



Municipal and Industrial Discharges Program

Directory of Program Elements

P-1	Adopt Water and Sediment Quality Standards and Mixing-Zone Criteria	44
P-2	Requirements in Wastewater Discharge Permits	45
P-3	Permit Fact Sheets, Public Involvement and Permit Review	47
P-4	Permit Writers' Manual, Permit Quality Control, and Internal Technical Assistance for Permit Writers	48
P-5	Inspections and Enforcement	50
P-6	Search for Unpermitted or Illegal Discharges	51
P-7	Felony Provisions	51
P-8	Data Management	51
P-9	Permit Fees and Aquatic Lands Leasing Rates	51
P-10	Pretreatment Program Enhancements	52
P-11	Training and Certification of Wastewater Treatment Plant Operators	52
P-12	Employee Education Assistance	53
P-13	Public Outreach	53
P-14	Technical Outreach to Dischargers, and Prevention, Reduction and Minimization Strategies	53
P-15	Ecology Reporting Requirements	54
P-16	Measuring Program Effectiveness	54

Problem Definition

Industries and municipal sewage treatment plants discharge nearly a billion gallons of wastewater into Puget Sound every day. These discharges are often referred to as “point sources,” because they are discharged into water bodies at a specific point by a pipe or ditch. Both industries and municipal sewage treatment plants are issued permits that regulate their discharges; however, problems arise when the wastewater is treated insufficiently.

Efforts to control releases of conventional pollutants from point sources have been increasingly successful. Water quality problems related to these

pollutants are now relatively rare in Puget Sound. But scientists are increasingly concerned that nutrient discharges may be causing harm to sensitive areas of the Sound.

Another concern is persistent toxicants. They exist long enough to accumulate and cause harm by concentrating in sediments and in the tissue of organisms—and ultimately pass through the food web.

The concentrations of toxicants recently found in samples from Puget Sound’s urban bay sediments were up to 100 times greater than the concentrations found in the cleanest rural bay. Lesions and tumors found in fish from urban bays are asso-

What does “shall” mean?

The Action Team has determined that the actions in this plan are needed to protect and restore Puget Sound. Consistent with the importance of these actions, this plan says that appropriate implementers “shall” perform the actions. However, implementation of many of these actions is a long-term process. The Action Team’s work plans will identify the actions that need to be taken each biennium to implement this management plan. Implementation of actions in the work plans is subject to the availability of funds and public input into the decision-making processes of implementing entities. When an action is included in a biennial work plan, the Action Team expects that it will be implemented in accordance with the relevant provisions of the Puget Sound management plan, in accordance with Chapter 90.71 RCW.

ciated with these high concentrations. Because humans are part of the food web, toxic substances may also pose health risks to those who eat seafood harvested from Puget Sound.

Approximately half the toxics entering Puget Sound are from municipal and industrial point sources. The other half may be related to nonpoint pollution sources—such as storm water, household hazardous waste and runoff from improper agricultural activities. Current monitoring is insufficient to accurately estimate total toxicant contamination from either non-point or point source discharges. Air deposition and small spills are also not quantified.

It is expected that contamination to the Puget Sound from discharged wastewater may become more severe as population and industrial activity increase. The persistence of many toxic substances makes restoring contaminated waters very difficult.

Institutional Framework

The federal Clean Water Act and Washington State law have established a strong institutional framework for controlling municipal and industrial discharges. Direct dischargers must obtain a National Pollutant Discharge Elimination System (NPDES) permit from the state Department of Ecology for nonfederal facilities or from the U.S. Environmental Protection Agency for federal facilities. Ecology also administers state permits for discharges to sewers (and related pretreatment requirements) and to the ground. The administering agency periodically inspects the facility and takes action where necessary to meet other state water quality standards.

An activity doesn't have to look like a factory or sewer treatment plant to require a permit. For example, many boat repair operations require permits, as do shipyards.

