



# Wastewater Discharge Permits in Washington State

## Short History of the Wastewater Discharge Permit Program

The water pollution control program in Washington State is based on both federal and state law. The state of Washington began a formal pollution program in 1945, three years before the first federal legislation dealing specifically with water pollution was enacted.

Twenty years later, the first federal legislation to require states to adopt water quality standards for interstate waters was enacted in the Water Quality Act of 1965. This law required state or federal authorities to show a direct link between a discharge and a specific water quality problem before they could require controls on the discharge of pollutants. Thus, the Water Quality Act of 1965 was very difficult to enforce.

In 1971, Washington State enacted the Pollution Disclosure Act, which required dischargers to use "all known, available and reasonable methods of treatment (of waste water), prior to discharge regardless of the quality of water ... to which the wastes are discharged." This law signaled a change in state philosophy to emphasize technology-based control of pollutants. Washington State agencies no longer had to demonstrate a direct link between water pollution problems and an individual discharger to control pollution. Instead, all dischargers were required to meet treatment standards, regardless of the quality of receiving waters.

The federal Water Pollution Control Act

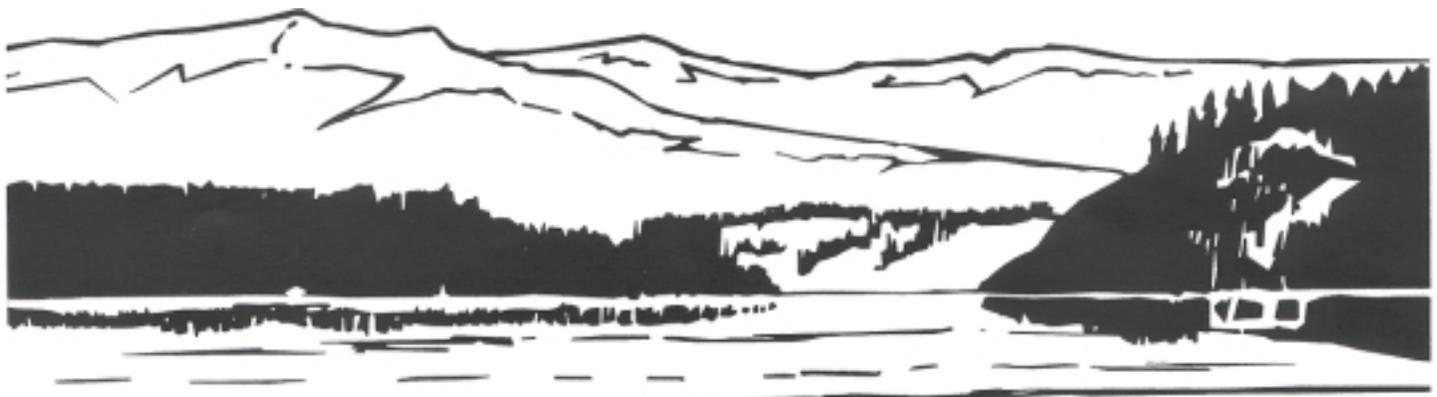
Amendments of 1972 adopted the philosophy of technology-based control that Washington law had outlined the previous year. When amended in 1977, the Act became popularly known as the Clean Water Act (CWA). This act, in conjunction with our state laws, serves as the basis and framework for the Washington State's present water quality regulatory program.

The Clean Water Act set a national goal to "restore and maintain the chemical, physical, and biological integrity of the nation's waters" and to "eliminate the discharge of pollutants" into navigable waters by 1985. In the interim, regulations were written to "provide for the protection and propagation of fish, shellfish, and wildlife and provide for

recreation in and on the water." Toward those ends, the Clean Water Act prohibited the discharge of pollutants in toxic amounts.

The Water Pollution Control Act of 1972 and subsequent amendments also created the National Pollution Discharge Elimination System (NPDES). NPDES is a system for issuing permits for wastewater discharges to surface waters. The purpose of the permits is to control pollutants as a means to achieving the goals of the Clean Water Act.

In 1973, Washington became one of the first states to be delegated by the U.S. Environmental Protection Agency to administer NPDES permits in addition to its state permit program.



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## What is a Wastewater Discharge Permit?

A wastewater discharge permit is a legal document issued by the Department of Ecology to control the discharge of wastewater to surface or ground waters and to publicly-owned sewage systems.

Permits place limits on the quantity and concentrations of contaminants that may be discharged. When necessary, permits require treatment of wastewater or impose other operating conditions on dischargers to ensure that permit limits are met.

Permits may also set other conditions, including monitoring and reporting requirements, spill prevention planning, and other regulatory activities.

