



# Chapter 1

## Getting Involved with Water Pollution Permitting

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Agencies, elected officials and even some citizens say the Clean Water Act has taken care of **point source** discharges. The Clean Water Act defines a point source as “any discernible, confined and discrete conveyance” of pollutants to a waterbody. The definition of discrete conveyance includes, but is not limited to, “any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.”<sup>2</sup> This definition throws a much wider net than the traditional picture of an industrial pipe. Examples of point sources of pollution range from sewage treatment plants to factories, large-scale factory farms and urban storm drain systems. It is true that many big problems were addressed by basic treatment requirements in the Act, but the job is far from finished. If we don’t keep a watchful eye on point source discharges, violations will be missed and uses of the water will be threatened.

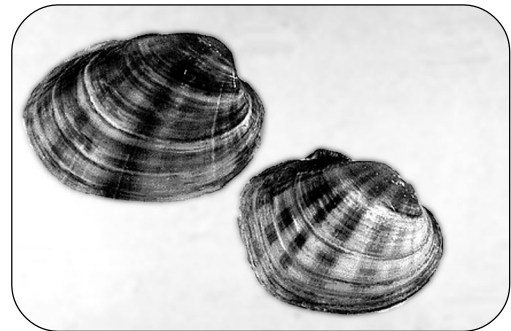
Under Section 402 of the Clean Water Act, water pollution from point sources is regulated through water pollution permits that restrict the type and amount of pollution that can be released into the nation’s waters. These permits are officially known as **National Pollutant Discharge Elimination System** permits, or more commonly, NPDES permits. The purpose of this handbook is to give you the basic tools to read, review and submit comments on an NPDES permit and participate in decisions related to pollution control in your watershed. This is an important skill to add to your repertoire, as watershed groups need to be aware of the amounts and types of pollution being released into their waters and to have a voice in controlling pollution as well.

## permit

**per-mit** (pə mit’; for n. usually pur’mīt’) **verb** –  
mitted, -mitting **1** to allow; consent to  
**2** to authorize – vi. To give opportunity [if  
time *permits*] – **noun** a license.<sup>1</sup>

## Keeping Pollution at Bay | a success story

In 1998, the 3M Corporation decided to expand its operations in Cordova, Illinois. The expansion would increase the amount of pollution 3M discharged to the Mississippi River. Local citizens and groups such as Prairie Rivers Network, Sierra Club and the Environmental Law & Policy Center, concerned about the proposed pollution increase, requested and reviewed the proposed NDPES permit. The groups noticed that the high levels of ammonia and organic wastes to be discharged would deplete already low dissolved oxygen levels in the river. Citizens and groups wrote letters describing the problem and requesting a public hearing.



Kevin Cummings, Illinois Natural History Survey

At the hearing, citizens learned the company would be employing treatment technology that was over 30 years old. Newer, more effective technology could be installed without an enormous investment by 3M.

A quick search of biological survey records showed the Higgins Eye Mussel, a federally listed endangered species, was known to exist in the area. There were also two state-listed endangered species in the river near the facility.

Illinois EPA had not known this information prior to issuing the draft permit for public review. Therefore the permit did not account for the potential impact of the pollution on the protected species.

In addition, water quality data collected on the other side of the river by the state of Iowa showed the Mississippi was already violating water quality standards for dissolved oxygen. The increased pollution allowed in the draft permit would worsen these water quality problems and possibly push protected species closer to extinction.

Citizens and concerned conservation and environmental groups submitted public comments on the draft permit, testified at a public hearing and filed a second set of public comments after the hearing. The message from concerned citizens was clear — new pollution should not be allowed into the Mississippi River, particularly since the costs of adequate treatment were not prohibitive. The overwhelming public sentiment was to protect water quality and protect the existing uses of the Mississippi River. More importantly, these sentiments weren't just based on a vague notion that pollution was simply "bad," but were backed up by scientific studies, the latest biological surveys and documentation that showed improved pollution controls were not only necessary, but relatively inexpensive.

Ultimately, after holding up the plant expansion for more than a year, the Illinois EPA, 3M Corporation and members of the public agreed to a revised permit. The revised permit placed much more restrictive limits on ammonia and organic wastes — to the point where the expanded facility would put out less pollution than the original! Because of action by local citizens and clean water organizations, over one million pounds of pollution was kept out of the Mississippi.

