



Protocol for Conducting Environmental Compliance Audits under the Stormwater Program



United States
Environmental Protection
Agency

Office of Enforcement and
Compliance Assurance (2224A)

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www.epa.gov/compliance/incentives/auditing/protocol.html

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Notice

This document is intended as guidance to help regulated facilities comply with the regulations. This guidance does not constitute rulemaking by the EPA and may not be relied on to create a substantive or procedural right or benefit enforceable, at law or in equity, by any person. The Audit Protocols are designed for use by individuals who are already familiar with the federal regulations but could use an updated comprehensive regulatory checklist to conduct environmental *compliance* audits at regulated facilities [e.g., construction sites, municipal separate storm sewer systems (MS4s)].

EPA may decide to update this guide without public notice to reflect changes in EPA's approach to implementing the regulations or to clarify and update text.

To determine whether EPA has revised this document and/or to obtain copies, contact EPA's Center for Environmental Publications at 1(800) 490-9198 or refer to www.epa.gov/npdes/compliance and www.epa.gov/clearinghouse. Additional information further assistance pertaining to the specific rules discussed in this document can be found at the end of the *Key Compliance Requirements* located in Section II.

THE GUIDANCE IS NOT A SUBSTITUTE FOR READING THE REGULATIONS AND UNDERSTANDING ALL THE REQUIREMENTS AS THEY APPLY TO YOUR FACILITY.

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Section I

Introduction

Background

The Environmental Protection Agency's (EPA) goal is to ensure that businesses and organizations, state and local government, and the public comply with federal laws that protect the public health and the environment. EPA's Office of Enforcement and Compliance Assurance (OECA) was established in 1994 to focus on compliance assistance-related activities. OECA has begun combining traditional enforcement activities with more innovative compliance approaches, including the provision of compliance assistance to the general public. OECA is also encouraging the development of self-assessment programs by regulated facilities. Voluntary audit programs play an important role in helping companies meet their obligation to comply with environmental requirements. Such assessments can be a critical link, not only to improved compliance, but also to improvements in other aspects of an organization's performance. For example, environmental audits may identify pollution prevention opportunities that can substantially reduce an organization's operating costs and protect the environment. Environmental audits can also serve as an important diagnostic tool in evaluating a facility's overall environmental management system.

EPA has developed a series of Environmental Audit Protocols to assist the regulated community in developing self-audit programs by regulated facilities for evaluating their compliance with the environmental requirements under the federal laws and regulations. The audit protocols also are intended to promote consistency among regulated facilities when conducting environmental audits and to ensure that audits are conducted in a thorough and comprehensive manner. The protocols can be found at <http://epa.gov/compliance/incentives/auditing/protocol.html>.

Who Should Use These Protocols?

EPA has developed these audit protocols to provide regulated facilities with specific guidance in periodically evaluating their compliance with federal environmental requirements. The specific application of this particular protocol, in terms of which media or functional area it applies to, is described in Section II under "Applicability".

The Audit Protocols are designed for use by individuals who are already familiar with the federal regulations but could use an updated comprehensive regulatory checklist to conduct environmental **compliance** audits. Typically, compliance audits are performed by persons who are not necessarily media or legal experts but instead possess a working knowledge of the regulations and a familiarity with the operations and practices of the facility to be audited. These two basic skills are generally useful for identifying areas subject to environmental regulations and potential regulatory violations that subtract from the organization's environmental performance. With these basic skills, audits can be successfully conducted by persons with various educational backgrounds (e.g., engineers, scientists, lawyers, business owners or operators). These protocols are not intended to be a substitute for the regulations nor are they intended to be instructional to an audience seeking a primer on the requirements under Title 40. Rather, they are designed to be sufficiently detailed to support the auditor's efforts.

The term "Protocol" has evolved over the years as a term of art among the professional practices of auditing and refers to the actual working document used by auditors to evaluate a facility's conditions against a given set of criteria (in this case the federal regulations). Therefore these documents describe "what" to audit an entity for rather than "how" to conduct an audit. To optimize the effective use of these documents, you should become familiar with basic environmental auditing practices. For more guidance on how to conduct environmental audits, EPA refers interested parties to:

The Auditing Roundtable
15111 N Hayden Road
Suite #160355
Scottsdale, AZ 85260-2555
(480) 659-3738

EPA's Public Policies that Support Environmental Auditing

In 1986, in an effort to encourage the use of environmental auditing, EPA published its "Environmental Auditing Policy Statement" (see 51 FR 25004). The 1986 audit policy states that "it is EPA policy to encourage the use of environmental auditing by regulated industries to help achieve and maintain compliance with environmental laws and regulations, as well as to help identify and correct unregulated environmental hazards." In addition, EPA defined environmental auditing as "a systematic, documented, periodic, and objective review of facility operations and practices related to meeting environmental requirements." The policy also identified several objectives for environmental audits:

- Verifying compliance with environmental requirements
- Evaluating the effectiveness of in-place environmental management systems
- Assessing risks from regulated and unregulated materials and practices

In 1995, EPA published "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations" which both reaffirmed and expanded its 1986 audit policy. The 1995 audit policy offers major incentives for facilities to discover, disclose and correct environmental violations. Under the 1995 policy, EPA generally will not seek gravity-based penalties or recommend criminal charges be brought for violations that are discovered through an "environmental audit" (as defined in the 1986 audit policy) or a management system reflecting "due diligence" and that are promptly disclosed and corrected, provided that other important safeguards are met. These safeguards protect health and the environment by precluding policy relief for violations that cause serious environmental harm or may have presented an imminent and substantial endangerment.

In 1996, EPA issued its "Final Policy on Compliance Incentives for Small Businesses." The policy is intended to promote environmental compliance among small businesses by providing them with special incentives to participate in EPA compliance assistance programs. Similar to the EPA Audit Policies, the Small Business Policy also encourages small businesses to conduct environmental audits, and then to promptly disclose and correct violations.

On April 11, 2000, EPA issued its revised final Small Business Policy (65 FR 19630) to expand the options allowed under the 1996 policy for discovering violations and to establish a time period for disclosure. The major changes contained in the April 11, 2000 Small Business Policy revision include lengthening the prompt disclosure period from 10 to 21 calendar days and broadening the applicability of the Policy to violations uncovered by small businesses through any means of voluntary discovery. This broadening of the Policy takes advantage of the wide range of training, checklists, mentoring, and other activities now available to small businesses through regulatory agencies, private organizations, and the Internet.

More information on EPA's Small Business and Audit/Self-Disclosure Policies are available by contacting EPA's Enforcement and Compliance Docket and Information Center (ECDIC) at (202) 566-1514 or visiting the EPA web site at: <http://www.epa.gov/compliance/>

How to Use the Protocols

Each protocol provides guidance on key requirements, defines regulatory terms, and gives an overview of the federal laws affecting a particular environmental management area. They also include a checklist containing detailed procedures for conducting a review of a facility's conditions. The audit protocols are designed to support a wide range of environmental auditing needs; therefore, several of the protocols in this set or sections of an individual protocol may not be applicable to a particular facility. To provide greater flexibility, each audit protocol can be obtained electronically from the EPA Website (<http://www.epa.gov/compliance/incentives/auditing/protocol.html>).

It is important to understand that there can be significant overlap within the realm of the federal regulations. For example, the Department of Transportation (DOT) has established regulations governing the transportation of hazardous materials. Similarly, the Occupational Safety and Health Administration (OSHA) under the U.S. Department of Labor has promulgated regulations governing the protection of workers who are exposed to hazardous chemicals. There can also be significant overlap between federal, state, and local environmental regulations. **State programs that implement federally mandated programs may contain more stringent requirements that are not described in these protocols.** There can also be multiple state agencies regulating the areas covered in these protocols. The auditor should determine which regulatory agency has authority for implementing an environmental program so that the required regulations are consulted. Prior to conducting the audit, the auditor should review federal, state and local environmental requirements and expand the protocol, as appropriate, to include other applicable requirements not found in these documents.

Review of Federal Legislation and Key Compliance Requirements:

These sections are intended to provide only supplementary information or a “thumbnail sketch” of the regulations and statutes. These sections are not intended to function as the main tool of the protocol. This is the purpose of the checklist. Instead, they serve to remind the auditor of the general thrust of the regulation and to scope out a facility’s requirements covered by that particular regulation. For example, a brief paragraph describing record keeping and reporting requirements and the associated subpart citations will identify a specific area of focus for the facility.

State and Local Regulations

Each EPA Audit Protocol alerts the auditor to typical issues containing state and local regulations (e.g., more stringent local regulations). From a practical standpoint, EPA cannot present individual state and local requirements in the protocols. However, this section does provide general guidance to the auditor regarding the decision of statutory authority between EPA and the states over a specific media. This section also describes circumstances where states and local governments may enact more stringent requirements that go beyond the federal requirements.

Key Terms and Definitions:

This section of the protocol identifies terms of art used in the regulations and the checklists that are listed in the “Definitions” sections of the Code of Federal Regulations (CFR). It is important to note that not all definitions from the CFR may be contained in this section, however; those definitions which are commonly repeated in the checklists or are otherwise important to an audit process are included. These definitions are generally related as they appear in the CFR without embellishment.

The Checklists:

The checklists delineate what should be evaluated during an audit. The checklists contained in these protocols are (and should be) sufficiently detailed to identify any area that may potentially receive a notice of violation if compliance is not achieved. For this reason, the checklists often get to a level of detail such that a specific paragraph of the subpart [e.g., 40 CFR 122.28(b)(2)] contained in the CFR or the Federal Register (FR) is identified for verification by the auditor.

