

Appendix 7: An Overview of the Clean Water Act

I. Introduction

The federal government and the states are both responsible for addressing water pollution in the United States, but they play different roles. States typically play a primary role in implementing water quality standards and permitting discharges of pollution, while the federal government maintains oversight authority. This authority structure is referred to as cooperative federalism.

The federal Clean Water Act (CWA or Act) authorizes states to administer certain programs under the Act, provided that the U.S. Environmental Protection Agency (EPA) approves the state program. EPA maintains an oversight role, however, and can withdraw its approval if the state program proves insufficient. In that case, EPA would take over the state's responsibilities and administer the Act directly in that state.

II. The Clean Water Act

The federal Clean Water Act was passed in 1972 with the objective “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”¹ The CWA made it illegal to discharge pollutants² from any point source into the waters of the United States without a permit. The Act defines the term point source as “any discernible, confined and discrete conveyance,” such as a pipe or a channel.³

Any source of water pollution that does not meet the point source definition is considered to be a nonpoint source. Nonpoint source pollution, which is caused by rain and snow melt that picks up pollutants from the ground and deposits them in rivers, lakes and streams, is typically from many spread out sources. Common types of nonpoint source pollution include agricultural runoff, sediment from improperly managed land or eroding streambanks, and motor oil that washes off roadways. Nonpoint sources are a significant source of pollution, but they are not required to obtain permits under the CWA.

a. Permitting Requirements

The CWA created two nationwide permitting programs: (1) National Pollution Discharge Elimination System (NPDES) permits; and (2) dredge and fill permits.

¹ 33 U.S.C. § 1251.

² The CWA defines pollutant broadly as “dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.” 33 U.S.C. §1362(6).

³ 33 U.S.C. §1362(14). Point sources include “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.” *Id.*

The NPDES permit program regulates point sources that discharge pollutants into the waters of the United States, such as factory pipes. Although stormwater run-off from land is often treated as a nonpoint source, in situations where it is collected, such as through municipal storm sewers, or can be collected, such as construction and industrial activities, it is regulated as a point source. Stormwater discharges from most municipal separate storm sewer systems (MS4s), construction activities, and industrial activities are regulated under the stormwater NPDES program.⁴

EPA has authorized most of the states, including Tennessee, to administer the NPDES permitting program.⁵ In Tennessee, the Tennessee Department of Environment and Conservation's Division of Water Resources is responsible for processing NPDES permit applications and drafting permit conditions.⁶ As discussed below, NPDES permits require that dischargers meet effluent limits that are derived from technology-based and water-quality based standards.

Dredge and fill permits are required under Section 404 of the CWA, so they are sometimes referred to as Section 404 permits. These permits are required for the discharge of dredged or fill material into the waters of the United States (including wetlands). States may seek authorization to administer the Section 404 permitting program,⁷ but very few of them have done so.⁸ In most states, including Tennessee, the U.S. Army Corps of Engineers administers the Section 404 permitting program. In addition, EPA has veto authority over Section 404 permits.⁹

b. Effluent Limitations

When the CWA was enacted, it required EPA to issue effluent limitation guidelines within one year.¹⁰ EPA is also responsible for revising these guidelines at least annually, if appropriate.¹¹ Among other things, the guidelines identify the amount of pollution control that can be achieved using technology-based standards, for example, the "best practicable control technology" or the "best available technology."¹² The CWA specifically tells EPA what factors to consider in determining the best practicable or best available control technology.¹³

⁴ U.S. EPA, *Stormwater Basic Information*, <http://cfpub.epa.gov/npdes/stormwater/swbasicinfo.cfm>.

⁵ U.S. EPA, *State NPDES Authority*, available at http://www.epa.gov/npdes/images/State_NPDES_Prog_Auth.pdf.

⁶ TDEC, National Pollutant Discharge Elimination System (NPDES) Permit, <http://www.tn.gov/environment/permits/npdes.shtml>.

⁷ 33 U.S.C. § 1344(g).

⁸ Ass'n of State Wetland Managers, *Clean Water Act Section 404 State Assumption* (2010), available at http://aswm.org/pdf_lib/cwa_section_404_state_assumption_factsheets.pdf.

⁹ 33 U.S.C. §1344(c).

¹⁰ 33 U.S.C. §1314(b).