This is what can happen when the public gets involved in the permitting process, points out information that was not available to the agency originally and speaks out for clean water.

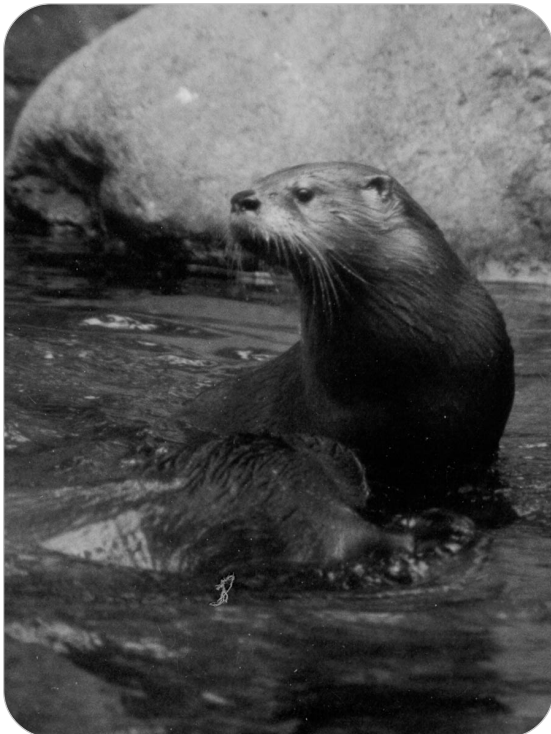
## 1.1 What Are Water Pollution Permits?

Water pollution permits are essentially a contract between dischargers and the permitting authority (usually the state). This contract regulates the type and amount of pollution that can be legally released, as well as the monitoring requirements dischargers must meet. These permits are legally binding and the state is charged with issuing and enforcing them.

Required by the Clean Water Act, NPDES permits were originally intended to *eliminate* pollution from the nation's waters by the mid-1980s. In theory, the permits were supposed to slowly ratchet down the levels of pollution released to the nation's waters until all water pollution was eliminated. Clearly this did not happen on schedule, but it is still the goal of the Clean Water Act.<sup>3</sup> However, we have a long way to go to achieve this goal. In fact, all too often NPDES permits authorize the release of *increased* amounts of pollution, rather than eliminating pollution.



RIVER NETWORK COLLECTION



JEAN HAMILL

### So what does an NPDES permit actually do?

- ❑ Regulates the types and amounts of pollutants that can be released to our waters.
- ❑ Specifies how often discharges are monitored, what type of samples must be collected, what laboratory techniques must be used and when monitoring results must be reported.
- ❑ Requires other types of environmental monitoring such as surveys of fish, mussels and other organisms that live in the water, or measuring levels of chemical pollutants in the vicinity where pollution is released.

The NPDES permit system uses two main types of permits — individual and general. An individual permit is just that — each individual facility applies for and receives its own site-specific permit. General permits differ in that one permit is issued to a class of activities, and many facilities can apply to be covered under the conditions of that permit.<sup>4</sup> Two of the most common general permits apply to industrial and construction site **stormwater** permits.

There are many reasons to prefer individual permits. First and foremost, any proposed individual permit triggers the public notice and comment procedures discussed in this guide, giving you a chance to weigh in. The permits are also site-specific, and therefore can address the details of a particular facility and location.<sup>5</sup>

General permits pose many problems. They are issued on an area-wide (state, watershed, etc.) basis and they are meant to cover similar operations that discharge the same wastes. What this means in practice is that the public is only allowed to comment on the one state- or watershed-wide permit — not on the details of a specific facility. The public generally receives no notice when a facility has applied for coverage under the general permit, unlike the notice required for individual permits.

In a nutshell, individual permits allow for greater public oversight; general permits streamline the regulatory process but overlook important differences between sites. If you are concerned that a general permit does not adequately protect uses and water quality, you can ask that a particular discharger be required to obtain an

individual permit instead.<sup>6</sup> Be especially aware of general permits that are issued in already impaired waterways. General permits will not offer the protections these rivers and lakes need.