Updates:

Environmental regulations are continually changing both at the federal and state level. For this reason, it is important for environmental auditors to determine if any new regulations have been issued since the publication of each protocol document and, if so, amend the checklists to reflect the new regulations. Auditors may become aware of new federal regulations through periodic review of Federal Register notices as well as public information bulletins from trade associations and other compliance assistance providers. In addition, EPA offers information on new regulations, policies and compliance incentives through several Agency Websites. Each protocol provides specific information regarding EPA program office websites that can be accessed for regulatory and policy updates.

The Relationship of Auditing to Environmental Management Systems

An environmental auditing program is an important part of any organization’s environmental management system (EMS). Audit findings generated from the use of these protocols can be used as a basis to implement, upgrade, or benchmark environmental management systems. Regular environmental auditing can be the key element to a high quality environmental management program and will function best when an organization identifies the “root causes” of each audit finding. Root causes are the primary factors that lead to noncompliance events. For example, a violation of a facility’s stormwater discharge permit may be traced back to breakdowns in management oversight, information exchange, or inadequate evaluations by untrained personnel.

As shown in Figure 1, a typical approach to auditing involves three basic steps: (1) conducting the audit, (2) identifying problems (audit findings), and (3) fixing identified deficiencies. When the audit process is expanded to identify and correct root causes to noncompliance, the organization’s corrective action part of its EMS becomes more effective. In the expanded model, audit findings (exceptions) undergo a root cause analysis to identify underlying causes to noncompliance events. Management actions then are taken to correct the underlying causes behind the audit findings and improvements are made to the organizations overall EMS before another audit is conducted on the facility. Expanding the audit process allows the organization to successfully correct problems, sustain compliance, and prevent discovery of the same findings again during subsequent audits. Furthermore, identifying the root cause of an audit finding can mean identifying not only the failures that

require correction but also successful practices that promote compliance and prevent violations. In each case a root cause analysis should uncover the failures while promoting the successes so that an organization can make continual progress toward environmental excellence.

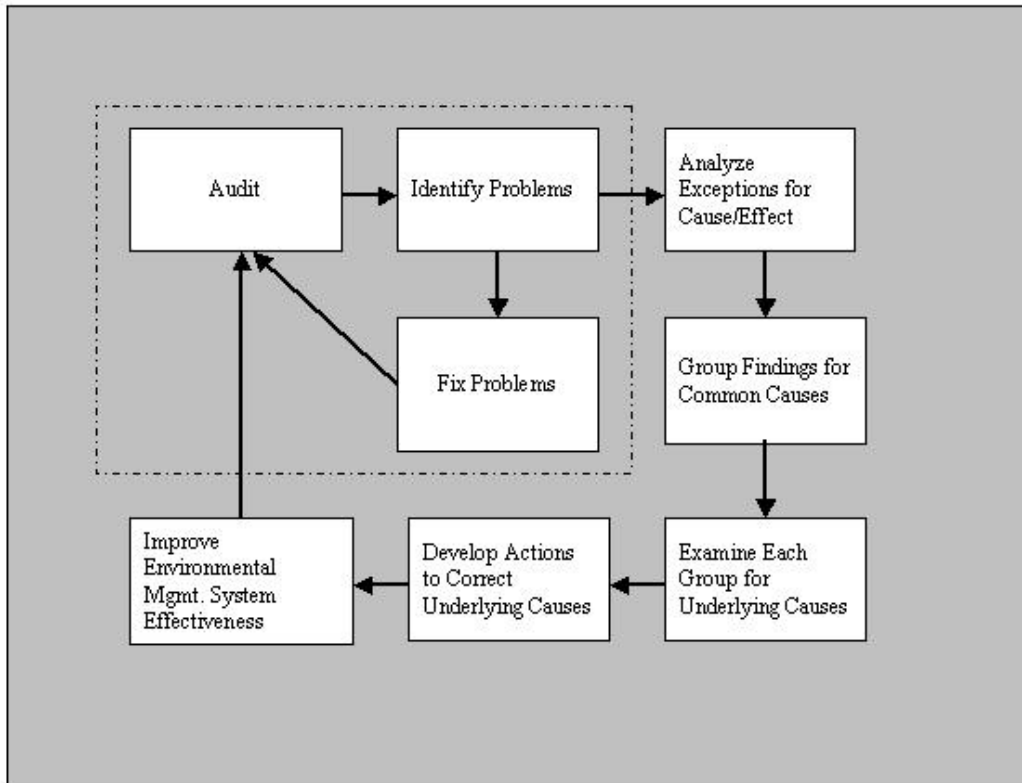


Figure 1 - Corrective Action Model

Section II

Audit Protocol

Applicability

This protocol applies to facilities that discharge stormwater directly to waters of the United States or to municipal separate storm sewer systems. Regulated stormwater discharges may originate from an industrial activity; construction sites larger than 1 acre; a small, medium, or large MS4s; or a facility identified by the National Pollutant Discharge Elimination System (NPDES) permitting authority. Guidance is provided on the checklists to direct the auditor to the regulations concerning the origin of stormwater discharges.

There are numerous environmental regulatory requirements administered by federal, state, and local governments. Each level of government may have a major impact on areas of the MS4 or construction site that are subject to the audit. Therefore, auditors are advised to review federal, state, and local regulations in order to perform a comprehensive audit.

Review of Federal Legislation

Clean Water Act

The 1972 Amendments to the Federal Water Pollution Control Act (commonly known as the Clean Water Act or CWA) prohibit the discharge of any pollutant to waters of the United States from a point source unless the discharge is authorized by an NPDES permit. At the time of the 1972 amendments to the CWA, sewage treatment plant outfalls and industrial process wastewater were easily identified as point sources responsible for contributing to the degradation of water quality. However, as pollution control measures were instituted, it became evident that more diffuse sources, such as agricultural and urban stormwater runoff, also were contributing to the problem. In response to this concern, the Water Quality Act (WQA) of 1987 added Section 402(p) to the CWA and required EPA to establish a comprehensive two-phased approach to address stormwater discharges.

State and Local Regulations

EPA is authorized under the CWA to directly implement the NPDES Program. EPA, however, may authorize states, territories, or tribes to implement all or parts of the national program. In such cases, the requirements mandated by the state, territory, or tribe must be at least as stringent as the federal regulations, but may be more stringent (e.g., permit coverage for stormwater discharges may be required for construction activity less than one acre). If the state, territory, or tribe does not have approval for administering the NPDES program, EPA will implement the NPDES program. While this document presents only federal NPDES regulations, auditors should ensure they are familiar with any state (or local) regulations addressing stormwater discharges to which the permittee is subject. Auditors should, as always, evaluate compliance based on the permit issued to the regulated facility -- regardless of whether it was a local, state, tribal, or federal authority who issued the general permit or individual permit.

Key Compliance Requirements

In response to the 1987 Amendments to the CWA, EPA developed Phase I of the NPDES Stormwater Program in 1990. Phase I requires all large and medium MS4s (as defined in 40 CFR 122.26 (b)(4) and (7), respectively) to have an NPDES permit covering discharges of stormwater (55 FR 47990). Phase I requires NPDES permits for stormwater discharges from:

- "Medium" and "large" municipal separate storm sewer systems (MS4s) generally serving, or located in incorporated places or counties with populations of 100,000 or more people
- Eleven categories of industrial activity, one of which is construction activity that disturbs five acres of land or greater

Medium and large MS4s must apply for individual permits under the Phase I program. Dischargers in the industrial categories may seek coverage under applicable general permits. This protocol, however, does not address audits of industrial facilities other than those performing construction activity requiring stormwater permit coverage.

EPA developed Phase II of the NPDES Stormwater Program in October 1999. The Phase II rule requires NPDES permit coverage - mostly under general permits - for stormwater discharges from certain small MS4s (primarily all those located in urbanized areas serving populations of less than 100,000) and construction activity disturbing between 1 and 5 acres of land (60 FR 40230).

In the preamble to the 1999 (Phase II) regulations, EPA recommends using general permits for the sources regulated by this rule. The use of general permits, instead of individual permits, generally reduces the administrative burden on permitting authorities while also limiting the paperwork burden on regulated parties. Permit authorities may require individual permits to address specific concerns, for instance, when there may be a question as to whether the permitted discharge will meet water quality standards. **Auditors should always evaluate compliance based on the terms of the local, state, territory, tribal, or federally-issued permit.** This is particularly important as it relates to the compliance evaluation of individual permit holders.

For further information regarding the stormwater regulations, refer to U.S. EPA's Stormwater Website at www.epa.gov/npdes/stormwater. The EPA website provides up-to-date information on regulations developed under CWA and the Stormwater Program as well as other helpful information.

Key Terms and Definitions

Best management practices (BMPs)

Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of “waters of the United States.” BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (40 CFR 122.2)

Director

The Regional Administrator or the State Director, as the context requires, or an authorized representative. When there is no “approved state program,” and there is an EPA administered program, “Director” means the Regional Administrator. When there is an approved state program, “Director” normally means the state Director. In some circumstances, however, EPA retains the authority to take certain actions even when there is an approved state program. For example, when EPA has issued an NPDES permit prior to the approval of a state program, EPA may retain jurisdiction over that permit after program approval, see 40 CFR 123.1). In such cases, the term “Director” means the Regional Administrator and not the state Director. (40 CFR 122.2)

Discharge of a pollutant

(a) Any addition of any “pollutant” or combination of pollutants to “waters of the United States” from any “point source,” or (b) Any addition of any pollutant or combination of pollutants to the waters of the “contiguous zone” or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any “indirect discharger.” (40 CFR 122.2)

Discharge-related activities

Activities which cause, contribute to, or result in stormwater point source pollutant discharges as well as measures to control stormwater discharges, including the siting, construction and operation of BMPs to control, reduce or prevent stormwater pollution.

Facility or activity

Any NPDES “point source” or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program. (40 CFR 122.2)

General permit

An NPDES “permit” issued under § 122.28 authorizing a category of discharges under the CWA within a geographical area. (40 CFR 122.2)

Illicit discharge

Any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities (40 CFR 122.26(b)(2)).

