



Water and Wastewater Regulatory Compliance Corner

Preventive Maintenance Plan and Pollution Prevention

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Background: Drinking Water Regulation in America

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources—rivers, lakes, reservoirs, springs, and ground water wells.

SDWA authorizes the United States Environmental Protection Agency (EPA) to set national health-based standards for drinking water to protect against both naturally occurring and synthetic contaminants that may be found in drinking water. EPA, Tribal Nations, states, and water systems then work together to make sure that these standards are met.

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 United States 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.

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40 CFR 122.41(e) states that the permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. The permit writer that is familiar with the wastewater plant will be able to add a Preventive Maintenance Plan (PMP) under the Special Conditions section of the NPDES permit. This will often outline areas of emphasis for that particular plant. Further, if no written PMP was previously used by the facility and that fact was discovered during a sanitary survey of the facility, the permit can require that a written plan be prepared, and copies delivered to the primacy agency.

In order to stay compliant with the PMP requirement, the plan must be periodically inspected and updated. The primary reason for having the PMP updated is to help in ensuring that no unauthorized discharges take place, thus no violations of the permit requirements. The Permittee shall amend the PMP whenever there is a change in the facility or in the operation of the facility that materially increases the generation of pollutants or their release or potential release to the receiving waters. The Permittee shall also amend the plan, as appropriate, when plant

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operations covered by the PMP change. Any such changes to the PMP must be consistent with the objectives and specific requirements listed above. All changes in the PMP must be reported to EPA in writing. If at any time the PMP proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and potential release to the receiving waters and/or the specific requirements above, the permit and/or the PMP must be subject to modification to incorporate revised BMP requirements.

Conclusion

It's actually pretty simple. Set up a really good, thorough Preventive Maintenance Plan, get it approved and send a copy to the primacy agency. Then follow the plan, do your maintenance, and keep very accurate records of what is done, when it's done, and how its done. Your maintenance plan **and** your wastewater plant will stay in compliance. And that makes everyone happy!

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