If dischargers do not comply with the conditions of their permits, the state can initiate enforcement action that can result in fines or even criminal penalties. Private citizens also have the right to sue dischargers who aren't in compliance and to recover damages for permit violations.<sup>7</sup>

Citizens have an important role in issuing and enforcing these permits by 1) providing public input into the conditions of the permit, 2) monitoring compliance with the permit, 3) notifying the state agency responsible for enforcement when dischargers are not complying with their permits and pressing them to take action, 4) potentially taking legal action against dischargers that violate the conditions of these permits and 5) monitoring the health of their stream or lake. This handbook is intended to help you get started with the first activity on this list.



## 1.2 Who Receives NPDES Permits?

Permits are required of all point sources of pollution. Examples of point-source polluters include any factory, sewage treatment plant, active or abandoned mine, stormwater drain or large-scale animal feedlot that discharges or has the potential to discharge pollution into our waters.

Permits are good for up to five years.<sup>8</sup> The discharger must apply for renewal before the permit expires. In many states this may be required as much as one year prior to expiration. At the time of renewal the discharger's performance is re-evaluated and the permit conditions may be altered.

In many states there is a fee for an NPDES permit, but not in all. Most permit fees are established to cover costs of the permit program. Some states have established fees associated with the volume and toxicity of the discharge.<sup>9</sup>



### Who receives NPDES permits?

Types of Permits	
<i>Major Municipal</i>	includes municipal sewage treatment plants that collect and treat wastewater from both residential and industrial polluters. (Note: Major municipal facilities are those with design flows of greater than one million gallons per day and those with <b>pretreatment programs</b> . <sup>10</sup> )
<i>Major Industrial</i>	includes industries that have their own permits and their own treatment works, and do not send their wastes to a municipal sewage treatment plant. (Note: Major industrial facilities are determined through specific ratings criteria developed by EPA or the state.)
<i>Mines</i>	includes coal mines, gravel and aggregate mines, hard rock mines and other types of mining activities (both above and below ground).
<i>Combined Sewer Overflows (CSO)</i>	includes combined municipal wastewater and stormwater systems that discharge raw sewage when the treatment plant capacity is exceeded during heavy rainfall.
<i>Sanitary Sewer Overflows (SSO)</i>	includes leaky municipal wastewater systems that can result in raw sewage overflows during heavy rainfall.
<i>Stormwater</i>	includes runoff from industrial sites, construction sites, city streets and any impervious surface. Even more stormwater permits will be issued for smaller sites and less populated areas in the next two to three years as new federal regulations come into effect.
<i>Confined Animal Feeding Operations</i>	includes large-scale hog, cow and poultry farms.
<i>Minor Permits</i>	include municipal and industrial permits. (Note: Minor municipal facilities are those with design flows of less than one million gallons per day (if they do not have pretreatment programs). Minor industrial facilities are defined with specific ratings criteria developed by U.S. EPA or the state. <sup>11</sup> )