Large municipal separate storm sewer system

All municipal separate storm sewers that are either:

- (i) Located in an incorporated place with a population of 250,000 or more as determined by the latest Decennial Census by the Bureau of Census, or
- (ii) Located in specific counties, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
- (iii) Owned or operated by a municipality other than those described in (i) or (ii) and that are designated as part of the large or medium municipal separate storm sewer system due to the inter-relationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers.

(40 CFR 122.26(b)(4))

Larger common plan of development or sale

A contiguous area where multiple separate and distinct construction activities are occurring under one plan (e.g., the operator is building on three half-acre lots in a 6-acre development). “Plan” is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur on a specific plot.

Major municipal separate storm sewer outfall (or “major outfall”)

A municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more) (40 CFR 122.26(b)(5)).

Major outfall

A major municipal separate storm sewer outfall (40 CFR 122.26(b)(6)).

Medium municipal separate storm sewer system

All municipal separate storm sewers that are either:

- (i) Located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the latest Decennial Census by the Bureau of Census; or
- (ii) Located in the counties listed in appendix I, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
- (iii) Owned or operated by a municipality other than those described in paragraph (b)(4) (I) or (ii) of this section and that are designated as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers.

(40 CFR 122.26(b)(7))

Municipal separate storm sewer

A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of the United States;
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

(40 CFR 122.26(b)(8))

Non-stormwater discharges

Discharges not entirely composed of stormwater. Unless specifically authorized under an NPDES permit, these discharges are illegal. Commonly authorized non-stormwater discharges include:

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.)
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate
- Irrigation water
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool discharges
- Street wash water
- Discharges or flows from fire fighting activities

Outfall

A point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR 122.26(b)(9))

Owner or operator

Operator of any facility or activity subject to the regulation under the NPDES program. (40 CFR 122.2)

Pollutant

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. (40 CFR 122.2)

Principal executive officer of a federal agency

This includes:

- (i) The chief executive officer of the agency, or
- (ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

Qualified personnel

A person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity.

Qualifying local program

A local, state, or Tribal municipal stormwater management program that imposes, at a minimum, the relevant requirements associated with the minimum control measures for small municipal stormwater programs [as detailed in 40 CFR 122.34(b)].

Regional Administrator

The administrator of the appropriate Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator. (40 CFR 122.2)

Responsible corporate officer

A responsible corporate officer means:

- (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or an other person who performs similar policy- or decision-making functions for the corporation, or
- (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decision which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(40 CFR 122.22)

Runoff coefficient

The fraction of total rainfall that will appear at a conveyance as runoff. (40 CFR 122.26(b)(11))

Significant materials

Includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges. (40 CFR 122.26(b)(12))

Small municipal separate storm sewer system

A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of the United States;
- (iii) Not defined as “large” or “medium” municipal separate storm sewer systems pursuant to 40 CFR 122.26 (b)(4) and (b)(7), or designated under 40 CFR 122.26 (a)(1)(v);
- (iv) This term includes systems similar to separate sewer systems in municipalities, such as systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

(40 CFR 122.26(b)(16))

Urbanized area

A land area comprising one or more places - central place(s) - and the adjacent densely settled surrounding area - urban fringe - that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per

square mile.

Stormwater

Stormwater runoff, snow melt runoff, and surface runoff and drainage. (40 CFR 122.26(b)(13))

Typical Records to Review

The following are typical records an auditor may review while conducting an environmental compliance audit.

- NPDES permits
- Stormwater Pollution Prevention Plan (SWPPP)
- Discharge monitoring reports (DMRs)
- Annual reports
- Notice of Intent documentation
- Hazardous waste transporter invoices or manifests
- Hazardous substance spill control and contingency plan
- Site plans
- Sediment and erosion control plans
- Stormwater management program plans
- Operation and maintenance plans
- Notices of noncompliance
- Notices of violations
- Administrative orders
- Local sewer ordinance
- Training manuals
- NPDES federal or state inspection reports

Typical Physical Features to Inspect

The following are typical physical features an auditor may observe while conducting an environmental compliance audit:

- Discharge outfall pipes
- Floor drains
- Parking lot drains
- Stormwater management facilities
- Covered storage facilities
- Silt fences
- Sediment traps and basins
- Outdoor storage areas exposed to stormwater

Checklist User Guidance

Only MS4s and construction activity are covered in this audit protocol document. Each of these categories is regulated slightly differently. The corresponding checklists for these two categories are specifically tailored to audits of each category and are designed as stand-alone tools.

Two audit checklists addressing the requirements for MS4s – one for large/medium MS4s and one for small MS4s – are included in this audit protocol. The audit checklist for medium and large MS4s is scaled down, since auditors must refer to the individual (site-specific) permits to evaluate compliance. The audit checklist for small MS4s refers to the model General Permit for Discharges from Small Municipal Separate Storm Sewer Systems. Auditors should refer to the specific EPA regional or state small MS4 general permit for any additional state specific requirements to evaluate compliance. Language will vary depending on permit format (e.g., state-wide, watershed specific, etc.)

The left column of the checklist includes requirements mandated by regulation or reference to the Federal Register. The second column of the checklist provide instructions to help conduct the audit. These instructions are performance objectives that should be accomplished by the auditor. Some of the performance objectives may be simple documentation checks that take only a few minutes; others may require a time-intensive physical inspection of an MS4 or construction site. The checklists contain the following components:

“Regulatory Requirement or Management Practice Column”

The “Regulatory Requirement or Management Practice Column” states either a requirement mandated by regulation or a best management practice that exceeds the requirements of the Federal regulations. The regulatory citation is given in parentheses after the stated requirement.

“Reviewer Checks” Column:

The items under the “Reviewer Checks:” column identify requirements that must be verified to accomplish the auditor’s performance objectives. (*The key to successful compliance auditing is to verify and document site observations and other data.*) The checklists follow very closely with the text in EPA’s general permits or CFR in order to provide the service they are intended to fulfill (i.e., *to be used for compliance auditing*). Wherever possible, the statements or items under the “Reviewer Checks” column, will follow the same sequence or order of the citations listed at the end of the statement in the “Regulatory Requirement or Management Practice” column.

“Reviewer Completed” Column:

This column provides a check box that allows the auditor to keep track of those items which have been completed in the auditing process. A yes or no question may also be posed in this column to determine need for completion of additional check box items.

“Reviewer Notes” Column

This space is provided in the checklists to allow the auditor room for additional notes related to each item. This may include identifying the appropriate permit or regulatory authority for a particular item (i.e., if a state or local requirement supercedes the federal requirement), noting areas that need improvement, or options the owner or operator may employ to comply with a given requirement.

Checklist Numbering System:

This checklist has incorporated a simplified numbering system for ease of use. Blank pages appear between checklist topic sections allowing an inspector to select and remove only the section of interest for use in the field. Each item in the checklist includes the associated regulatory citation or EPA permit reference in parentheses after the section title or text of the requirement.

List of Acronyms and Abbreviations

BMP	Best Management Practice
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (or Superfund)
CFR	Code of Federal Regulations
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DOT	Department of Transportation
EPA	Environmental Protection Agency
EMS	Environmental Management System
FR	Federal Register
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OECA	Office of Enforcement and Compliance Assurance
OSHA	Occupational Safety and Health Administration
POTW	Publically Owned Treatment Works
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SMCRA	Surface Mining Control and Reclamation
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
WLA	Waste Load Allocation
WQA	Water Quality Act

Index for Checklist Users

	Refer To:	
	Checklist Items	Page Numbers
Construction Activity	1.0 through 6.0	12-31
Municipal Separate Storm Sewer Systems (MS4s)		
• Medium and Large MS4s	7.0 through 8.15	33-37
• Small MS4s	9.0 through 17.0	39-51

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Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

**NPDES Stormwater Requirements
for Construction Activity**

Note: The following checklist follows the organization of US EPA’s General Permit for Stormwater Discharges from Construction Activities (Construction General Permit, CGP). The CGP can be found at 68 *Federal Register* 39087 (July 1, 2003). As the permit was not printed in the Federal Register in its entirety, the corresponding permit number (not FR citation) is noted for each item. The regulatory citation is found after the section title or the requirement text where available. Some referenced sections of the CGP are combined to reduce redundancy and facilitate the review process.

It is important to note that construction site stormwater discharges may be covered under an individual permit or under an alternative state or EPA Regional permit. When this occurs, refer to that permit for any additional/different permit requirements that may not be included in the following checklist.

The following table includes checks the auditor should make during both the paperwork and on-site review of an operator’s management of construction site stormwater discharges. To facilitate the review process, Appendix A includes those checks that are to be performed on site and the associated permit reference.

