

Environmental permitting is required for a variety of public works projects—from everyday operations and maintenance to new construction. This toolbox provides general information on the different types of permits that may be required including National Pollutant Discharge Elimination System (NPDES) Municipal Storm Sewer System (MS4) permits, NPDES Construction General permits, and Clean Water Act Section 401 Certification and Section 404 permits, Endangered Species Act (ESA) consultation, and Section 106 consultation. This toolbox is not intended to be all-inclusive of permitting processes. Rather, it provides an initial framework public works staff can refer to when presented with project opportunities and challenges.

# National Pollutant Discharge Elimination System (NPDES)

## Municipal Separate Storm Sewer System

A Municipal Separate Storm Sewer System (MS4) is a conveyance system or set of systems separate from sanitary sewer systems and owned by a public entity. The storm sewer system is anything that collects or conveys stormwater and includes roads, gutters, ditches, storm sewer intakes (also known as drains or inlets), outlets, stormwater management practices such as detention basins and the pipes that link this infrastructure together.

The Clean Water Act 33 U.S.C. §1251 et seq. of 1972 (CWA) regulates the discharge of pollutants into navigable waters and then further defines navigable waters as waters of the United States (WOTUS). Some public entities (cities, counties, parishes, states, villages, towns, transportation agencies, and military bases) must obtain a National Pollutant Discharge Elimination System (NPDES) permit under the CWA that allows them to direct stormwater and the pollutants in it to WOTUS. A majority of states (46) have been delegated authority by the US Environmental Protection Agency (EPA) to issue and administer NPDES MS4 permits, while the EPA maintains this authority in the remaining states and territories.

The regulations distinguish between large and small MS4 permittees, mainly based on the jurisdiction's size. Large jurisdictions are typically called Phase I MS4s and have populations over 100,000 residents. These permittees are typically issued "individual" permits, which are tailored more specifically to local conditions. Smaller jurisdictions are typically referred to as Phase II MS4s and have populations between 10,000 and 100,000 residents. These permit holders typically receive a general permit, which covers a large group of similarly situated entities (such as those located within a state or large watershed) and generally imposes a uniform set of requirements on all permittees. Regardless of size, regulated entities are subject to:

- Higher costs (operational, permitting, capital improvements, etc.) than non-regulated entities
- Heightened scrutiny from regulatory agencies (state and/ or EPA)
- Identification and improvement of locally impaired water bodies
- Full compliance with permit requirements including "Six Minimum Control Measures" plus any additional requirements imposed by the regulating authority. More information on the control measures can be found here: https://www3.epa.gov/region1/npdes/stormwater/ma/sixminimum-control-measures.pdf

The Six Minimum Controls are:

- Public Education and Outreach Permittees are required to provide education and outreach to targeted audiences on the impacts stormwater and the pollutants it can have on the environment.
- Public Participation This measure provides at least a single annual opportunity for the public to participate in the development or implementation of the MS4's program entity.
- Illicit Discharge Detection and Elimination This measure focuses on identifying cross-connections between and then eliminating a permittee's MS4 system and sources on non-stormwater discharges into it, such as sanitary sewer cross connections.
- 4. Management of Construction Site Runoff Silt and sediment carried in stormwater from construction sites result in significant effects on water resources. This measure focuses on the implementation by ordinance of temporary erosion and sediment control practices and the requirements for plan submittals.



- Management of Post-Construction Site Runoff Permittees must require by ordinance the onsite (i.e., manage it where it falls on the landscape) management of stormwater and prioritizes the use of low impact development techniques or green stormwater infrastructure over more traditional practices.
- Good Housekeeping of Municipal Operations Entities are required to implement practices around their operations which focus on reducing pollutants in stormwater. This measure also requires street sweeping and optimization of catch basin cleanout.

MS4 permits are typically renewed on five-year schedules and can take approximately six months to a year to apply for and obtain the first time. Implementation of an MS4 permit for new permittees is often a phased process and renewed permits include a process continuous improvement (i.e., plancheck-revise). Permittees often require public works staff to direct the implementation of their permit.

Additional information on MS4s and the permitting process can be found on the US EPA's website: (list is not inclusive)

- <u>https://www.epa.gov/npdes/stormwater-discharges-</u> municipal-sources
- https://www.epa.gov/sites/default/files/2017-01/ documents/part1-epa\_compendium\_of\_ms4\_general\_ permit\_requirements\_508.pdf

Each delegated authority can have state- or agencyspecific requirements. APWA encourages entities to coordinate with their local regulatory authority to confirm permitting needs and requirements.