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

c. Water Quality Standards

States are responsible for establishing water quality standards for their waters.¹⁴ However, the CWA authorizes EPA to establish water quality standards for a state if EPA determines that the state's proposed standards are inconsistent with the Act, or if the state fails to establish standards within a particular time frame.¹⁵ Water quality standards have two parts: 1) designated uses of a water body; and 2) water quality criteria for that water body.¹⁶

1. Designated Uses

States are required by regulation to classify their waters and designate "appropriate water uses to be achieved and protected."¹⁷ A state's classification of its waters "must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial, and other purposes including navigation."¹⁸

States must provide notice and opportunity for a public hearing before adding or removing any designated use, or establishing sub-categories of a use.¹⁹ States may remove designated uses only if they are not *existing* uses,²⁰ and only if the state can demonstrate that attaining the designated use is not feasible due to a narrow range of reasons, which are specifically mentioned in the regulations.²¹ A state may remove a designated use that is also an existing use only if the state changes the designated use to one that is more stringent.²²

2. Water Quality Criteria

The role of water quality criteria is to describe those conditions that should be able to fully support a given use. Water quality criteria are "elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When these criteria are met, water quality will generally protect the designated use."²³

The CWA requires EPA to develop water quality criteria that accurately reflect the latest scientific knowledge.²⁴ The criteria are based on data about pollutant concentrations and

¹⁴ See 33 U.S.C. § 1313(a).

¹⁵ See 33 U.S.C. § 1313(b).

¹⁶ 33 U.S.C. § 1313(c)(2)(a).

¹⁷ 40 C.F.R. § 131.10(a).

¹⁸ *Id.*

¹⁹ 40 C.F.R. § 131.10(e).

²⁰ "*Existing uses* are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards." 40 C.F.R. § 131.3(e).

²¹ 40 C.F.R. § 131.3(g).

²² 40 C.F.R. § 131.3(h)(1).

²³ 40 C.F.R. 131.3(b).

²⁴ 33 U.S.C. § 1314(a)(1).

dispersal, and the impacts of these pollutants on human health and the environment.²⁵ As a result, the criteria protect both human health and aquatic life.

EPA must also provide periodic information on: (1) factors necessary to restore and maintain the integrity of the waters of the United States; (2) factors necessary to allow recreation in and on the water and to protect fish, shellfish, and wildlife; (3) the measurement and classification of water quality; and (4) developing TMDLs.²⁶

3. Review and Revision of Water Quality Standards

States must review their water quality standards at least once every three years, and must hold public hearings in conjunction with this review.²⁷ Any new or revised water quality standards must be submitted to EPA for review.²⁸ If EPA determines that the new or revised standard meets the requirements of the CWA within sixty days of submission, the standard is approved and becomes an applicable water quality standard in that state.²⁹

If EPA determines that the standard is inconsistent with the requirements of the Act, then EPA must notify the state within ninety days after submittal and explain what changes must be made.³⁰ The state has ninety days to adopt the changes.³¹ If the state fails to meet the deadline, then EPA must establish the water quality standard for the state.³² EPA must also establish a new or revised standard for a state in any case in which EPA determines that a new or revised standard is necessary to meet the requirements of the CWA.³³

d. Impaired Waterbodies And Total Maximum Daily Loads

The CWA requires states to identify waterbodies that are impaired and do not meet the state's water quality standards.³⁴ These impaired waterbodies must be included on a list (commonly known as a 303(d) list, in reference to the relevant statutory provision) that must be submitted to EPA for approval every two years.³⁵

A 303(d) list must also identify the pollutants affecting the impaired waters and establish a priority ranking for the development of Total Maximum Daily Loads (TMDLs).³⁶ A TMDL establishes the maximum amount of a pollutant that may enter impaired water "at a level

²⁵ *Id.*

²⁶ 33 U.S.C. § 1314(a)(2).

²⁷ 33 U.S.C. § 1313(c)(1).

²⁸ 33 U.S.C. § 1313(c)(2)(A).

²⁹ 33 U.S.C. § 1313(c)(3).

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ 33 U.S.C. § 1313(c)(4)(B).

³⁴ 33 U.S.C. § 1313(d)(1)(A).

³⁵ 40 C.F.R. § 130.7(d)(1).