Compliance Category: Stormwater Management for Construction Activity			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
1.0 Applicability			
Regulations generally apply to construction activity that disturbs 1 or more acres of land. [(5 or more acres - 40 CFR 122.26(b)(14)(x) and (1-5 acres - 40 CFR 122.26(b)(15)(i))]	Verify the area of disturbance (acres) within the construction boundary.	<input type="checkbox"/>	
Regulations apply if the construction activity disturbs less than 1 acre of land, but is part of a larger common plan of development or sale that will ultimately disturb 1 or more acres. [(5 or more acres - 40 CFR 122.26(b)(14)(x) and (1-5 acres - 40 CFR 122.26(b)(15)(i))]	Determine whether the construction activity is part of a larger common plan of development or sale. Verify the size of disturbance or planned disturbance in the common plan.	<input type="checkbox"/> <input type="checkbox"/>	
2.0 Coverage under the Permit (CGP Part 1)			
2.1 Eligibility (CGP Part 1.3)			
2.1.1 Discharging into Receiving Waters with an Approved TMDL and Documentation of Permit Eligibility (CGP Part 1.3.C.5 and 3.14. A, B, and C)			
The operator must address stormwater discharges that contribute to waters for which a TMDL has been established or approved. [40 CFR 122.44(d)(1)(vii)(B)] The SWPPP must include documentation supporting a determination of permit eligibility with regard to waters that have an EPA-established or approved TMDL. (CGP Part 3.14.A, B, C)	Is there a TMDL for the receiving water with conditions applicable to the operator’s discharges? If yes, verify the SWPPP includes : • If the TMDL identifies whether the operator’s discharge is identified in a TMDL (either specifically or generally)? • Any associated allocations, requirements, and assumptions identified for the operator’s discharge	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> <input type="checkbox"/>	

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	
	<ul style="list-style-type: none"> • Conditions applicable to the discharges necessary for consistency with these assumptions/requirements • Summaries of consultation with state/federal TMDL authorities on consistency of SWPPP conditions with the approved TMDL • Measures/controls taken to ensure the discharge is consistent with the assumptions/requirements of the TMDL <p>If a <u>specific wasteload allocation</u> been established that would apply to the operator's discharge, verify the operator has incorporated the allocation into the SWPPP and steps have been implemented to meet the allocation.</p> <p>If a <u>general wasteload allocation</u> has been established applicable to construction stormwater discharges, but no specific requirements for construction sites are established, verify the operator has consulted with the state or federal TMDL authority to confirm adherence to a SWPPP that meets requirements of the permit and is consistent with the TMDL.</p> <p>Note: Where a wasteload allocation has not been specified for construction stormwater discharges, but has not specifically excluded these discharges, adherence to a SWPPP that meets the requirements of the CGP will generally be assumed to be consistent with the approved TMDL.</p> <p>Note: If the TMDL specifically precludes such discharges, the operator is not eligible for coverage under EPA's CGP.</p> <p>Verify on site the operator has incorporated measures or controls into the SWPPP that are consistent with the assumptions and requirements of the TMDL.</p>	<p align="center"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </p>	

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Compliance Category: Stormwater Management for Construction Activity			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
2.1.2 Endangered and Threatened Species and Critical Habitat Protection and Documentation of Permit Eligibility (CGP Part 1.3.C.6 and 3.7)			
<p>Permit coverage is available only if the operator's stormwater discharges, allowable non-stormwater discharges, and stormwater-related activities are not likely to jeopardize the continued existence of any species that are federally-listed as endangered or threatened ("listed") under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is federally-designated as critical under the ESA ("critical habitat").</p> <p>The operator is not eligible to discharge if the stormwater discharges, allowable non-stormwater discharges, or stormwater discharge-related activities would cause a prohibited "take" of federally-listed endangered or threatened species, unless authorized under sections 7 or 10 of the ESA.</p> <p>(CGP 1.3.C.6)</p> <p>The SWPPP must include documentation supporting a determination of permit eligibility with regard to endangered species. (CGP 3.7)</p>	<p>Verify the SWPPP includes:</p> <ul style="list-style-type: none"> • Whether federally-listed endangered or threatened species, or federally-designated critical habitat may be in the project area <input type="checkbox"/> • If such species or critical habitat exist in the project area, whether such species or critical habitat may be adversely affected by stormwater discharges or discharge related activities <input type="checkbox"/> • The results of the permit's listed species and critical habitat screening determination <input type="checkbox"/> • Confirmation of NOI delivery to permitting authority <input type="checkbox"/> • Any correspondence with the U.S. Fish and Wildlife Service (FWS), EPA, the U.S. National Marine Fisheries Service (NMFS), or others on project planning related to listed species or critical habitat, including any notification that delays authorization to discharge <input type="checkbox"/> • A description of measures necessary to protect listed species or critical habitat, if found in the project area. <input type="checkbox"/> <p>Verify on site the permittee has implemented measures (i.e., BMPs) to protect listed threatened or endangered species or critical habitat. <input type="checkbox"/></p>		
2.1.3 Historic Properties (CGP Part 1.3.C.7)			
<p>The operator must comply with applicable state, tribal, and local laws concerning the protection of historic properties and places.</p>	<p>Verify the SWPPP has identified any applicable laws regarding historic properties. <input type="checkbox"/></p> <p>Verify the SWPPP has identified the need for the protection of historic property and any measures to protect these site(s). <input type="checkbox"/></p> <p>Verify on site the permittee has implemented measures to protect historic properties and places. <input type="checkbox"/></p>		
3.0 Authorization for Discharges of Stormwater from Construction Activity (CGP Part 2)			

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Compliance Category: Stormwater Management for Construction Activity			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
<p>Dischargers of stormwater associated with industrial activity [40 CFR 122.26(b)(14)(x)] and with small construction activity [122.26(b)(15)] are required to apply for an individual permit or seek coverage under a promulgated stormwater general permit. Facilities that are required to obtain an individual permit or any discharge of stormwater which the Director is evaluating for the designation under 40 CFR 122.26(a)(1)(v) and is not a municipal storm sewer, shall submit an NPDES application in accordance with the requirements of 40 CFR 122.21 as modified and supplemented by the provisions of this paragraph. [40 CFR 122.26(c)(1)]</p> <p>Operators seeking coverage under a general permit shall submit to the Director a written notice of intent (NOI) to be covered by the general permit. A discharger who fails to submit an NOI in accordance with the terms of the permit is not authorized to discharge under the terms of the general permit unless the general permit, in accordance with 40 CFR 122.28 (b)(2)(v), contains a provision that an NOI is not required or the Director notified a discharger that it is covered. [40 CFR 122.28(b)(2)]</p>	<p>Determine if all operators on site have submitted an NOI.</p> <p>Verify the operator has provided all the information required by the permitting authority in the application/NOI.</p> <p>Verify commencement date of construction activities is consistent with submission requirements under the permit.</p> <p>Determine whether operator has changed at the site. If so, verify:</p> <ul style="list-style-type: none"> • The submission date of new NOI. • The date the new operator began work on the site after the new NOI was submitted. 	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	
4.0 Stormwater Pollution Prevention Plans (SWPPPs) (CGP Part 3)			
4.1 SWPPP Framework (CGP Part 3.1)			
<p>A SWPPP must be developed for each construction project or site covered by this permit prior to submission of an NOI. (CGP Part 3.1.A)</p>	<p>Verify SWPPP covers the entire construction site or project for this permit.</p> <p>Verify the date of the SWPPP and NOI.</p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	
<p>The SWPPP must be prepared in accordance with good engineering practices. (CGP Part 3.1.A)</p>	<p>Verify that measures proposed in the SWPPP are based on good engineering practices (such as those recommended in state or local Sediment and Erosion Control Manuals or Handbooks) which would achieve the intended level of controls.</p>	<p align="center"><input type="checkbox"/></p>	

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Compliance Category: Stormwater Management for Construction Activity			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
<p>party(ies) with day-to-day operational control over those activities necessary to ensure compliance with the SWPPP or permit conditions</p> <p>(CGP Part 3.2.A)</p>			
<p>Permittees with operational control over day-to-day activities must ensure the SWPPP:</p> <ul style="list-style-type: none"> • Meets the minimum permit requirements and identifies the parties responsible for implementation of control measures identified in the plan • Indicates those areas of the project where the operator has operational control over day-to-day activities • Includes the name of the party(ies) with operational control over project specifications (including the ability to make modifications in specifications) <p>(CGP Part 3.2.B)</p>	<p>Verify the SWPPP indicates areas where the permittee has operational control over day-to-day activities.</p> <p>Verify the SWPPP contains the name of party(ies) with operational control over project specifications.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	
<p>With operational control over only a portion of a larger project, the permittee is responsible for compliance with all applicable terms and conditions of the permit as it relates to the activities on that portion of the construction site, including the protection of endangered species, critical habitat, and historic properties, and implementation of BMPs and other controls required by the SWPPP.</p> <p>The operator must ensure either directly or through coordination with other permittees, that his/her activities do not render another party's pollution control ineffective.</p> <p>The operator must either implement his/her portion of a common SWPPP or develop and implement his/her own SWPPP.</p> <p>(CGP Part 3.2.C)</p> <p><i>ALSO SEE 2.1.2 and 2.1.3 for</i></p>	<p>Verify the permittee is responsible for only a portion of a larger project (e.g., one of four homebuilders in a subdivision).</p> <p>Verify that a SWPPP has been developed for this portion of the project or that the operator has implemented a portion of a common SWPPP.</p> <p>Verify on site that the operator's activities have not negatively impacted another party's pollution controls.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Compliance Category: Stormwater Management for Construction Activity			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
<i>reference to endangered species, critical habitat, and historic properties.</i>			
4.3 Pollution Prevention Plan Contents: Site and Activity Description (CGP Part 3.3)			
The SWPPP must identify all operators for the project site, and the areas of the site over which each operator has control. (CGP Part 3.3.A)	<p>Verify the name of responsible party(s) with day-to-day operational control of those activities necessary to ensure compliance with SWPPP or other permit conditions.</p> <p>Verify the SWPPP indicates areas where the responsible party has control.</p>	<input type="checkbox"/> <input type="checkbox"/>	
The SWPPP must include the nature of the construction activity. (CGP Part 3.3.B)	<p>Verify the SWPPP includes the following:</p> <ul style="list-style-type: none"> • The function of the project (e.g., low density residential, shopping mall, highway, etc.) • The intended sequence and timing of activities that disturb soils at the site • Estimates of the total area expected to be disturbed by excavation, grading, or other construction activities, including dedicated off-site borrow and fill areas • A general location map (e.g., USGS quadrangle map, a portion of a city or county map, or other map) with enough detail to identify the location of the construction site and waters of the United States within one mile of the site. 	<input type="checkbox"/> <input type="checkbox"/>	
The SWPPP must contain a legible site map, showing the entire site. (CGP Part 3.3.C)	<p>Verify the SWPPP includes a site map, indicating the following:</p> <ul style="list-style-type: none"> • Direction(s) of stormwater flow and approximate slopes anticipated after major grading activities • Areas of soil disturbance and areas that will not be disturbed • Locations of major structural and nonstructural BMPs identified in the SWPPP • Locations where stabilization practices are expected to occur • Locations of off-site material, waste, borrow or equipment 	<input type="checkbox"/> <input type="checkbox"/>	