The Water Resources Management Committee has developed this member resource on Municipal Separate Storm Sewer System (MS4). This toolbox is intended for individuals new to this area of public works. It can also be used as education for residents and the governing body of your agency. https://www.apwa.org/resource/municipal-separate-stormsewer-system-ms4/

## **NPDES Construction General Permits**

Again, a majority of states (46) have been delegated authority by the EPA to issue and administer NPDES construction permits, while the EPA maintains this authority in the remaining states and territories. An NPDES construction permit is required for any construction activity disturbing one acre or more of land, or less than one acre of land, but that is part of a common plan of development or sale that will ultimately disturb one or more acres of land. More information on the construction general permit can be found on EPA's website https://www.epa.gov/npdes/2022-constructiongeneral-permit-cgp. Each delegated authority can have stateor agency-specific requirements. APWA encourages entities to coordinate with their local regulatory authority to confirm permitting needs and requirements.

## Clean Water Act Section 401 Certification and Section 404 Permits

## Clean Water Act Section 401

Under Section 401 of the CWA, a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into WOTUS unless a Section 401 water quality certification is issued, or certification is waived. States and authorized tribes where the discharge would originate are generally responsible for issuing water quality certifications. In cases where a state or tribe does not have authority, the EPA is responsible for issuing certification, similar to NPDES MS4 permits. Some of the major federal licenses and permits subject to Section 401 include:

- Clean Water Act Section 402 and 404 permits issued by EPA or the US Army Corps of Engineers (USACE),
- Federal Energy Regulatory Commission (FERC) licenses for hydropower facilities and natural gas pipelines, and
- Rivers and Harbors Act Section 9 and 10 permits (<u>https://www.epa.gov/cwa-401/overview-cwa-section-401-certification</u>)

#### **Clean Water Act Section 404**

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into WOTUS, including wetlands. Activities in WOTUS regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into WOTUS, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities) (https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404).

Typically, if it is determined a Section 404 permit is needed, the applicant will submit a joint permit to both USACE and their appropriate state agency. This agency is typically a department of natural resources or department of environmental quality. This will meet both Section 401 and Section 404 submittal requirements. The state agency will determine if a 401 certification is needed and will outline special state level requirements. USACE will then determine if the discharge is covered under a general permit or an individual permit. An individual, or standard permit, is issued when projects have more than minimal individual or cumulative impacts, are evaluated using additional environmental criteria, and involve a more comprehensive public interest review. A general permit is issued for structures, work, or discharges that will result in only minimal adverse effects. General permits are issued on a nationwide, regional, or state basis for particular categories of activities. There are three types of general permits: nationwide permits, regional general permits, and programmatic general permits. General permits are usually valid for five years and may be reauthorized by USACE.

## Endangered Species Act (ESA)

The Endangered Species Act (ESA) of 1973 provides a framework for species conservation and protection—both domestically and abroad. It also protects habitats critical to the continued existence of any listed species. It is managed by the National Oceanic and Atmospheric Association (NOAA) Fisheries and US Fish and Wildlife Services (USFWS). A federal action (i.e., issuing a permit or funding a project, etc.) requires the federal agency consult with NOAA Fisheries and USFWS on the effects of the action on ESA listed species. This process can require extensive field work, public engagement, and time and should be coordinated with the federal action agencies early in project development to avoid unnecessary delays. More information can be found here:

https://www.epa.gov/laws-regulations/summary-endangeredspecies-act

https://www.fisheries.noaa.gov/national/endangered-speciesconservation/endangered-species-act#:~:text=The%20 Endangered%20Species%20Act%20of,habitats%20both%20 domestically%20and%20abroad.

https://www.fws.gov/law/endangered-species-act

#### Section 106 of the National Historic Preservation Act (NHPA)

Similar to ESA consultation, the NHPA requires federal agencies assess the effects of a federal action (i.e., license, approve or fund, etc.) may have on historic properties. The NHPA also provides opportunities for the National Council on Historic Preservation to comment on a proposed federal action. Section 106 of the NHPA outlines the process federal agencies must follow to identify and assess effects on historic properties. A stakeholder engagement process with state historic preservation office(s) (SHPOs), tribal historic preservation officers (THPOs), tribes, Native Hawaiian organizations, and others is also part of the NHPA. This process can require extensive field work, public engagement, and time and should be coordinated with the federal action agencies early in project development to avoid unnecessary delays. More information can be found here:

Integrating NEPA and Section 106 | Advisory Council on Historic Preservation (achp.gov)

#### Summary

This toolbox was created by the Water Resources Management Committee to assist you with environmental permitting. Environmental permitting can impact public works agencies every day because you own, operate, maintain, and construct projects that touch WOTUS and often do so using federal dollars. While it can be challenging, identifying permitting needs and developing a strategy to address them in the early stages of a project often lead to balanced approaches and more certain outcomes. If you have any questions, please contact <u>education@apwa.org</u>.