³⁶ *See* 40 C.F.R. § 130.7(d)(1).

necessary to implement the applicable water quality standards with seasonal variations and a margin of safety.”³⁷

Developing a TMDL is hard work. It involves: (1) looking at all sources (including nonpoint sources) of the pollutant at issue; and (2) figuring out the maximum amount of the pollutant each source can discharge into the water without violating the state water quality standards. The state is required to develop TMDLs in accordance with the 303(d) list’s priority ranking,³⁸ which means that the state develops TMDLs for its most polluted waters first.

EPA has thirty days to review a state’s proposed 303(d) list after the list has been submitted for approval.³⁹ If EPA approves the list, the information therein becomes part of the state’s water quality management program. If EPA does not approve the list, EPA has an additional thirty days to identify impaired waterbodies in the state and to establish TMDLs for them, which are then incorporated into the state’s program.⁴⁰

e. Antidegradation

By regulation, EPA requires states to establish a three-tiered antidegradation policy.⁴¹ Tier 1 maintains and protects a waterbody’s existing uses and the water quality conditions that are needed to support those uses. Tier 2 applies to “high quality” waters in which existing conditions support fishing and swimming. Water quality may be lowered for Tier 2 waters, but only under certain conditions, and it may not be lowered to a level that would interfere with existing or designated uses. Tier 3 applies to outstanding national resource waters and provides the highest level of protection. Water quality may not be lowered in these waters, apart from certain temporary changes.⁴²

f. Section 401 Water Quality Certification

Any application for a federal permit to conduct any activity that may result in a discharge into the waters of the United States must provide the permitting agency with a certification from the state in which the discharge originates or will originate.⁴³ The state certification must certify that the discharge will comply with the applicable water quality standards and other standards under the CWA.⁴⁴ The state must establish procedures for public notice for all applications for certification and may, if it deems it appropriate, also establish procedures for public hearings for specific applications.⁴⁵

³⁷ 33 U.S.C. §1313(d)(1)(C); *see also* 40 C.F.R. §130.7(c)(1)(ii).

³⁸ *See* 40 C.F.R. §130.7(d)(1).

³⁹ 33 U.S.C. §1313(d)(2).

⁴⁰ *See id.*

⁴¹ 40 C.F.R. §131.12.

⁴² U.S. EPA, *Antidegradation Policy*, <http://water.epa.gov/scitech/swguidance/standards/adeg.cfm>.

⁴³ 33 U.S.C. §1341(a)(1).

⁴⁴ *Id.*

⁴⁵ *Id.*

If the state fails to act on a request for certification within a reasonable period of time, not to exceed one year, the certification requirement is waived.⁴⁶ No federal permit may be granted until the state provides the necessary certification (or until certification has been waived).⁴⁷ If the state denies certification, the permit may not be granted.⁴⁸

g. Citizen Suits: CWA §505(a)(1)

The CWA citizen suit provision authorizes “any citizen” to bring a civil action against (1) any person alleged to be in violation of an effluent standard or limitation under the Act, or an order issued with respect to such a standard or order; or (2) the EPA Administrator, where it is alleged that he or she failed to perform any nondiscretionary act or duty under the Act (i.e., any act or duty the Administrator *must* perform).⁴⁹ The federal district courts have jurisdiction over CWA citizen suits.⁵⁰ Suits alleging illegal discharges must be filed in the judicial district where the source of the discharge is located.⁵¹

Before filing a citizen suit, the citizen must provide notice to (1) the Administrator; (2) the state in which the alleged violation occurred; and (3) the alleged violator.⁵² If EPA and the state choose not to take an enforcement action, then the citizen suit may be filed after 60 days have passed.⁵³ If EPA or the state commences and “is diligently prosecuting” a civil or criminal action, the citizen suit may not be filed.⁵⁴ However, any citizen may intervene (i.e., may participate) in the lawsuit as a matter of right.⁵⁵ Likewise, EPA (if not a party) may intervene as a matter of right in a citizen suit.⁵⁶

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ 33 U.S.C. §1365(a).

⁵⁰ *Id.*

⁵¹ 33 U.S.C. §1365(c)(1)

⁵² 33 U.S.C. §1365(b).

⁵³ *See* 33 U.S.C. §1365(b)(1)(A).

⁵⁴ 33 U.S.C. §1365(b)(1)(B).

⁵⁵ *Id.*

⁵⁶ 33 U.S.C. §1365(c)(2).