

# U.S. Environmental Protection Agency NPDES Permit Writers' Manual



U.S. Environmental Protection Agency  
Office of Wastewater Management, Water Permits Division  
State and Regional Branch

EPA-833-K-10-001 • September 2010



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# **United States Environmental Protection Agency**

## **National Pollutant Discharge Elimination System (NPDES) Permit Writers' Manual**

This guidance was developed by staff within the U.S. Environmental Protection Agency's (EPA's) Office of Wastewater Management and addresses development of wastewater discharge permits under the National Pollutant Discharge Elimination System (NPDES). NPDES permit development is governed by existing requirements of the Clean Water Act (CWA) and the EPA NPDES implementing regulations. CWA provisions and regulations contain legally binding requirements. This document does not substitute for those provisions or regulations. Recommendations in this guidance are not binding; the permitting authority may consider other approaches consistent with the CWA and EPA regulations. When EPA makes a permitting decision, it will make each decision on a case-by-case basis and will be guided by the applicable requirements of the CWA and implementing regulations, taking into account comments and information presented at that time by interested persons regarding the appropriateness of applying these recommendations to the situation. This guidance incorporates, and does not modify, existing EPA policy and guidance on developing NPDES permits. EPA may change this guidance in the future.

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EPA-833-K-10-001  
September 2010

# Acknowledgements

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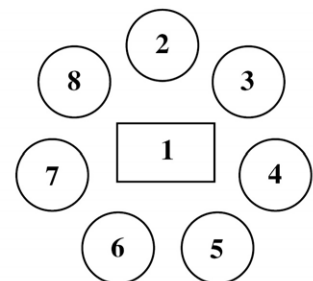
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6. Non-Municipal (Industrial)—EPA
7. Construction Stormwater—Barry Toning, Tetra Tech, Inc.
8. Combined Sewer Overflow—EPA



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## Introduction to the Manual

This manual reviews the statutory and regulatory framework of the National Pollutant Discharge Elimination System (NPDES) program and examines technical considerations for developing NPDES permits for wastewater discharges. The manual is designed, primarily, for new permit writers becoming acquainted with the NPDES program and the process of permit writing, but can also serve as a reference for experienced permit writers or anyone interested in learning about the legal and technical aspects of developing NPDES permits. This manual replaces the *1996 U.S. EPA NPDES Permit Writers' Manual*<sup>1</sup> <[www.epa.gov/npdes/pubs/owm0243.pdf](http://www.epa.gov/npdes/pubs/owm0243.pdf)>, which updated the *1993 Training Manual for NPDES Permit Writers*<sup>2</sup> <[www.epa.gov/npdes/pubs/owm0339.pdf](http://www.epa.gov/npdes/pubs/owm0339.pdf)>.

To assist the reader, acronyms and abbreviations are defined for the first use in each chapter and in Appendix A of the manual. Endnotes are provided at the end of each chapter.

## Purpose of this Manual

The purpose of this *NPDES Permit Writers' Manual* (manual) is to provide a general reference for permitting authorities that outlines and explains the core elements of the NPDES permit program. The core elements form the foundation of the NPDES program on which guidance for specific areas of the program (e.g., stormwater, concentrated animal feeding operations) can be built. While the guidance for these core program areas will be applicable in many cases, the U.S. Environmental Protection Agency (EPA) recognizes that each EPA Regional Office or authorized state, territory, or tribe (hereafter *state*) will tailor specific aspects of its NPDES permitting procedures to address state and local laws and site-specific concerns and conditions.

The specific objectives and functions of this manual are as follows:

- Provide an overview of the scope and the statutory and regulatory framework of the NPDES program.
- Describe the essential components of a permit and provide an overview of the permitting process.
- Describe the different types of effluent limitations and the legal and technical considerations involved in developing effluent limitations.
- Describe the legal and technical considerations involved in developing other permit conditions including
  - Monitoring and reporting requirements.
  - Special conditions.
  - Standard conditions.
- Describe other permitting considerations including
  - Variances.
  - Anti-backsliding.
  - Other applicable statutes.