Permits are written by engineers and environmental scientists from Ecology. Most permits have a five-year life span.

Washington State permits are grouped by geographical areas called Water Quality Management Areas (WQMAs). Every five years permits in a WQMA come up for review and renewal. This gives Ecology and local agencies a chance to look holistically at watersheds.

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## Who Needs a Permit?

Ecology administers both state wastewater discharge permits and federal National Pollutant Discharge Elimination System, or NPDES, permits.

State wastewater discharge permits are required for anyone who discharges waste materials from a commercial or industrial operation to ground or to a publicly-owned treatment plant, and for municipalities who discharge to ground.

NPDES permits are required for anyone who discharges wastewater to, or has a significant potential to impact, surface waters.

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## Kinds of Permits

The state of Washington issues two types of wastewater discharge permits:

- ❖ Individual permits cover single, specific facilities or activities like factories.
- ❖ General permits cover a category of similar dischargers. Boatyards and upland fin fish hatcheries are examples of industries which are covered under general permits.

Individual and general permits may be issued either as a state permit or an NPDES permit. When discharges are to surface waters and to ground or a treatment plant, the discharges are covered by a combined state/NPDES permit.

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## What is a Permit Fact Sheet?

Fact sheets are companion documents to permits. Their primary purpose is to provide a record of how the requirements in the permit were derived.

Fact sheets explain the nature of the proposed discharge, Ecology's decisions on limiting the pollutants in the wastewater, and the regulatory and technical basis for those decisions.

Fact sheets also document the history of the permit through reissuances and amendments, summarize the administrative record of the permit issuance, and serve as an informational document for the public.

Fact sheets and some of their contents are required by federal and state law.

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## Principles of the Permit Program

Washington State's goal is to maintain the highest purity of public waters by limiting pollutant discharges to the greatest extent possible. Four principles drive the Washington State wastewater discharge permit program toward that goal:

- ❖ The discharge of pollutants is *not* a right. A permit is *required* to use the waters of the state, a public resource, for purposes of wastewater discharge.
- ❖ Permits limit the amount of pollutants to be discharged.
- ❖ Wastewater must be treated with all known available and reasonable technology before it is discharged—regardless of the quality of the water into which it is discharged.
- ❖ Effluent limits are set using technology-based *and* water quality-based standards. The more stringent of the two limits is always applied.

## How to Read a Fact Sheet

Fact sheets detail the principal technical and scientific facts and the significant legal and policy decisions that were made when setting the terms and conditions of the permit. The fact sheet should, therefore, be used as a reference document when evaluating the terms and conditions of a permit. Certain elements of the fact sheet are of particular interest when reviewing a permit.

### Where to look for key information in a fact sheet:

#### Facility Description –

Each fact sheet has a cover sheet which provides the applicant's name and address, the location of the discharge in narrative form and as a latitude and longitude (when available), and a brief description of the type of operation and expected discharge.

#### Background Information –

The background information section of the fact sheet describes the applicants' operations and wastewater discharge in greater detail. The official state classification of the receiving water (the water discharged into) is cited and common uses of the receiving water are described.

The background section also summarizes the past performance, or compliance history, of a permit renewal applicant and outlines permit limitations from the previous permit.

#### Permit Limitations and Conditions –

Waste discharge permits must contain conditions that ensure a discharge will meet established water quality standards. Water quality standards are designed to protect the beneficial uses of the waters of the state.

*Effluent limitations* are specific restrictions on the volume and concentration of certain pollutants that can be discharged. Permit conditions specify how a facility must operate to remain within the effluent

### FACT SHEET

This fact sheet is a companion document to the draft National Discharge Elimination System (NPDES) Permit No. XXXXXX-X. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to waters of the State of Washington.

This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical basis for those decisions. Public involvement information is contained in Appendix A. Definitions are included in Appendix B.

#### GENERAL INFORMATION

Applicant: HOMETOWN ENTERPRISES, INC.  
Facility Name FINISHING OPERATIONS PLANT  
and Address: 1 FINISHING WAY  
HOMETOWN, WA

Type of Facility: ELECTROPLATING  
Discharge HOMETOWN BAY, PUGET SOUND

#### Location:

The Hometown Finishing Operations Plant discharges directly into Hometown Bay via a discharge pipe. The end of the discharge pipe is located 300 feet into Hometown Bay, approximately 1 mile east of Purdy Point and 550 yards west of the mouth of Purdy Creek.

Latitude: 47° 30' 05" N.

Longitude: 122° 30' W.