The federal Clean Water Act requires Ecology to prepare a list of water bodies that do not meet water quality standards and are not expected to meet the standards through normal pollution control efforts. The Act then requires a total maximum daily load (TMDL) be established for each problem contaminant for each water body. The TMDL should also include a plan for reducing discharges to meet the water quality standards. The requirements identified through the TMDL process are then included in the discharge permit.

Program Goal

To achieve comprehensive improvement in the control of toxic and other pollutants discharged into Puget Sound by industrial and municipal dischargers, thus reducing and eventually eliminating harm from such contaminants entering or accumulating in the Sound.

Program Strategy

The strategy for achieving this goal is to:

- a. adopt and, as needed, revise water and sediment quality standards;
- b. require that all waste discharge permits include the monitoring requirements and limitations on toxicants and other pollutants of concern which are appropriate to the permit;
- c. develop the tools needed to make these permit improvements, including the permit writers' manual, data management, lab support, quality assurance and technical assistance and training;
- d. strengthen pretreatment;
- e. inspect permitted discharges and take enforcement actions for violations of discharge permits; and
- f. discover and control un-permitted discharges.

Standards

P-1. Adopt Water and Sediment Quality Standards and Mixing-Zone Criteria

P-1.1 Water Quality Standards

The Department of Ecology shall adopt and periodically revise numerical water quality criteria that are relevant to Washington State and equivalent to those published in the *Environmental Protection Agency's Quality Criteria for Water* (for the protection of aquatic life). These criteria will address toxicants and conventional contaminants. Ecology shall update the state water quality standards every three years as required under the federal Clean Water Act.

To ensure that point source discharges do not have adverse environmental consequences,

Ecology shall develop and include in the state water quality standards: implementation procedures for an antidegradation policy and biocriteria that are consistent with national guidance from the Environmental Protection Agency (EPA).

Target date for P-1.1: Ecology shall complete updates every three years.

P-1.2. Sediment Management Standards

Ecology shall periodically review and revise, by regulation, standards for identifying and designating sediments that have acute or chronic adverse effects on biological resources or that pose a significant health risk to humans. The sediment standards will establish the levels of sediment contamination that are acceptable throughout the Sound over the long term.

Sediments that exceed the sediment standards are undesirable in Puget Sound. When they are dredged, they may only be disposed of by meeting the requirements for use of unconfined open-water disposal sites (element S-2) or the requirements for treatment or confined disposal to be developed under element S-3 (which may include in-water as well as upland disposal and treatment methods). Sediments that exceed the sediment standards shall not be used as cap material for dredged-material disposal or remedial actions.

Target date for P-1.2: Ecology shall adopt human health criteria for sediments during the 2003-2005 biennium. Implementation of the standards shall be ongoing.

P-1.3. Water Column and Sediment Mixing-Zone Criteria

Ecology shall review and revise water column and sediment mixing-zone criteria as a component of the water and sediment quality standards to achieve the goal of this program.

P-2. Requirements in Wastewater Discharge Permits

P-2.1. Alternatives for Reducing Effects of Sanitary Discharge to Marine Waters

Ecology shall adopt a policy promoting alternatives to discharging effluent from sewage treatment plants to marine waters whenever such alternatives are feasible, economically achievable and environmentally preferable (for example, when discharge

and/or disposal of effluent from sewage treatment plants could result in shellfish bed closures due to potential pollution). Alternatives to be considered shall include, but not necessarily be limited to, the following: land application, reuse, additional treatment and the use of constructed wetlands. The policy shall be used in state financial-assistance programs.

P-2.2. Reevaluate Allocation of Permits into Major and Minor Categories

The EPA and Ecology shall ensure that point source permits are properly classified as major or minor permits. Where appropriate, existing permits should be reclassified.

P-2.3 Permit Requirements

Ecology and EPA shall include the following requirements to protect Puget Sound, when appropriate, in wastewater discharge permits they issue. These requirements are most appropriate in individual permits for large facilities and may not be appropriate for general permits.