- Explain the administrative process for issuing, modifying, revoking and terminating NPDES permits.

This manual is not intended to be a standalone reference document. Rather, it establishes the framework for NPDES permit development and should be supplemented, where necessary, by additional EPA and state regulations, policy, and detailed guidance applicable to specific types of dischargers and circumstances. To that end, this manual identifies and references relevant regulations, policy, and other guidance documents throughout the text.

## Publications Referenced

This manual provides links to publications available online that supplement the information in the manual. All documents available electronically were accessed and available as of the date of this manual's publication. Some documents are not available in an electronic format. In those instances, readers should check the following sources to determine the availability of and to obtain printed copies of the documents:

- Office of Water Resource Center (OWRC) <[www.epa.gov/safewater/resource/](http://www.epa.gov/safewater/resource/)>  
OWRC is a contractor-operated facility providing document delivery, information/referral, and reference services to public users and EPA staff interested in Office of Water Program information  
phone: 202-566-1729 or 800-832-7828, fax: 202-566-1736, e-mail: <[center.water-resource@epa.gov](mailto:center.water-resource@epa.gov)>.
- EPA Library Services and Repositories <[www.epa.gov/natlibra/libraries.htm](http://www.epa.gov/natlibra/libraries.htm)>  
EPA's library services and repositories provide access to information about the environment and related scientific, technical, management, and policy information. Library services <[www.epa.gov/natlibra/library\\_services.html](http://www.epa.gov/natlibra/library_services.html)> are delivered through the National Library Network <[www.epa.gov/natlibra/index.html](http://www.epa.gov/natlibra/index.html)>.
- National Service Center for Environmental Publications (NSCEP) <[www.epa.gov/ncepihom/](http://www.epa.gov/ncepihom/)>  
NSCEP, formerly NCEPI, maintains and distributes EPA publications in hardcopy, CD ROM and other multimedia formats. The publication inventory includes more than 7,000 titles  
phone: 513-489-8190 or 800-490-9198, fax: 513-489-8695, e-mail: [ncepimal@one.net](mailto:ncepimal@one.net).
- National Technical Information Service (NTIS) <[www.ntis.gov/](http://www.ntis.gov/)>  
NTIS is the largest central resource for government-funded scientific, technical, engineering, and business related information covering more than 350 subject areas from more than 200 federal agencies  
phone: 703-605-6050 or 888-584-8332, fax: 703-605-6900, e-mail: [customerservice@ntis.gov](mailto:customerservice@ntis.gov).

## Legislative and Regulatory Citations

There are a number of different conventions used to cite legislation and regulations. In this manual, the following conventions have been used:

- When citing the *United States Code*, the abbreviation U.S.C. is used. The abbreviation is preceded by the Title of the U.S.C. and then followed by the section number.  
Example: 16 U.S.C. 1531 *et seq.* and 33 U.S.C. §§ 1251-1387.

- When citing the Clean Water Act, the abbreviation CWA is used. The abbreviation is followed by the word *section* and then the section number.

Example: CWA section 402 and CWA section 402(o).

- When citing the *Code of Federal Regulations* (CFR), the convention depends on the location of the reference. For first references, the abbreviation CFR is preceded by the title number of the CFR and followed either by the word *Part* (if it is a part—a whole number) or the number of the subsection (if it is a subpart/subsection). For subsequent references, the title and CFR are omitted and just the word *Part* or the section symbol (§) is used.

Example: First citation: 40 CFR Part 136 or 40 CFR 122.44

Subsequent citations: Part 136 or § 122.44.

Almost all the regulatory citations in this manual are for Title 40 of the CFR (with the exception of the other federal laws referenced in section 11.1 of this manual). Any other Titles are explicitly referenced and in the format for the first regulatory citation (e.g., 50 CFR Part 402).

## Electronic NPDES Information

Websites and electronically stored publications and data are available to help permit writers draft NPDES permits. Tools have been created to assist permit writers with specific aspects of permit development and are discussed in their respective sections. The electronic tools listed below apply to all aspects of permit development and serve as valuable references for the permit writer.