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	
	<p>acre of drainage area (or equivalent measure)</p> <ul style="list-style-type: none"> Silt fences, vegetative buffer strips, or equivalent sediment controls for all down slopes <p><u>For 10 acres or more disturbed and where a temporary sediment basin is not attainable:</u></p> <ul style="list-style-type: none"> Smaller sediment basins and/or sediment traps Silt fences, vegetative buffer strips, or equivalent sediment controls for all down slope boundaries <p><u>For drainage locations serving less than 10 acres:</u></p> <ul style="list-style-type: none"> Smaller sediment basins and/or sediment traps Silt fences, vegetative buffer strips, or equivalent sediment controls for all down slope boundaries of the construction area (unless a sediment basin providing storage from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre is provided) <p>Verify on site that these measures have been implemented.</p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	
<p>The SWPPP must include a description of all post-construction stormwater management measures to be installed during the construction process after construction operations have been completed.</p> <p>Structural measures should be placed on upland soils to the degree practicable.</p> <p>Such measures must be designed and installed in compliance with applicable federal, local, state, or tribal requirements.</p> <p>(CGP Part 3.4.E)</p>	<p>Verify the SWPPP includes a description of measures to control stormwater discharges after the completion of construction.</p> <p>Verify placement of structural measures in the SWPPP and on site.</p> <p>Verify SWPPP includes discussion of placement of measures if not put on upland soils.</p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	
<p>The SWPPP must describe measures to prevent the discharge of solid materials, including building materials, to waters of the United States, except as authorized by a permit issued under Section 404 of the CWA. (CGP Part 3.4.F)</p>	<p>Verify the SWPPP states that no solid/building materials will be discharged into the waters of the United States. If these discharges are planned, verify reference in the SWPPP to a permit issued under Section 404 of the CWA.</p> <p>Verify on site through inspection of outfalls that no solid/building materials are discharged unless authorized by a permit.</p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	
<p>The SWPPP must describe measures to minimize to the extent practicable off-site vehicle tracking of sediments onto paved surfaces and the generation of dust. (CGP Part 3.4.G)</p> <p>If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts. (CGP Part 3.13.B)</p>	<p>Verify in the SWPPP that measures (such as use of stone entrances or truck washing) to minimize vehicle tracking of sediments and the generation of dust are provided.</p> <p>Verify on site that accumulation of sediment, or signs of sediment escape, does not appear outside the construction entrance or perimeter of the construction site.</p> <p>Verify the SWPPP identifies measures and schedule are identified to remove sediment escaping the construction site.</p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	
<p>The SWPPP must include a description of construction and waste materials expected to be stored on-site with updates as appropriate.</p> <p>The SWPPP must include a description of controls, including storage practices, to minimize the exposure of the materials to stormwater, and spill prevention and response practices.</p> <p>(CGP Part 3.4.H)</p> <p>Litter, on-site construction debris, and construction chemicals that could be exposed to stormwater must be prevented from becoming a pollutant source in stormwater discharges. (CGP Part 3.13.C)</p>	<p>Verify the SWPPP includes a description of construction and waste materials to be stored on-site.</p> <p>Verify on site that those construction and waste materials stored on-site match those noted in the SWPPP.</p> <p>Verify the SWPPP includes a description of exposure minimization practices, including storage practices, to prevent construction and waste materials from becoming sources of pollution. Verify, at a minimum, this includes:</p> <ul style="list-style-type: none"> • Litter • On-site construction debris • Construction chemicals <p>Verify on site that the exposure minimization practices discussed in the SWPPP have been implemented.</p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Compliance Category: Stormwater Management for Construction Activity			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
<p>construction activities at the site.</p> <p>Non-stormwater discharges should be eliminated or reduced to the extent feasible.</p> <p>The SWPPP must identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge.</p>	<ul style="list-style-type: none"> • Appropriate water pollution prevention measures and descriptions for the control of non-stormwater discharges. <p>Verify on site non-stormwater discharges are eliminated or reduced to the extent feasible</p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	
4.6 Maintenance of Controls (CGP Part 3.6) ALSO SEE 4.9, Maintaining an Updated Plan, CGP Part 3.11			
<p>All erosion and sediment control measures and other protective measures identified in the SWPPP must be maintained in effective operating condition. (CGP Part 3.6.A)</p> <p>All control measures must be properly selected, installed, and maintained in accordance with any relevant manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the operator must replace or modify the control for site situations as soon as practicable. (CGP Part 3.13.A)</p>	<p>Verify the control measures selected have been deemed appropriate for the site (measures have been approved and have not been modified or replaced without approval).</p> <p>Verify on site that the control measures, including erosion and sediment controls, identified in the SWPPP are installed and operating effectively. This may require visiting the site after a rain event (ALSO SEE 4.10 Inspections, CGP 3.10.E).</p> <p>Determine if inspection records have identified any improperly or incorrectly used/maintained controls.</p> <p>Verify the operator has procedures in place to fix improperly functioning control measures identified during inspections so that issues are addressed as soon as practicable (preferably before the next storm event).</p> <p>Verify on site that if a control measure has been used inappropriately or correctly it has been replaced or modified.</p> <p>Verify this change has been documented in the SWPPP.</p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	
<p>If existing BMPs need to be modified or if additional BMPs are necessary for any reason, implementation must be completed before the next storm event whenever practicable.</p> <p>If implementation before the next</p>	<p>If BMPs have required modification or have been added, verify the SWPPP:</p> <ul style="list-style-type: none"> • Has been updated to include these changes • Details the schedule for the 	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Compliance Category: Stormwater Management for Construction Activity			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
<p>storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as possible. (CGP Part 3.6.B)</p> <p><i>ALSO SEE 4.9 Maintaining and Updated Plan, CGP Part 3.11</i></p>	<p>implementation of changes and, if applicable:</p> <ul style="list-style-type: none"> Detail if changes were not made before the next rain event The alternative BMPs that were implemented immediately <p>Verify on site that these changes have been implemented.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	
<p>Sediment from sediment traps or sedimentation ponds must be removed when design capacity has been reduced by 50 percent. (CGP Part 3.6.C)</p>	<p>Verify the SWPPP address removal of sediment from sedimentation ponds.</p> <p>Verify on site that sediment accumulated does not exceed 50 percent of capacity of sediment traps and/or sediment ponds.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	
4.7 Applicable State, Tribal, or Local Programs (CGP Part 3.9)			
<p>The SWPPP must be consistent with applicable state, tribal, and/or local requirements for soil and erosion control and stormwater management including updates as necessary to reflect revision to the requirements.</p>	<p>Verify the SWPPP contains provisions to be consistent with applicable state, tribal, or local requirements for soil and erosion control and stormwater management.</p>	<p><input type="checkbox"/></p>	
4.8 Inspections (CGP Part 3.10)			
<p>Inspections must be conducted in accordance with the permits inspection schedule. (3.10.A)</p>	<p>Verify the SWPPP includes the intended inspection schedule which is either:</p> <ul style="list-style-type: none"> At least once every 7 calendar days <p>OR</p> <ul style="list-style-type: none"> At least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater. 	<p><input type="checkbox"/></p>	
<p>Inspection frequency may be reduced to at least once every month given specific seasonal, project, or geographic conditions. (CGP Part 3.10.B)</p>	<p>If operator has modified inspection schedule, verify in the SWPPP that a monthly inspection schedule has been implemented.</p> <p>If the inspection frequency has been reduced, verify on site that one of the following conditions applies:</p> <ul style="list-style-type: none"> The entire site is temporarily 	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	

Compliance Category: Stormwater Management for Construction Activity			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
within seven days of knowledge of the release. (CGP Part 4.3)	<p>notified.</p> <p>Verify that the SWPPP was modified to include:</p> <ul style="list-style-type: none"> • A description of the release • The circumstances leading to the release • The date of the release • Measures to prevent the reoccurrence of such release • Measures to respond to such releases 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
6.0 Records Retention (CGP Part 6.0)			
Copies of the SWPPP and all documentation required by this permit, including records of all data used to complete the NOI to be covered by this permit, must be retained for at least three years from the date that permit coverage expires or is terminated. This period may be extended by request of EPA at any time.	<p>Verify the permittee has copies on file of the following:</p> <ul style="list-style-type: none"> • SWPPP • All reports required by the permit • Records of all data used to complete the NOI 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

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Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

**NPDES Stormwater Requirements
for Large and Medium Municipal Separate Storm Sewer Systems**

Note: As a general permit is not available for large and medium municipal separate storm sewer systems (MS4s), the requirements detailed below are based on the permit requirements outlined in the 1990 regulation (55FR 47990). Refer to the individual city's permit for specific requirements. The corresponding permit section number and/or regulation citation is found after the section title or the requirement text.