P-2.3.1. Discharge Limits

In issuing or reissuing National Pollution Discharge Elimination System (NPDES) or state waste discharge permits, Ecology and EPA permit writers shall review the dischargers' operations and incorporate permit conditions that require all known, available and reasonable methods to control toxicants in the dischargers' waste water. Such conditions may include, but are not limited to, limits on the discharge of specific chemicals and/or limits on the overall toxicity of the effluent. Where possible, permit writers shall incorporate a combination of concentration and mass limits into permits. The toxicity of the effluent shall be determined by techniques such as chronic or acute bioassays. Such conditions shall be required regardless of the quality of receiving water and regardless of the minimum water quality standards. In no event shall the discharge of toxicants be allowed that would violate any water quality standard, including toxicant standards, sediment criteria and mixing zone criteria.

Wastewater discharge permits shall have quantitative discharge limits for all toxicants present in significant amounts. At a minimum, discharge limits, including an appropriate mixing zone, shall be established for all toxicants that would exceed applicable ambient water-quality standards at the

end-of-the-pipe based on all known, available and reasonable methods of treatment (AKART). Similarly, discharge limits, including a mixing zone if appropriate, shall be established if monitoring results show that applicable ambient water-quality standards are exceeded at the end-of-the-pipe based on AKART.

Where a Total Maximum Daily Load (TMDL) has been established, Ecology or EPA permit writers shall incorporate applicable conditions into all discharge permits.

2.3.2. Particulate Contamination in Effluents

Ecology and EPA permit writers shall obtain and review information on particulate contamination in the applicants' effluents (looking at similar data for comparable effluents) and shall include specific conditions that address particulate contamination, appropriate to each case, sufficient to assure that the ambient sediment standards will not be violated, subject to any authorized sediment impact or mixing zones. Such conditions may include measures to control pollution sources, best management practices, numeric limits on toxicity of the particulate fraction of the effluent, numeric limits on the concentration or mass of specific chemicals discharged, or other conditions deemed appropriate by the permitting agency.

P-2.3.3. Solids Handling and Disposal

NPDES, pretreatment and federal facilities permits shall include solids handling and disposal plans that prevent pass-through of excessive solids. For municipal permits, these plans shall also address disposal of solids generated from cleaning out sanitary and combined sewer collection systems. Stormwater permits, including general or group permits, shall include solids handling and disposal plans for maintenance and cleaning. Solids handling requirements will be consistent with Chapter 173-308 WAC, Biosolids Management.

P-2.4. Monitoring Requirements in Permits

In issuing, modifying or reissuing NPDES and state wastewater permits (municipal, industrial and stormwater), Ecology and EPA permit writers shall consider the need for each of the five types of monitoring listed below and shall include requirements in permits for all types of monitoring that are appropriate to each permittee. Monitoring requirements included in permits shall be tiered so that if

initial (baseline) sampling discloses no problems, a reduced monitoring schedule may then apply. Likewise, if baseline sampling indicates the possibility of problems, a more frequent and/or more comprehensive monitoring schedule would apply. Initial monitoring schemes shall be set to ensure that enough data is collected to determine if additional discharge limits should be set.

Although these monitoring requirements shall be primarily directed toward the detection of effects from individual wastewater discharges, as a second priority, and to the extent practicable, Ecology and EPA shall develop monitoring requirements for permits that will facilitate the calculation of the total quantity of contaminants discharged to Puget Sound.

The five types of monitoring are as follows:

- a. Monitor specified parameters in the sediment in the vicinity of every significant outfall.
- b. Separately analyze samples of the particulate fraction of the effluent from each significant outfall.
- c. Conduct periodic acute and chronic toxicity bioassays on a sample of the effluent from each outfall and on the sediment near each outfall.
- d. Conduct periodic surveys of the population, species composition and health of biota in the vicinity of each significant outfall.
- e. Monitor water quality at the boundary of the mixing zone. Mixing-zone modeling may suffice, provided that appropriate field verification determined by Ecology is carried out.