## 1.3 How Do I Find Out about NPDES Permits in My Area?

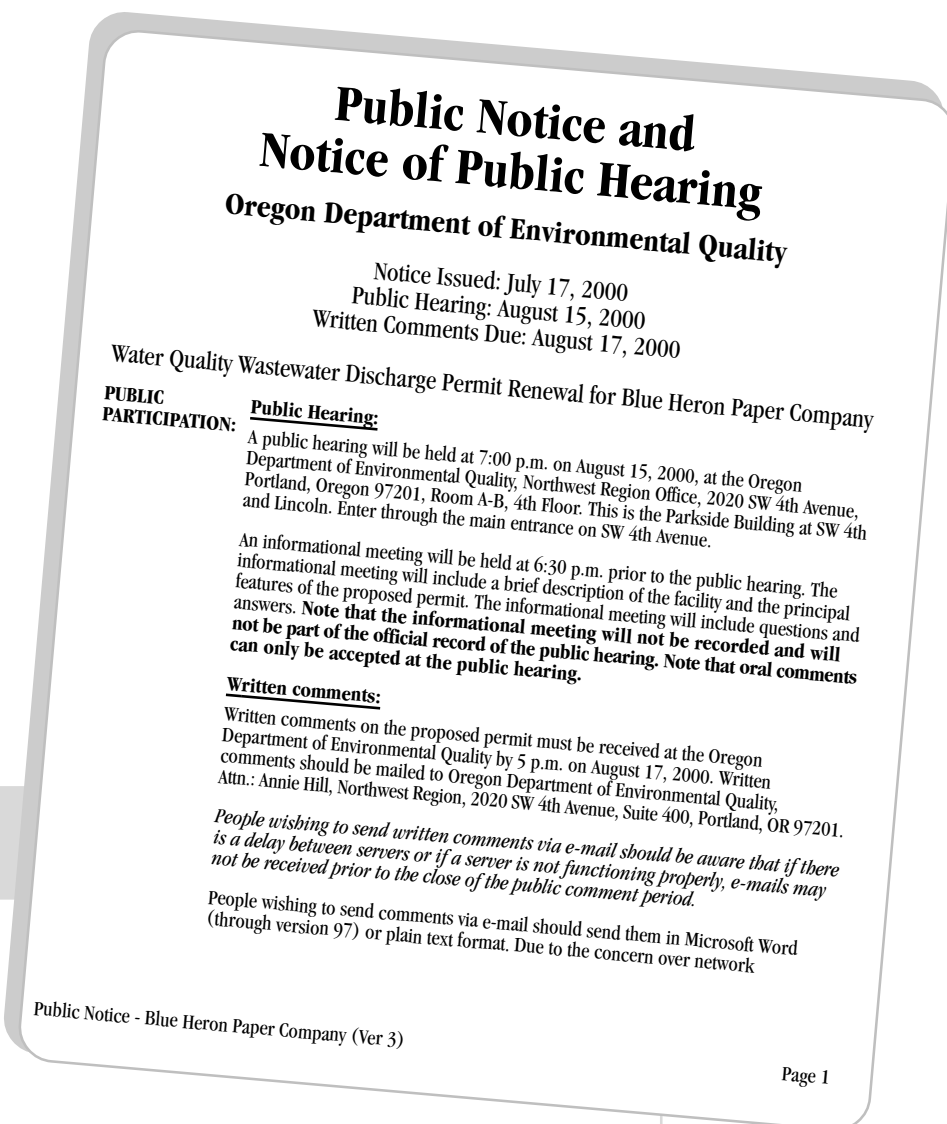
The permit agency is required to notify the public about their decision to issue an NPDES permit. The permit agency could be U.S. EPA, a state agency or a tribal government. In most states, U.S. EPA has delegated its authority to administer the NPDES permitting program to an appropriate state agency.<sup>12</sup>

Public notice of each draft permit summarizing basic information about the permit and the action proposed by the agency is required.

### The public notice should include:<sup>13</sup>

- {1} name of the discharger
- {2} permit number
- {3} public notice number
- {4} discharger's address
- {5} statement of whether the permit is new, reissued or modified
- {6} summary of any modifications if the permit is modified
- {7} summary of the pollutants being regulated by the permit
- {8} name of the waterbody receiving the proposed discharge

The public notice is posted in newspapers or elsewhere and also mailed to anyone who has requested to be notified about NPDES permit decisions. To receive information on NPDES permit decisions in your state, call or write the agency contact listed in Appendix B of this guide.

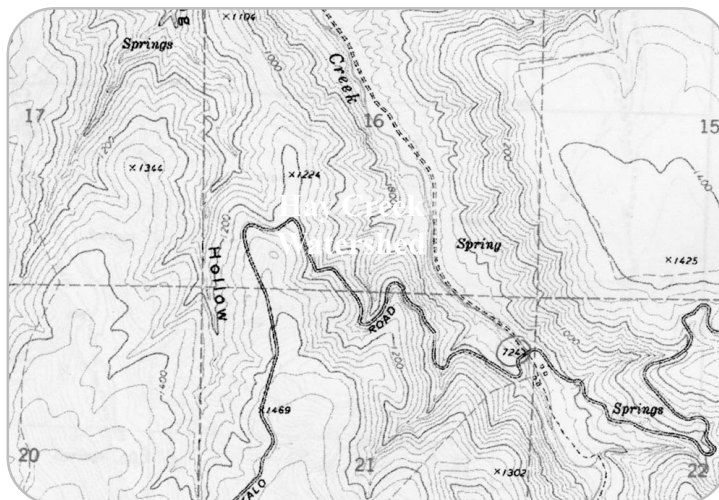


## 1.4 Putting Together Your NPDES Permit Toolkit

Several things will prove useful as you delve into the world of NPDES permits, and all of them are powerful additions to any clean water activist's toolkit. The following items will help you gain a lot of information without requiring a degree in environmental engineering or fresh water ecology. You do not need to collect all of these materials before starting to review permits, but they will enhance your efforts once you do.