### NPDES Website and Resources

The Water Permits Division (WPD) within the EPA Office of Water (OW), Office of Wastewater Management, has developed a comprehensive NPDES Website <[www.epa.gov/npdes](http://www.epa.gov/npdes)> with technical and regulatory information about the NPDES permit program, information on related programs and initiatives, and documents published by WPD. Where applicable, this manual references the NPDES Website and provides links to relevant documents on that site. This manual also references other EPA and non-EPA websites that contain information that might be helpful to NPDES permit writers. Note, however, that EPA is not responsible for information provided on websites outside the EPA Website <[www.epa.gov](http://www.epa.gov)>.

WPD also has prepared several websites and other resources to help permit writers draft permits. This manual references those websites and resources in the appropriate section of this manual.

### Electronic Permitting Tools

Many EPA Regions and authorized states have developed tools to help them manage the permit issuance process. Electronic permitting tools range from spreadsheets and word processing applications to sophisticated Web-based systems that enable permitting authorities to manage their entire environmental program. For example, some states have built systems that enable dischargers to electronically sign and submit discharge reports; create, track, and store permit documents; and manage enforcement, compliance, and inspections related to permits. As technologies continue to evolve, many permitting authorities are likely to begin using more information technology applications to manage the process of permitting.

## ICIS-NPDES

Together with OW, the Office of Enforcement and Compliance Assurance (OECA) is responsible for oversight of implementation of the NPDES program. OW is responsible for the NPDES implementing regulations and oversight of permit issuance by states and EPA Regions. OECA, along with its regional, state, tribal and local counterparts, is responsible for tracking and maintaining enforcement and compliance activities, monitoring and enforcement and compliance status of the regulated community, and reviewing and evaluating program performance. OECA also maintains national data systems to support program management and oversight of the NPDES program.

The Permit Compliance System (PCS), one of two national NPDES electronic databases, supports the management and oversight of the NPDES program. Since the last modernization of PCS in 1985, the NPDES program has evolved significantly to include additional program requirements, such as the NPDES program for stormwater and implementation of the Combined Sewer Overflow Control Policy. Because of limitations to PCS, OECA is working to phase out this system and move to a more modern data management system described below.

### The Integrated Compliance Information System for NPDES permits (ICIS-NPDES)

<<https://icis.epa.gov/icis>>, the successor to PCS, provides an updated system that enables national program management and oversight activities such as

- Permit tracking and management.
- Compliance monitoring.
- NPDES program management.
- Enforcement actions.

ICIS-NPDES is a Web-based system with an electronic database capable of handling the large amount of data generated by and about the NPDES program. Section 11.5.1.1 of this manual provides more information on ICIS-NPDES as it relates to NPDES permit compliance.

## Hyperlinks in this Document

Where a website provides supplementary information or is referenced in this manual, the actual site or higher level site address appears in the symbols < > so that readers will have a reference to the address even in a printed version of this document. In the electronic version of the manual, the text in carats is also the hyperlink to the referenced website. Care has been taken to provide the correct Web addresses and hyperlinks; however, these references can change or become outdated after this manual's publication.

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<sup>1</sup> U.S. Environmental Protection Agency. 1996. *U.S. EPA NPDES Permit Writers' Manual*. EPA-833-B-96-003. U.S. Environmental Protection Agency, Office of Water, Washington, DC. <[www.epa.gov/npdes/pubs/owm0243.pdf](http://www.epa.gov/npdes/pubs/owm0243.pdf)>. Separate sections of this document are also available on the NPDES Website by going to <[www.epa.gov/npdes](http://www.epa.gov/npdes)>, clicking on Publications and entering NPDES Permit Writers' Manual in the Search box.

<sup>2</sup> U.S. Environmental Protection Agency. 1993. *Training Manual for NPDES Permit Writers*. EPA-833-B-93-003. U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, DC. <[www.epa.gov/npdes/pubs/owm0339.pdf](http://www.epa.gov/npdes/pubs/owm0339.pdf)>.