All major municipal dischargers shall perform priority-pollutant scan analyses on their effluent at least annually and more frequently if appropriate. The permit writer may exclude groups of chemicals (e.g., pesticides) from the priority-pollutant scan requirements of dischargers with a capacity less than five million gallons per day if there is recent monitoring data or literature documenting that the particular group of chemicals is not of concern for that discharge.

Target date for P-2.4 Ecology shall review the monitoring guidelines annually and update as necessary.

P-2.5. Spill Control Plans Required

Every major permit issued or reissued, and minor permits as appropriate, shall include conditions

that require the development or updating of spill control plans. At a minimum, such plans shall apply to both oil and hazardous substances. Ecology, in consultation with the EPA, shall actively review and comment on the plans and shall require the permittee to implement the approved plan. Spill plans shall include the provisions of WAC 173-303-630 regarding secondary containment.

Consistent with other state and federal requirements, Ecology shall:

- a. Track and improve requirements in dischargers' spill control plans;
- b. Follow up on and improve upon dischargers' compliance with spill control plans; and
- c. Ensure adequate staff to perform on-site compliance inspections for spill control plans and update spill control plans in permits as appropriate.

Ecology shall take enforcement action, consistent with its enforcement guidelines, against any permittee found out of compliance with its spill control plan (refer to the Spill Prevention and Response Program).

Target date for P-2.5: Ecology shall incorporate improved requirements for spill control plans into new and revised permits on an ongoing basis.

P-2.6. Enhanced Requirements for EPA-Issued Permits and Ecology Certifications

P-2.6.1. EPA-Issued Permits

The conditions in EPA-issued permits in the Puget Sound region shall be at least as stringent as those required under this management plan in permits issued by Ecology. This applies to all toxicant and particulate limits, and to monitoring, spill control, frequency of inspection and public notice requirements. The EPA shall also review existing EPA-issued permits and modify any permit as necessary to include such limits and requirements.

P-2.6.2. Ecology Certifications

Ecology shall not issue an NPDES permit or certify the issuance or renewal of any NPDES permit for a federal facility under Section 401 of the Clean Water Act, unless the permit includes appropriate numeric limits and other conditions required to comply with all applicable water quality and sediment standards and other elements of this management plan. Before considering a permit or 401 certification for a federal-facility permit, Ecology shall seek to be

familiar with the facility site, through site visits, inspections or other means.

Target date for P-2.6: Ongoing.

P-2.7. Certified Labs

Ecology shall adopt regulations requiring all permittees to use a certified laboratory for their compliance and self-monitoring wastewater analyses, and requiring all certified laboratories to use specified protocols and comply with specified quality assurance and quality control procedures (see Laboratory Support Program).

P-2.8. Reopener Clause

Every permit issued or reissued by Ecology or EPA in the Puget Sound basin shall include a reopener clause allowing the permitting agency to modify, based on monitoring results or other causes consistent with state and federal regulations, the effluent limitations, monitoring requirements or other conditions in the permit.

P-3. Permit Fact Sheets, Public Involvement and Permit Review

The objective of fact sheets is to facilitate meaningful public review. In the fact sheet accompanying each draft major permit, the Department of Ecology shall clearly explain how the draft permit fulfills the goal of reducing and eventually eliminating harm from toxic contaminants in Puget Sound, including a summary of the information used to determine which limits on specific toxicants and/or overall effluent toxicity should be included in the permit. It is the Action Team's intent that the fact sheet information be as concise, consistently presented and efficiently prepared as possible, making use of computerized information and focusing on the issues addressed in this program. Fact sheets shall be written in language that can be understood by the general public.

Ecology shall ensure that the dischargers and the public have equal opportunity for access to and involvement in the permit decisions pertaining to discharge limits, mixing zones, monitoring schemes or other negotiable requirements of the permits.