Water Body ID Number: WA-01-0000

limits. This section of the fact sheet describes both the scientific and legal basis on which the limits and conditions in the permit were derived. For permit renewal, this section of the fact sheet also presents comparisons of proposed limitations and conditions with those in the previous permit.

Federal and state regulations require that effluent limitations in a permit must be either *technology-based* or *water quality-based*. The more stringent of

these two types of limits must be chosen for each pollutant of concern. *Technology-based* limitations are performance standards established under federal and state regulations. *For example:* For a kraft (unbleached) pulp mill the technology-based standard is 2.8 lbs. of biochemical oxygen demand (oxygen consuming pollutant) per 1000 pounds of pulp production.

## How to Read a Fact Sheet (cont.)

*Water quality-based* limitations are based on compliance with the state water quality standards. *For example:* If the technology-based standard above is not strict enough to protect the water quality standard of >6.0 mg/L dissolved oxygen, a limit of less than 2.8 lbs. of biochemical oxygen demand per 1000 pounds of production would be required.

Technology-based effluent limits for the discharge are derived first. Washington State requires dischargers to use all known and available reasonable technology (AKART) to control pollutants in their effluent.

If technology-based controls fail to cause a discharge to meet state water quality standards, the permit will impose additional conditions so the discharge meets water quality standards. These are water quality-based effluent limits.

Water quality-based limits consider the variability of the pollutant concentrations in both the effluent and the receiving water. Water quality-based limits are determined for the water body's critical condition. The critical condition is the combination of receiving water and waste discharge conditions, which has the highest potential to harm aquatic biota or existing uses of the receiving waters.

### Monitoring and

**Reporting** – Effluent monitoring, recording, and reporting are required in most permits to verify that treatment or control processes are functioning correctly and that effluent limitations are being achieved. The monitoring and testing schedule is detailed in the permit under Condition S.2.

Specified monitoring frequencies take into account the quantity and variability of discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring. The frequency of monitoring is the minimum frequency needed to document compliance.

### Other Permit

**Conditions** – The fact sheet also describes specific activities that are required of the discharger. Requirements for preparation of pollution prevention plans, spill control plans, and other operating conditions are in this section.

**Appendix - Appendix A** contains information about how the permit development process has been advertised. Opportunities for public involvement in the development of the final permit are also included here.

*Appendix B* is a glossary of terms intended to help interpret complex permit language.

## Major Elements of Washington Water Quality Standards

### Numerical Criteria

Numerical water quality criteria are values for specific pollutants or parameters listed in Washington's Water Quality Standards. The standards are used to specify the level of protection in receiving water for specific pollutants or other parameters. *For example:* The water quality standards for Class A waters set the numeric criteria for the pollutant copper at 2.5 µ/L in marine water and for the parameter dissolved oxygen at 9.5 mg/L in Class AA freshwaters. Numerical criteria are used to derive the water quality-based effluent limits in a discharge permit.

### Narrative Criteria

Narrative criteria describe the specific beneficial uses of all fresh and marine waters in Washington. Narrative water quality criteria are used in addition to numerical criteria to set limits for toxicity, radioactivity, and other harmful impacts of pollutants. Narrative criteria are also used to prohibit impairment of the aesthetic value of the waters of the state. An example of narrative criteria in the water quality standards is: "*Aesthetic values shall not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch, or taste.*"

### Antidegradation Policy

Washington's antidegradation policy is designed to minimize the degradation of the existing water quality of the water body. When the natural conditions of receiving water exceed water quality criteria, no further degradation is allowed. Anti-degradation is currently addressed through the use of both technology-based and water quality-based effluent limitations.

### Mixing Zones

The water quality standards allow Ecology to authorize mixing zones around a discharge point when establishing water quality based effluent limits. Mixing zones are areas in which effluent has an opportunity to mix with receiving waters. The maximum size of mixing zones is established by rule. Both acute and chronic mixing zones may be set for potentially toxic pollutants. Mixing zones can be authorized only after all known, available, and reasonable methods of pollution prevention and control technology (AKART) have been applied.