### Detailed map(s) of your watershed

Your state's edition of the DeLorme Gazetteer map series or U.S. Geological Survey topographic maps will provide extensive information, such as the location of public recreational areas, downstream communities, boat launch points and access areas.



### Camera

Sometimes a picture is worth a thousand words.

When you are out paddling or fishing or just driving around, snap a few photos of your local discharger's facility and the condition of the river, particularly if something strikes you as being not quite right. Remember, by the time you call the appropriate agency and they send out an inspector, your photographs may be the only remaining evidence of the problem. A digital camera can be especially helpful to post pictures on the web and to send them to the regulatory agencies or the press on the same day.

### Water quality data

It's always good to know the past and current water quality of your hometown stream and there are many useful sources of this information. Among the most comprehensive are:

#### ▣ **Biennial State Water Quality Report to Congress (305(b) Report)**

Published bi-annually in accordance with section 305(b) of the Clean Water Act, this is the state's overall assessment of water quality. It will tell you the general condition of your stream and what water quality problems exist. To access this information for free, either call your state agency directly (see Appendix B) or visit U.S. EPA's web site at <http://www.epa.gov/305b>. (Click on the most recent year and "Appendices from national water quality inventory" for more detailed state information.)

#### ▣ **Threatened and Impaired Waters List (303(d) List)**

Published every other year by the state in accordance with section 303(d) of the Clean Water Act, this is the list of waters in the state that do not meet clean water requirements. These waters will have clean-up plans called **Total Maximum Daily Loads (TMDLs)** developed for them. Call your state agency or visit <http://www.epa.gov/owow/tmdl> and click on your state for a copy of the list.



## ■ USGS water quality monitoring data

The United States Geological Survey (USGS) studies water quality, among other things. Contact your district USGS office. You can find local USGS contact information by visiting [www.cwn.org](http://www.cwn.org) and clicking on “water quality standards.” Scroll down for a link to a contact listing. You can also visit the USGS website to get summaries of water quality for those areas which USGS studies as part of their National Ambient Water Quality Assessment (NAWQA) at <http://infotrek.er.usgs.gov/wdbctx/nawqa/nawqa.home>. More general information on water quality from your state is also available from USGS at <http://water.usgs.gov>.

## ■ Detailed data from U.S. EPA’s STORET

(short for STORage and RETrieval) system is available at <http://www.epa.gov/storet/>. STORET is a repository for water quality, biological and physical data and is used by state environmental agencies, EPA and other federal agencies, universities, private citizens and many others.

## ■ General information on your watershed

Few people realize how much information is available. A first stop should be U.S. EPA’s Surf Your Watershed web site located at <http://www.epa.gov/surf>. Your state pollution control agency or natural resources agency may also have information on water quality and aquatic species populations. See Appendix B for some contacts in your state.

## ■ Biological information

It is always useful to know what types of fish, mussels and other aquatic organisms live in a waterbody where a discharge exists or is proposed. Contact your state’s U.S. Geological Survey office, state natural resource agency or local university researchers to find out more.

## State Water Quality Standards

Get a copy of your state water quality standards from your state agency or from the Internet. These are the state regulations that set criteria to protect beneficial uses and water quality in the state. State contact and water quality standard information is available from River Network at [http://www.rivernetwork.org/cleanwater/cwa\\_search.asp](http://www.rivernetwork.org/cleanwater/cwa_search.asp). Water quality standard information that has been approved by U.S. EPA is available at U.S. EPA websites found at <http://www.epa.gov/wqsdatabase/> and <http://www.epa.gov/ost/wqs/>.

## Additional information

So much information is available free of charge and just a click away on the Internet. Look at Appendix C for a list of additional Internet resources.

The preceding sources are readily available and offer a great deal of information about your watershed, including existing problems the regulatory agency must consider when regulating pollution. Even if reviewing NPDES permits is not in your immediate future, having these items at your fingertips will be an ongoing asset.