EPA shall provide a similar explanation for any draft major permit issued by the EPA.

In order to provide an opportunity for meaningful public review, monitoring requirements shall be fully described in the draft permit.

The fact sheet accompanying each draft major permit shall include a brief discussion of how the draft permit has dealt with each of the five types of monitoring specified below, and shall explain those situations where any of these types of monitoring have not been required or otherwise addressed in the draft permit.

P-3.1. Explanation of Relaxed and Increased Limits in Permits

For any draft permit whose effluent limitations are in any way less stringent than those in the preceding permit, Ecology shall include a conspicuous notice and clear explanation of the reasons for such limits in the public notice of the draft permit. This requirement shall apply to all effluent limitations that are, or appear to be, a relaxation of limits in comparison to the previous permit. This requirement for notice and written explanation shall also apply to any draft permit proposing to allow a greater amount of effluent to be discharged due to increases in production. In every such explanation, Ecology shall report on measures available to and undertaken by the discharger to reduce the production of pollutants per unit of product. Ecology shall adopt a formal policy for implementing this program element

Target date for P-3.1: The notification and explanation process are ongoing activities.

P-3.2. Permit Review

The Washington departments of Natural Resources, Health, and Fish and Wildlife, appropriate federal agencies and tribal governments shall review and comment on selected NPDES permits with regard to protecting the respective resources for which they have responsibility. Ecology shall provide training for these departments upon request for the purpose of reviewing permits (element P-13).

Target date for P-3.2: Ongoing.

P-4. Permit Writers' Manual, Permit Quality Control, and Internal Technical Assistance for Permit Writers

Several comprehensive policies must be implemented to ensure overall coordination and quality assurance of the permit program. In order to fulfill this objective, Ecology shall build upon existing

efforts and establish a centralized mechanism that ensures:

- a. Development of consistent policies and communication of them to all permit writers in the Puget Sound basin;
- b. Implementation of quality assurance reviews of permits prior to their issuance;
- c. Coordination and resolution of cross-program issues;
- d. Acceptance of permit applications from dischargers only if they are fully complete;
- e. Equally stringent requirements for both municipal and industrial permits to the extent practicable; and
- f. Implementation of pollution prevention through waste minimization.

P-4.1. Permit Writers' Manual and Checklist

Ecology shall revise, as necessary, a procedures manual for permit writers (referred to as the permit writers' manual). In preparing all NPDES permits in the Puget Sound basin, permit writers shall use the permit writers' manual.

This manual shall include examples, guidelines and procedures to ensure that all pertinent information is made available to and used by permit writers in determining appropriate effluent limits, particulate contamination limits (element P-2), measures to control pollution sources, monitoring schemes, best professional judgment, fact sheets, and other conditions in NPDES and state permits. Such information may be derived from documents already available to the department (e.g., the applicant's most recent hazardous waste annual reports) or additional information that would be requested from the applicant (e.g., information on the overall distribution of contaminants between the dissolved and suspended phases of the effluent).

The permit writers' manual shall require that all NPDES permits include appropriate conditions for addressing all stormwater runoff from permitted facilities. Procedures to incorporate requirements of applicable TMDLs shall also be included. The permits shall also address any significant issues raised in the fact sheet.

The permit writers' manual shall incorporate other requirements related to permit writing, including water quality and sediment standards (elements P-1); enhanced information in public notices and fact sheets pertaining to draft permits

(element P-3); particulates and solids (element P-2); monitoring requirements, including provisions for tiering (element P-2); spill control (element P-2); explanation of changes in discharge limitations; 401 certifications; assuring inspection access, assuring that inspection results are provided to permit writers and that permit modifications are made if necessary; pretreatment program enhancements (element P-10); and pollution prevention through waste minimization (element P-14). The permit writers' manual shall encourage Ecology staff to make the best possible use of municipal and industrial expertise and resources in carrying out permit writing and appropriate related activities.