Compliance Category: Stormwater Management for Large and Medium MS4s			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
7.0 Applicability			
7.1 Large and medium MS4s are required to apply for an NPDES permit. [40 CFR 122.26(a)(iii)-(iv)] Note: Large / Medium MS4s are defined in 40 CFR 122.26(b)(4) and 122.26(b)(7).	Verify that an application has been submitted for a permit.	<input type="checkbox"/>	
8.0 Permit Requirements (40 CFR 122.41)			
8.1 Permittees with currently effective permits shall submit a new application 180 days before the existing permit expires, except that: The Regional Administrator may grant permission to submit an application later than the deadline before submission otherwise applicable, but no later than the permit expiration date. [40 CFR 122.21(d)(2)].	Verify the date of reapplication if permittee has reapplied for permit coverage.	<input type="checkbox"/>	
8.2 The permittee must comply with all conditions of the permit. [40 CFR 122.41(a)]	Verify that the municipality is operating according to permit conditions. Determine if the municipality has a history of non-compliance with its MS4 NPDES permit (possibly indicating propensity toward non-compliance).	<input type="checkbox"/> <input type="checkbox"/>	
8.3 Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. [40 CFR 122.41(j)(1)]	Verify that monitoring (i.e., measurements and samples) consists of representative sampling.	<input type="checkbox"/>	

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Compliance Category: Stormwater Management for Large and Medium MS4s			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
8.4 The permittee shall retain records of all monitoring information for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by the Director at any time. [40 CFR 122.41(j)(2)]	Verify that the following records are being maintained and have been on file for three years: <ul style="list-style-type: none"> • Calibration and maintenance records • Original strip chart recordings for continuous monitoring instrumentation • All data used to complete the permit application • All reports required by the permit • Records of all data used to complete the permit application 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
8.5 Large and medium MS4s must include detailed information regarding each monitoring event in all monitoring records. [40 CFR 122.41(j)(3)]	Verify that all monitoring records include the: <ul style="list-style-type: none"> • Date, exact place, and time of sampling or measurements • Individual(s) who performed the sampling or measurements • Date analyses were performed • Individual(s) who performed the analyses • Analytical techniques or methods used • Results of the analyses 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
8.6 Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit. [40 CFR 122.41(j)(4)]	Verify in the monitoring records that all analytical methods / procedures use are those approved under 40 CFR 136. Verify that: <ul style="list-style-type: none"> • A U.S. EPA approved analytical testing laboratory was used • Proper approval was obtained from state/U.S. EPA if alternate analytical procedures are used • Parameters other than those required by the permit are analyzed appropriately • Calibration and maintenance of instruments and equipment is being performed • Quality control procedures are used • Duplicate samples are analyzed • Spiked samples are used • A commercial laboratory is used • The commercial laboratory is 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

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Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
	state certified (states with formal certification program)		
8.7 All applications, reports, or information submitted to the Director shall be signed and certified. [40 CFR 122.41(k)(1); 40 CFR 122.22]	Verify that all information submitted to the Director is properly signed and certified by the appropriate person. Note: This may include a responsible corporate officer for a corporation, a general partner or proprietor for a partnership or sole proprietorship, or a principal executive officer or ranking elected official for a municipality, state, federal, or other public agency.	<input type="checkbox"/>	
8.8 The permittee shall give notice to the Director as soon as possible of any planned physical alternations or additions to the permitted facility. Notice is required when the alteration or addition could significantly change the nature or increase the quantity of pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 122.42(a)(1). [40 CFR 122.41(l)(1)(ii)]	As a baseline, verify the permit: • Includes all those areas in the system where there is a "discharge of pollutants". • Adequately describes the nature and quantity of discharge. Verify that records indicate the Director was contacted of any significant changes in the nature of discharge or increase in quantity of discharge.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
8.9 The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. [40 CFR 122.41(l)(2)]	Verify records indicate that the MS4 notified the Director of any anticipated noncompliance.	<input type="checkbox"/>	
8.10 Monitoring results shall be reported at intervals specified in the permit. [40 CFR 122.41(l)(4)]	Verify that all monitoring results were sent to the Director at the intervals specified in the permit, by reviewing the file which includes the DMRs or other approved reporting forms.	<input type="checkbox"/>	

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Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
8.11 Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting monitoring results. [40 CFR 122.41(l)(4)(i)]	Verify that the correct forms for reporting monitoring results are being used by the MS4.	<input type="checkbox"/>	
8.12 If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136, the test results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. [40 CFR 122.41(l)(4)(ii)]	Verify if the permittee monitors any pollutant more frequently than required. If so, verify: <ul style="list-style-type: none"> • All pollutant monitoring results use approved test procedures • The results are included in the calculations • The results are reported to the Director 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
8.13 Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit. [40 CFR 122.41(l)(4)(iii)].	Verify that the arithmetic mean is being utilized to calculate the average of multiple measurements.	<input type="checkbox"/>	
8.14 Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. [40 CFR 122.41(l)(5)]	Verify that all reports relating to compliance schedules were submitted to the Director within 14 days following the schedule date.	<input type="checkbox"/>	
8.15 The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. [40 CFR 122.41(l)(6)(l)]	Verify records include any incidents on non-compliance including releases of hazardous substances or oil. Verify records indicate that these incident were reported: <ul style="list-style-type: none"> • Orally (e.g., telephone call) within 24 hours of becoming aware of the event, • In writing within 5 days of becoming aware of the event Verify that the written submission included: <ul style="list-style-type: none"> • Description of the 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

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	noncompliance and the cause <ul style="list-style-type: none"> • The period of noncompliance (dates and times) • If the noncompliance was not corrected, the time frame that noncompliance is expected to continue, the steps taken to reduce, eliminate, or prevent reoccurrence of such an event. 	<input type="checkbox"/> <input type="checkbox"/>	

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**NPDES Stormwater Requirements
for Small Municipal Separate Storm Sewer Systems**

Note: The requirements for small municipal separate storm sewer systems (MS4s) are based on the model small MS4 general permit. Refer to the applicable state-specific small MS4 permit for any additional state-specific requirements. Language will vary depending on if permit is state-wide, watershed specific, etc. The corresponding permit section number and/or regulation citation is found after the section title or the requirement text.

This checklist is based on the assumption that the permitting authority has determined the eligibility of the operator and has reviewed the NOI/application for completeness. Consequently, these items are not discussed in depth below. Additionally, it is important to note that operators of small MS4s have until the end of the first permit term (typically five years) to fully implement the stormwater management program.

Compliance Category: Stormwater Management for Small MS4s			
Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
9.0 Applicability			
The operator of a small MS4s is required to obtain permit coverage, unless qualifying for a waiver. This includes, but is not limited to, federal, state, tribal, or local governments (including state departments of transportation). (40 CFR 122.32(a)) AND Small MS4s located in an urbanized area, as determined by the latest Decennial Census by the Bureau of the Census. [40 CFR 122.26(a)(1)] OR The operator is designated by the permitting authority [40 CFR 122.26(b)]	Verify the MS4 meets the regulatory definition of a small MS4 and satisfies the requirements in 40 CFR 122.32 (see Key Terms and Definitions).	<input type="checkbox"/>	
10.0 Limitations on Coverage (MS4 - 1.3)			
The permit does not authorize: • Discharges or discharge-related activities that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the ESA or result in the adverse modification or destruction of habitat that is designated as critical under the ESA. • Discharges and discharge-	Verify the operator has determined the location of outfalls into receiving waters to determine where discharges occur and what may be impacted (<i>ALSO SEE 12.3 Illicit Discharge Detection and Elimination [122.34(b)(3)] (MS4 - 4.2.3)</i>). Verify if the Stormwater Management Program (SWMP) has indicated any additional discharge points/related activities. If so, verify if these points/related	<input type="checkbox"/> <input type="checkbox"/>	

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<p>related activities with unconsidered adverse effects on historic properties.</p> <ul style="list-style-type: none"> Discharges to territorial seas, the contiguous zone, and the oceans unless such discharges are in compliance with the ocean discharge criteria of 40 CFR 125, Subpart M. Discharges that would cause or contribute to instream exceedances of water quality standards. Discharges that do not comply with the state or tribe's anti-degradation policy for water quality standards. <p>Note: Both at the time the NOI/application is filed and throughout the implementation of the SWMP the operator must identify the location of discharge points as well as determine if any existing or new discharges or discharge related activities will have any impact on the above.</p>	<p>activities impact endangered species, historic properties, etc., limiting permit coverage and this has been communicated with the permitting authority.</p>	<input type="checkbox"/>	
11.0 Discharges to Water Quality Impaired Waters (MS4 - 3.1)			
<p>The operator must comply with any more stringent effluent limitations in the permit, including permit requirements that modify, or are in addition to, the minimum control measures based on an approved total maximum daily load (TMDL) or equivalent analysis. [40 CFR 122.34(e)(1)]</p>	<p>Determine if a waterbody to which the MS4 discharges has been designated as a 303(d) listed water or a TMDL has been developed for the waterbody.</p> <p>If discharging to an impaired water, verify the SWMP discusses:</p> <ul style="list-style-type: none"> How discharges of pollutants of concern will be controlled How the operator will ensure discharges will not cause or contribute to exceedances of water quality standards Measures and BMPs that will control these discharges <p>If a TMDL has been developed for the waterbody(s), verify the operator has determined the applicability of the MS4s discharges to the TMDL</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

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	including: <ul style="list-style-type: none"> • If the TMDL is for a pollutant likely to be in stormwater discharges • If the TMDL has WLAs or other performance requirement for the MS4 • If the TMDL addresses a flow regime likely to occur in periods of stormwater discharge from MS4 <p>If the MS4 must implement WLA provisions of the TMDL, verify that the operator has assessed if WLAs are being met through existing stormwater control measures.</p> <p>Verify documentation of all current or planned control measures and the schedule for planned measures. Documentation must include the calculations/evidence showing WLAs will be met.</p> <p>Verify documentation of a monitoring program showing controls are adequate to meet the WLAs.</p> <p>If additional/modified controls are necessary, verify the type and schedule for additional controls has been described in the SWMP.</p> <p>Note: Two continuous monitoring cycles must show that the WLAs or water quality standards are being met.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
12.0 Stormwater Management Programs - Requirements [40 CFR 122.34(a)] (MS4 - 4.1 and 4.3)			
The operator must, at a minimum, develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. [40 CFR 122.34(a)] If an existing qualifying local	Verify the operator has developed, implemented, and is enforcing a SWMP. Verify the SWMP includes the following minimum control measures: <ul style="list-style-type: none"> • Public education and outreach • Public involvement/participation • Illicit discharge detection and 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