# The Individual Permit Process and Opportunities for Public Involvement

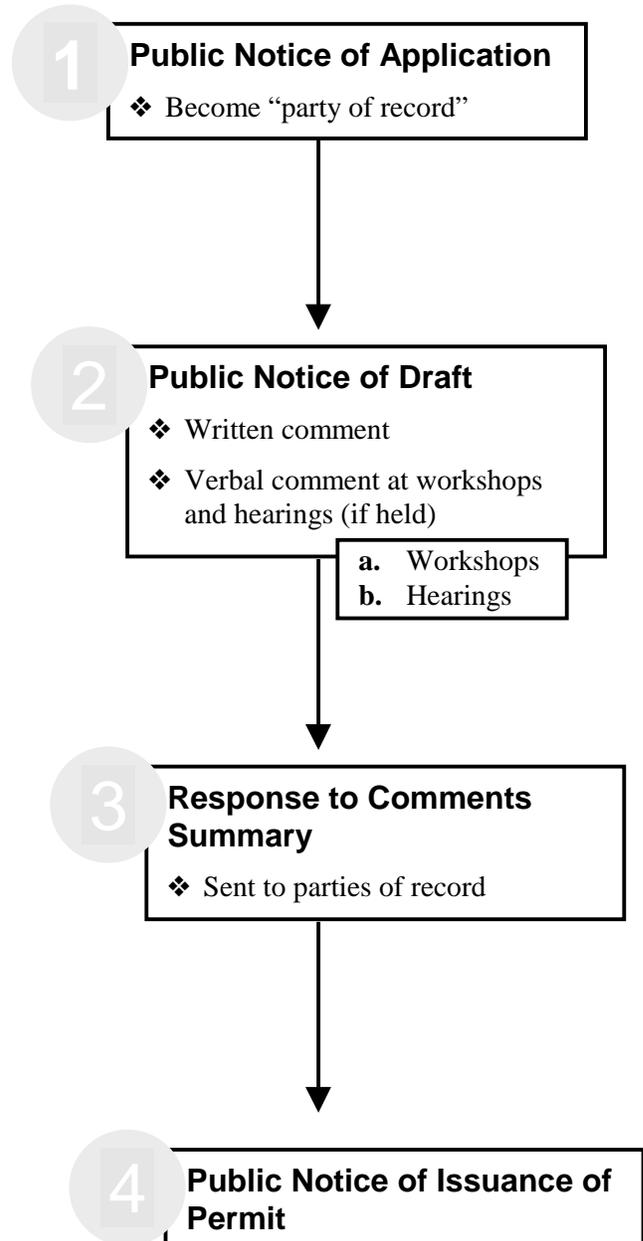
Ecology uses the same basic procedures to develop each individual wastewater discharge permit. However, public involvement opportunities may vary, depending on the significance of the discharge and public concern. Those stages in the process which offer the best opportunities for public involvement are labeled to coincide with the numbers in the flowchart.

Dischargers must file a *permit application* with Ecology. Permit applications are often complex and may be accompanied by detailed engineering or environmental reports. Applications must include results of analyses of pollutants in the effluents, effluent toxicity data, and other technical information about a facility and its operating procedures.

Ecology reviews each application for completeness and accuracy. Ecology may require applicants to conduct studies to gather more information about their processes and discharges before an application is accepted. Ensuring that the application is thorough and complete may require site visits as well as extensive consultation and technical assistance from Ecology.

**1** When the permit application is accepted, Ecology releases a *Public Notice of Application (PNOA)*. PNOAs may be published as legal classified advertisements or display advertisements in the geographical areas affected by the permit. PNOAs may also be mailed to persons on the water quality permits “interested parties” mailing list. Persons on this list have expressed an interest in all permit issuance activities. Procedures to get on the mailing list are specified on Page 7 of this document. The PNOA informs the interested public that an application has been accepted and that Ecology has tentatively decided to develop a permit for the applicant. The notice of application invites the public to make its interest in the permit known.

All persons who respond to the PNOA, and all subsequent notices, are placed on a permit-specific mailing list as “parties of record.” Parties of record will receive all further notices regarding that permit. The parties of record list is maintained through the lifetime of the permit and revised upon renewal. The permit writer drafts a permit and fact sheet using data supplied by the discharger in the application, from information gathered



## The Individual Permit Process (*continued*)

during personal inspections of the facilities, and from extensive research into operations and technologies of the industry being considered for a permit. The *application, fact sheet, and permit* make up a permit package. All three parts of the permit package are available for public review and comment upon request.

When the draft permit is complete, a *Public Notice of Draft Permit* (PNOD) is published in the legal classified section of major newspapers in the geographical area of the discharge. Parties of record will also receive a PNOD by mail. Other forms of public notice may also be used to advertise that a draft permit is available.

The PNOD invites the public to review the draft permit and to make their views on the proposed permit action known to Ecology. All PNODs explain how to obtain copies of the permit and fact sheet and list those Ecology offices that offer information and assistance to interested persons.

The normal comment period for a draft permit is 30 days after publication of the PNOD; however, the comment period can be extended by Ecology to increase opportunity for public input. The comment

period is often extended when Ecology holds public hearings on the permit.

