



Water and Wastewater Regulatory Compliance Corner

Clean Water Act National Pollutant Discharge Elimination System (NPDES) Narrative Limitations

Published October 18, 2021

Introduction

The Federal Water Pollution Control Act of 1948 was the first major US law to address water pollution. Growing public awareness and concern for controlling water pollution led to sweeping amendments in 1972. As amended in 1972, the law became commonly known as the Clean Water Act (CWA). The CWA established the basic structure for regulating pollutant discharges into the waters of the US. It also gave the US Environmental Protection Agency (EPA) the authority to implement pollution control programs such as setting wastewater standards for industry. The EPA was also given authority to issue discharge permits to wastewater treatment facilities. These permits are called National Pollution Discharge Permits, or NPDES.

Narrative Limits

An important part of any NPDES permit is the Narrative Limits. These limits are in place to supplement water quality standards for the body of water that is being discharged into directly. Initially, the CWA authorized EPA to delegate federal authority to states, from which the states set limits that were at least as protective as the federal standards. In 1987, the CWA was amended to authorize EPA to treat eligible Tribal Nations in a manner similar to states, or TAS. Tribal Nations who have attained TAS may develop limits within their jurisdiction. Some Tribal Nations are subject to the limits set by states.

Each NPDES permit shall include conditions that meet certain requirements, where applicable, as outlined in 40 CFR 122.44, Paragraph (d). This title is where the water quality standards and state requirements are found and describe any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards. These more stringent requirements are designed to achieve water quality standards established under section 303 of the CWA, including state narrative criteria for water quality.

Limitations must control all pollutants or pollutant parameters that are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above any state or Tribal water quality standard. To determine the need for a limit of a pollutant, the agency will consider if the receiving water body has concentrations lower than the Tribal or state water quality criterion. If so, then a water quality-based limit is needed in the permit. If the water body concentration is greater than the state- or Tribal-mandated water quality criterion, then there is no need to establish the water quality-based limit. Here is an example of this. If Waxahachie Lake has a nitrate concentration of 10 ppm and the plant discharge is set for 15 ppm, a WQ limit would be needed. If the lake is at 20 ppm, then no limit is needed because the plant's discharge is already below the lake concentration level.

These water quality standards are called Total Maximum Daily Load (TMDL). This is established by calculating the maximum amount of a pollutant that can enter a waterbody and ensure that the waterbody will continue to meet the water quality standard for that pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant.

The Water and Wastewater Regulatory Compliance Corner provides analyses and details about changes to national drinking water standards and regulations, and national regulatory standards for wastewater discharged to surface waters and sewage treatment plants. These technical analyses are intended for Tribal water and wastewater utility professionals, and do not necessarily reflect USET/USEP policy positions about national environmental laws; EPA regulations, rules, and guidance documents; EPA trust and treaty obligations; and EPA strategy for implementing federal environmental programs in the USET region.



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Point and Nonpoint Sources

Sources of pollutants are classified as either point, or nonpoint sources. Point sources are controlled by NPDES programs like wastewater treatment plants, some stormwater discharges, and discharges from concentrated animal feeding operations (CAFO). These point sources are assigned a wasteload allocation (WLA). Nonpoint sources are all remaining sources of pollution as well as natural background sources. Nonpoint sources are assigned a load allocation (LA). TMDLs must also account for seasonal variations in water quality and include a margin of safety (MOS) to account for uncertainty in predicting how well pollutant reductions will result in meeting water quality standards.

Each pollutant causing a waterbody to be impaired or threatened is referred to as a waterbody/pollutant combination, and typically a TMDL is developed for each waterbody/pollutant combination. For example, if one waterbody is impaired or threatened by three pollutants, three TMDLs might be developed for the waterbody. However, in other cases, a single TMDL document may be developed to address several waterbody/pollutants combinations. Neither the CWA nor EPA's regulations define or limit the scale of TMDLs. Some states have been developing TMDLs on a watershed-scale basis. Such state TMDLs may also cover multiple watersheds.

TMDL Triggers and Responsibility

According to the Clean Water Act, each state must develop TMDLs for all the waters identified on their Section 303(d) list of impaired waters, according to their priority ranking on that list. As a general matter, states are responsible for developing TMDLs and submitting them to EPA for approval. Even if third parties assist in the development of the TMDL or its supporting analysis, such TMDLs must still be submitted to EPA by the states. Under the CWA, the EPA reviews and either approves or disapproves the TMDL. If EPA disapproves a state TMDL, EPA must develop a replacement TMDL. The [EPA's website](#) has information about impaired waters and TMDLs, and CWA Section 303(d).

Clean Water Act programs, including Water Quality Standards, TMDLs, and sections 311, 402, and 404 address "navigable waters," defined in the statute as "waters of the United States, including the territorial seas." The CWA does not define "waters of the United States," but authorizes EPA and the US Department of the Army to define "waters of the United States" or WOTUS in regulations. The WOTUS definition has recently been litigated in federal courts, and while a new rulemaking process is initiated, the EPA and Department of the Army are interpreting WOTUS consistent with the pre-2015 regulatory regime.

TMDLs and the NDES Permit

So, what does all of this have to do with your discharge permit? In every NPDES permit there will be a list of narrative limitations that must be followed. There may only be one or two or there may be a long list of requirements. For example, look at the permit for your wastewater treatment plant. The limitations contained

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therein will probably reference 40 CFR 122.44(d) and may reference your Tribal water quality regulations. Each parameter has a title and the limitation for that parameter. For instance:

1. Suspended, colloidal and settleable solids: Tribal surface waters shall be free from suspended, colloidal and settleable solids that will cause deposition or impair the waters for their best uses.
2. Oil, grease, and any floating substances: Tribal surface waters shall be free from oil and grease, including visible oil film and globules of oil, attributable to other than natural sources.

Conclusion

Section 303(d) of the Clean Water Act addresses water restoration and protection. Setting TMDLs for impaired Tribal waters allows Tribal utilities to aid in the healing of these waters. Setting Narrative Limits for nonimpaired Tribal waters allows point source discharges, such as those from a wastewater treatment plant, to keep receiving waters clean and usable, as well as to leave a lasting legacy for future generations.

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