Protocol for Conducting Environmental Compliance Audits under the Stormwater Program

Compliance Category: Stormwater Management for Small MS4s			
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<p>program requires the operator to implement one or more of the minimum control measures, the NPDES permitting authority may include conditions in the NPDES permit that may direct the operator to follow that program's requirements rather than the requirements described under 40 CFR 122.34(b). [40 CFR 122.34(c)]</p>	<p>elimination</p> <ul style="list-style-type: none"> • Construction site stormwater runoff control • Post-construction stormwater management in new development and redevelopment • Pollution prevention/good housekeeping. <p>Verify the SWMP includes the BMPs that the operator or another entity will use to address each of these control measures including:</p> <ul style="list-style-type: none"> • Measurable goals for each BMP • Time required to undertake BMP, including interim milestones and frequency of the action • Person(s) responsible for implementing/coordinating BMP • Rationale for selection of BMPs and measurable goals <p>If a qualifying local program is requiring the operator to implement a control measure(s), verify that this has been discussed in the SWMP.</p> <p>Note: If the operator is meeting the requirements of a qualifying local program, the operator may not be required to submit information on the other minimum measures discussed below.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	
12.1 Public Education and Outreach on Stormwater Impacts [122.34(b)(1)] (MS4 - 4.2.1)			
<p>The operator must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff. [40 CFR 122.34(b)(1)]</p>	<p>Verify the SWMP describes the decision process for program development including:</p> <ul style="list-style-type: none"> • Plans to inform individuals/households about reducing stormwater pollution • Plans to inform individuals/groups about involvement with the stormwater program • The target audiences and why they are selected • The targeted pollutant sources • The outreach strategy and methods that will be used to 	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	

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	<p>reach targeted audiences</p> <ul style="list-style-type: none"> • The number of people expected to be reached by the strategy in permit term • Who is responsible for management and implementation of the program/BMPs • How the success of the minimum measure will be evaluated • How the measurable goals were selected <p>Verify the BMPs and measurable goals outlined in the plan have been met by the schedule in the SWMP.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
12.2 Public Involvement/Participation [122.34(b)(2)] (MS4 - 4.2.2)			
The operator must, at a minimum, comply with state, tribal and local public notice requirements when implementing a public involvement/participation program. [122.34(b)(2)]	<p>Verify the SWMP describes the decision process for program development including:</p> <ul style="list-style-type: none"> • How the public was involved in NOI submittal and SWMP development • The plan for public involvement in program development and implementation • The target audiences for the involvement program including ethnic and economic groups • Person(s) responsible for the management and implementation of the program/elements • The types of public involvement activities including, where appropriate: <ul style="list-style-type: none"> • Citizen representatives on a local stormwater management panel • Public hearings • Citizen volunteers to educate other individuals about the program • Volunteer monitoring • How success of minimum measures are evaluated • How measurable goals were selected <p>Verify the SWMP describes how the</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

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Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
	<p>public involvement/ participation program complies with state, Tribal, and local public notice requirements.</p> <p>Verify the BMPs and measurable goals outlined in the plan have been met by the schedule set forth in the SWMP.</p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	
12.3 Illicit Discharge Detection and Elimination [122.34(b)(3)] (MS4 - 4.2.3)			
<p>The operator must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at 122.26(b)(2)). [122.34(b)(3)]</p>	<p>Verify a storm sewer map has been developed indicating location of outfalls and receiving waters.</p> <p>Verify the SWMP describes the decision process for program development including:</p> <ul style="list-style-type: none"> • How a storm sewer map is or will be developed and how it will be updated • The regulatory mechanism that will be used to prohibit discharges (i.e., ordinance) including: <ul style="list-style-type: none"> • Why the mechanism was chosen • A description of the plan to develop the mechanism or copy of relevant sections if already developed • A description of the plan to ensure compliance of this regulatory mechanism through enforcement procedures and actions • A plan to detect and address illicit discharges including: <ul style="list-style-type: none"> • Dry weather screening for non stormwater flows • Field tests of selected chemical parameters • A mechanism to address on-site sewage disposal systems that flow into the storm drainage system and procedures for: <ul style="list-style-type: none"> • Locating priority areas • Tracing source o f discharges (including techniques) • Removing the source of the 	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	

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Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
	<ul style="list-style-type: none"> illicit discharges • Program evaluation and assessment • A plan to inform public employees, businesses, and the general public of the hazards of illegal discharges and improper disposal (including how this will coordinate with public education, pollution prevention/ good housekeeping) • Person(s) responsible for management and implementation of the program/BMPs • How success of minimum measures are evaluated • How measurable goals were selected <p>If already developed, verify the storm sewer map shows the location of the outfalls and names and location of receiving waters.</p> <p>Verify the BMPs and measurable goals outlined in the plan have been met by the schedule set forth in the SWMP.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
12.4 Construction Site Stormwater Runoff Control ([22.34(b)(4)] (MS4 - 4.2.4)			
<p>The operator must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. (12.34(b)(4))</p>	<p>Verify the SWMP describes the decision process for program development including:</p> <ul style="list-style-type: none"> • The regulatory mechanism that will be used to require erosion and sediment controls at construction sites (i.e., ordinance) including: <ul style="list-style-type: none"> • Why this mechanism was chosen • A description of plan to develop the mechanism or copy of relevant sections if already developed • A description of the plan to ensure compliance of this regulatory mechanism through sanctions and enforcement • Description of procedures for when certain sanctions are used 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

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	<p>training program used to prevent/reduce stormwater pollution from municipal activities including:</p> <ul style="list-style-type: none"> • A description of exiting materials used • Description of how the training program is coordinated with public information and illicit discharge minimum measures • A program description addressing: <ul style="list-style-type: none"> • Maintenance activities, schedules, and long-term inspection procedures for controls to reduce floatables/pollutants to the MS4 • Controls for reducing or eliminating discharges from streets, parking lots, storage yards, etc. • Procedures for proper disposal of waste removed from MS4 and municipal operations • Procedures ensure flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection • Person(s) responsible for management and implementation of the program/BMPs • How success of minimum measures are evaluated • How measurable goals were selected <p>Verify the training program for the municipal staff achieves the intended goal of educating staff associated with reducing pollutant runoff from municipal operations.</p> <p>Verify that proposed maintenance activities are performed.</p> <p>Verify the BMPs and measurable goals outlined in the plan have been met by the schedule set forth in the SWMP.</p>	<p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p> <p align="center"><input type="checkbox"/></p>	

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13.0 Sharing Responsibility (40 CFR 122.35) (MS4 - 4.4)			
<p>The operator may rely on another entity to satisfy the operator's NPDES permit obligation to implement a minimum control measure (40 CFR 122.35).</p>	<p>If an entity other than the MS4 is implementing part or all of a minimum control measure, verify the operator:</p> <ul style="list-style-type: none"> • Has actually implemented the measure <input type="checkbox"/> • Has implemented a control measure or component of the control measure that is at least as stringent as the corresponding permit requirements <input type="checkbox"/> • Has agreed to implement the control measure on the municipality's behalf and that this obligation is maintained as part of the description of the stormwater management program (in the form of a Memorandum of Agreement, etc.) <input type="checkbox"/> 		
14.0 Reviewing and Updating Stormwater Management Programs [40 CFR 122.34(g)] (MS4 - 4.5)			
<p>The operator must evaluate program compliance, the appropriateness of the identified best management practices, and progress towards achieving the identified measurable goals. [40 CFR 122.34(g)]</p> <p>Permits... may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Director's initiative. However, permits may only be modified, revoked and reissued, or terminated for the reasons specified in §122.62 or §122.64... All requests shall be in writing and shall contain facts or reasons supporting the request. [40 CFR 124.5]</p>	<p>Verify the operator has performed an annual review of the SWMP in conjunction with the annual report.</p> <p>If modifications have been made to the SWMP, verify a record of written notification of proposed change including:</p> <ul style="list-style-type: none"> • An analysis of why the BMP is ineffective or infeasible <input type="checkbox"/> • Expectations of the effectiveness of the replacement BMP <input type="checkbox"/> • The analysis of why the replacement BMP is expected to achieve goals of replaced BMP <input type="checkbox"/> • Any modifications to the SWMP are approved by the regulating agency are implemented according to schedule <input type="checkbox"/> <p>If additional areas have been added to the MS4, verify:</p> <ul style="list-style-type: none"> • A plan for implementation of the SWMP has been developed for the area <input type="checkbox"/> 		

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	<ul style="list-style-type: none"> • The SWMP has been implemented no longer than one year after the addition of the area <p>Note: Only those portions of SWMP required as permit conditions are subject to 40 CFR 122.4. Modifications of BMPs are considered minor changes and not modifications to the permit.</p>	<input type="checkbox"/>	
15.0 Monitoring (MS4 5.1)			
<p>The operator must evaluate the program compliance, the appropriateness of identified BMPs, and progress towards achieving identified measurable goals. [40 CFR 122.34(g)]</p> <p>Note: The NPDES permitting authority may determine monitoring requirements for the operator in accordance with state/Tribal monitoring plans appropriate to the watershed. [40 CFR 122.34(g)(1)]</p>	<p>When monitoring is conducted, verify in records:</p> <ul style="list-style-type: none"> • Representative samples and measurements have been taken <input type="checkbox"/> • It is conducted according to the test procedures approved under 40 CFR 136 <input type="checkbox"/> • Records include: <input type="checkbox"/> <ul style="list-style-type: none"> • Date, location, time of sampling • Name of those performing sampling • Date of analyses • Name of those performing analyses • Analytical techniques or methods used • Results of analyses <p>Verify monitoring results are reported on a Discharge Monitoring Report (DMR). <input type="checkbox"/></p> <p>If the MS4 discharges to a water for which a TMDL was approved, verify that any additional monitoring requirements were performed. <input type="checkbox"/></p>		
16.0 Recordkeeping (MS4 - 5.2)			
<p>The operator must keep records required by the NPDES permit for at least three years. The operator must submit records to the NPDES permitting authority only when specifically asked to do so. The operator must make records, including a description of the</p>	<p>Verify the following are maintained on file:</p> <ul style="list-style-type: none"> • Records of all monitoring information required in the permit (i.e., calibration and maintenance records, original strip chart recordings for 	<input type="checkbox"/>	