**2a** Ecology often conducts informal public meetings during the comment period for significant permits. Meetings are held to inform interested persons about the conditions of a proposed permit and to learn of public interests and concerns about the permit. Meetings or workshops are held at Ecology's discretion unless a formal hearing is planned on the permit. Informational meetings are required before hearings.

*Public Notices of Meetings* may appear as display advertisements, legal advertisements, via mail, or in news releases which detail the time and location of each session and the subject matter to be discussed. Parties of record will be notified of meetings by mail. Notice of upcoming meetings will often be included in notices of hearings.

**2b** Hearings are formal sessions which offer individual or groups an opportunity to publicly voice their opinions on the terms and conditions of a proposed permit. Statements made in hearings are regarded as formal testimony and

become part of the permit record.

Anyone may request that Ecology hold a hearing, but Ecology has the authority to decide whether a hearing is warranted. Hearings are held any time Ecology feels there is sufficient public interest and a likelihood of meaningful public comment on a permit.

*Public Notices of Hearing* appear as display advertisements in major newspapers in the geographical area of the proposed discharge. Notices of hearings are also mailed to parties of record. Other forms of advertising may also be used to announce hearings. Hearing notices are published at least 30 days prior to the date of the hearing.

Comments may be submitted to Ecology on the terms and conditions of a proposed permit throughout the permit development process, beginning with the notice of application stage. Notices of draft permit, meetings, and hearings will clearly state the comment deadline date.

**3** After the close of the comment period, Ecology reviews and evaluates all comments and information regarding the proposed permit. Ecology then writes a *Responsiveness Summary* to address those comments

and suggestions. The responsiveness summary details significant changes made to the permit as a result.

The responsiveness summary is mailed to parties of record and upon request.

Major changes made in the terms and conditions of the proposed permit following public review may require that Ecology re-advertise the permit to obtain public comment. Major revisions may reopen the permit process for written public comment and may initiate another series of public meetings and hearings.

When public review and comment do not result in major revisions in the terms and conditions of the draft permit, the permit may be issued.

**4** A permit becomes effective when it is signed by the Water Quality program manager or a designee. Ecology mails a *Notice of Issuance* to parties of record upon issuance.

The conditions of a permit can be appealed after the permit has been issued. An appeal may result in changes in the final permit.

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## The Individual Permit Process

A permit may also be modified during its term. Ecology may, if necessary, modify a permit to impose numerical limitations to meet water quality standards, sediment quality standards, or based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies. Ecology may also modify a permit as a result of new or amended state of federal regulations. Permit modifications may also be required when a facility's operational changes result in changes in effluent volumes or character.

Parties of record will be notified by mail of appeals, resolution of appeals, and suspensions, modifications, or revocations of a permit through out its lifetime.

Permits must be renewed or administratively extended every five years. Ecology will issue a *Public Notice of Application* for a renewal as a legal classified advertisement and will notify all persons on the permit-specific parties of record list. All respondents to that notice will be placed on a new mailing list for that permit and all non-respondents dropped from the list. All subsequent procedures are the same as those for a new permit.

## For Information about Permits or for Assistance to Participate in the Permit Process:

### Contact Ecology Regional Offices:

Water Quality permit coordinators in each of the regional offices are the primary contacts for information about specific permits that are being developed or administered in their region. Permit coordinators can also place your name on a mailing list to receive notices of regional permit actions.

#### Northwest Regional Office

425-649-7201  
3190 160<sup>th</sup> Avenue Southeast  
Bellevue, WA 98008-5452

For: *King, Whatcom, Skagit, Snohomish, San Juan, Kitsap, and Island* counties.

#### Southwest Regional Office

Industrial Permits  
360-407-6280

Municipal Permits  
360-407-6279  
P. O. Box 47775  
Olympia, WA 98504-7775

For: *Thurston, Clallam, Jefferson, Grays Harbor, Mason, Pierce, Lewis, Skamania, Wahkiakum, Cowlitz, Clark, and Pacific* counties.

#### Central Regional Office

509-457-7105  
15 West Yakima Avenue, Suite 200  
Yakima, WA 98902

For: *Yakima, Benton, Klickitat, Chelan, Douglas, Kittitas, and Okanogan* counties.

#### Eastern Regional Office

509-329-3537  
N 4601 Monroe, Suite 100  
Spokane, WA 99250-1295

For: *Spokane, Grant, Adams, Whitman, Franklin, Ferry, Stevens, Pend Oreille, Asotin, Garfield, Columbia, Walla Walla, and Lincoln* counties.

#### Industrial Permits Section

360-407-6930  
P. O. Box 47706  
Olympia, WA 98504-7706

For: *Major industrial facilities such as pulp mills, oil refineries, or aluminum plants statewide.*