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Regulatory Requirement or Management Practice:	Reviewer Checks	Reviewer Completed	Reviewer Notes
SWMP, available to the public at reasonable times during regular business hours. [40 CFR 122.35(g)(2)]	continuous monitoring instrumentation, analytical laboratory reports) <ul style="list-style-type: none"> • Copies of all reports required in permit • DMRs • A copy of the permit • Records of all data used to complete the application (NOI) Verify a description of the SWMP has been retained in an accessible location for the permitting authority and that records are available to the public.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
17.0 Reporting (MS4 - 5.3)			
Unless the operator is relying on another entity to satisfy the NPDES permit obligations under §122.35(a), the operator must submit annual reports to the NPDES permitting authority for the first permit term. For subsequent permit terms, the operator must submit reports in year two and four unless the NPDES permitting authority requires more frequent reports. [40 CFR 122.35 (g)(3)]	Verify an annual report has been submitted as required and includes: <ul style="list-style-type: none"> • The status of compliance with permit conditions • An assessment of the appropriateness of BMPs • The progress towards achieving the goal of reducing the discharge of pollutants to the MEP • The measurable goals for each minimum control measure • The results of information collected and analyzed (if any), including monitoring data used to assess the success of the program • A summary of stormwater activities planned in the next reporting cycle and schedule • Any proposed changes to SWMP (including to BMPs and measurable goals) • Notice that the operator is relying on another entity for permit obligations Verify that stormwater activities reported in the annual report are being undertaken by the permittee or other entity.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

Appendix A

Onsite Checklist for Construction Stormwater Discharges

Onsite Checklist for Construction Stormwater Discharges

Reviewer checks of regulatory requirements or management practices for construction activity require both paperwork and on-site review. To facilitate the review process, reference to those checks requiring on-site are referenced below.

Permit Reference	
2.1.1 Discharging into Receiving Waters with an Approved TMDL and Documentation of Permit Eligibility (CGP Part 1.3.C.5 and 3.14. A, B, and C)	Verify on site the operator has incorporated measures or controls into the SWPPP that are consistent with the assumptions and requirements of the TMDL.
2.1.2 Endangered and Threatened Species and Critical Habitat Protection and Documentation of Permit Eligibility (CGP Part 1.3.C.6 and 3.7)	Verify on site the permittee has implemented measures (i.e., BMPs) to protect listed threatened or endangered species or critical habitat
2.1.3 Historic Properties (CGP Part 1.3.C.7)	Verify on site the permittee has implemented measures to protect historic properties and places.
4.1 SWPPP Framework (CGP Part 3.1.C)	If a definable area is marked on the SWPPP as being stabilized, verify that it is indeed stabilized on site.
4.2 Requirements for Different Types of Operators (CGP Part 3.2.C)	Verify on site that the operator's activities have not negatively impacted another party's pollution controls.
4.4 Pollution Prevention Plan Contents: Controls to Reduce Pollutants (CGP Part 3.4.B, 3.13.D)	Verify on site disturbed areas are stabilized (sodded or covered by other means) where construction activities have temporarily or permanently ceased.
4.4 Pollution Prevention Plan Contents: Controls to Reduce Pollutants (CGP Part 3.4.D, 3.13.E)	Verify on site the appropriate sediment and erosion control measures for the drainage area of the site is implemented as described in the SWPPP.
4.4 Pollution Prevention Plan Contents: Controls to Reduce Pollutants (CGP Part 3.4.E)	Verify placement of structural measures in the SWPPP and on site.
4.4 Pollution Prevention Plan Contents: Controls to Reduce Pollutants (CGP Part 3.4.F)	Verify on site through inspection of outfalls that no solid/building materials are discharged unless authorized by a permit.
4.4 Pollution Prevention Plan Contents: Controls to Reduce Pollutants (CGP Part 3.4.G, 3.13.B)	Verify on site that accumulation of sediment, or signs of sediment escape, does not appear outside the construction entrance or perimeter of the construction site.
4.4 Pollution Prevention Plan Contents: Controls to Reduce Pollutants (CGP Part 3.4.H, 3.13.C)	Verify on site that those construction and waste materials stored on-site match those noted in the SWPPP.

4.4 Pollution Prevention Plan Contents: Controls to Reduce Pollutants (CGP Part 3.4.H, 3.13.C)	Verify on site that the exposure minimization practices discussed in the SWPPP have been implemented.
4.4 Pollution Prevention Plan Contents: Controls to Reduce Pollutants (CGP Part 3.4.H, 3.13.C)	Verify on site the stormwater conveyance system and the outside perimeter of the construction site are free of debris and chemicals.
4.4 Pollution Prevention Plan Contents: Controls to Reduce Pollutants (CGP Part 3.4.H, 3.13.C)	Verify on site that the spill prevention and response practices are being implemented (there are materials provided to employees, trainings, etc.)
4.4 Pollution Prevention Plan Contents: Controls to Reduce Pollutants (CGP Part 3.13.F)	Verify on site: <ul style="list-style-type: none"> • The velocity dissipation devices have been installed • There is no evidence of erosion at outlet • High velocity flow has not misplaced rocks • The size and number of rocks are adequate to avoid soil erosion • There is no evidence of additional sedimentation in receiving water attributable to the site
4.5 Non-Stormwater Discharge Management (CGP Part 3.5)	Verify on site non-stormwater discharges are eliminated or reduced to the extent feasible
4.6 Maintenance of Controls (CGP Part 3.6.A, 3.13.A)	Verify on site that the control measures, including erosion and sediment controls, identified in the SWPPP are installed and operating effectively.
4.6 Maintenance of Controls (CGP Part 3.6.A, 3.13.A)	Verify on site that if a control measure has been used inappropriately or correctly it has been replaced or modified.
4.6 Maintenance of Controls (CGP Part 3.6.B)	Verify on site that changes to existing BMPs or additional BMPs have been implemented/added.
4.6 Maintenance of Controls (CGP Part 3.6.C)	Verify on site that sediment accumulated does not exceed 50 percent of capacity of sediment traps and/or sediment ponds.
4.8 Inspections (CGP Part 3.10.B)	If the operator has modified the inspection frequency, verify on site that one of the following applies: <ul style="list-style-type: none"> • The entire site is temporarily stabilized • Runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or the ground is frozen) • Construction is occurring during seasonal arid periods in arid areas and semi-arid areas

Appendix B

EPA Stormwater Regional Contacts

EPA Stormwater Regional Contacts

REGION 1

Thelma Murphy
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REGION 2

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Central Europa Building, Suite 417
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REGION 3

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REGION 4

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REGION 5

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REGION 6

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REGION 7

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REGION 9

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San Francisco, CA 94105-3901
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REGION 10

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Appendix C

Information Sources

Information Sources
(Updated November 2004)

WEBSITES (water and/or wastewater-oriented; financial related)

EPA National Compliance Assistance Clearinghouse	www.epa.gov/clearinghouse
Compliance Assistance Centers	http://www.assistancecenters.net
Construction Industry Compliance Assistance Center	www.cicacenter.org
EPA NPDES website	http://www.epa.gov/npdes
EPA Operator On-Site Technical Assistance Program–104(g) (hands-on assistance to small municipal WWTP operators at no cost to community)	www.epa.gov/owm/mab/smcomm/104g/sstc.htm
EPA Office of Wastewater Management	www.epa.gov/owm
EPA Clean Water Tribal Grant Program	www.epa.gov/owm/mab/indian/cwisa.htm
EPA Colonias Program	www.epa.gov/owm/mab/mexican
EPA Clean Water State Revolving Loan Fund Program	www.epa.gov/owm/cwfinance/cwsrf
EPA Website (Headquarters & Regions)	www.epa.gov/
EPA Small Business Gateway	http://www.epa.gov/smallbusiness
Environmental Finance Center	http://sspa.boisestate.edu/efc
National Environmental Services Center/WV University	www.nesc.wvu.edu
Local Govt. Environmental Assistance Network	www.lgean.org
Rural Community Assistance Program (RCAP)	www.rcap.org
Water Environment Federation (WEF)	www.wef.org
AMSA	www.amsa-cleanwater.org/pubs/
American Water Works Assoc. (AWWA)	http://www.awwa.org/
National Association of Towns & Townships (NATAT)	http://www.natat.org/

PUBLICATIONS /TRAINING VIDEOS /NEWSLETTERS, etc.

EPA National Service Center For Environmental Publications (NSCEP)
USEPA/NSCEP
PO Box 42419
Cincinnati, OH 45242
Tele: 1-800-490-9198 or 513-489-8190 (fax: 513-489-8695)

EPA Office of Water Resource Center
Tele: 202-566-1729 (24 hours)
center.water-resources@epa.gov

National Environmental Services Center (formerly the National Small Flows Clearinghouse)

West Virginia University Small Business Gateway

P.O. Box 6064

Morgantown, WV 26506

Tele: 1-800-624-8301

California State University - Sacramento

Tele: 916-278-6142

(training videos, etc.)

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