The permit writers' manual shall also include guidelines for permit writers to use in evaluating the potential for cross-media transfer of pollutants. These guidelines shall emphasize mechanisms available to permit writers to encourage waste reduction at the source rather than end-of-pipe treatment if such treatment results in cross-media transfer of pollution. Ecology is encouraged to develop such effluent guidelines and technical standards as may be necessary to assist in the efficient administration of the permit program.

Ecology shall provide opportunity for review and comment on the draft permit writers' manual and any significant updates to it by an advisory committee made up of interested stakeholders.

A checklist shall accompany each public draft and final issued permit. The checklist shall document that all appropriate requirements of the Puget Sound Management Plan were met and procedures in the permit writers' manual were followed during preparation of the permit.

Target date for P-4.1: Ecology shall complete the missing elements of the Permit Writers' Manual during the 2003-2005 biennium.

P-4.2. Monitoring Guidelines

Ecology shall develop (and revise as necessary) guidelines for the frequency and methodology for monitoring by dischargers and for reporting requirements and format. The guidelines shall include the tiered approach.

The guidelines shall focus the monitoring resources of dischargers on the mandatory monitoring of effluent and the receiving environment and leave most of the in-plant, process-control monitoring to the discretion of the discharger except in cases of significant non-compliance, as necessary to meet permit effluent limits. Ecology

shall minimize the mandatory in-plant, process-control monitoring to only what is necessary to verify that the appropriate technology is being used and to characterize influents as appropriate.

The guidelines shall use the Puget Sound Estuary Program Protocols and Guidelines when available and data management systems compatible with the Puget Sound Ambient Monitoring Program (PSAMP). The guidelines shall also define triggers for determining when action is necessary to modify a permit. Ecology shall develop the guidelines in consultation with municipal and industrial dischargers, laboratories, EPA, the Action Team and others as appropriate.

P-4.3. Technical Assistance and Quality Control

Ecology shall establish an internal "technical assistance team" to assist permit writers in researching and in writing appropriate conditions for NPDES and state permits. Ecology shall build on initial efforts and develop a comprehensive permit quality control and internal, technical assistance plan.

P-4.4. NPDES Rule Revision

Ecology shall revise or adopt rules governing NPDES permits (WAC 173-220, WAC 173-205) to include the permit improvements specified in the *Puget Sound Management Plan* as appropriate.

P-4.5. Biosolids Management

Ecology shall periodically update the guidelines for managing biosolids and the "biosolids management rule."

P-4.6. Training for Permit Writers

Ecology shall establish an ongoing, vigorous program of training for permit writers, including cross training in other environmental regulatory programs, recognition of problems related to cross-media transfer of pollution, and opportunities to reduce or recycle waste at the source. Ecology shall assure that an appropriate percentage of permit writers' time is allocated to training activities. Ecology shall establish minimum training requirements for permit writers and ensure that all staff complete these requirements before assuming their duties. Ecology shall take advantage of existing training programs, such as those offered by EPA, to the maximum extent practicable.

Compliance Assurance

P-5. Inspections and Enforcement

P-5.1. Adopt Enforcement Policies as Regulations, Report on Enforcement and Encourage Compliance

The objective of this element is to develop a more effective enforcement program that is consistently, efficiently and fairly applied to the regulated community for the purposes of protecting the water and sediment quality of Puget Sound.

Ecology shall provide a regular program of enforcement training for agency staff involved in enforcement actions.

Ecology shall continue to prepare and submit to the Puget Sound Council and Action Team quarterly lists of all water quality-related civil and criminal enforcement actions taken, together with statistics on the percentage of Ecology enforcement actions that were appealed and the dollar amounts of penalties assessed versus those sustained. Where possible, Ecology may include statistics on cases in which the Pollution Control Hearings Board has considered the post-penalty behavior of a violator in determining the amount of penalty to be sustained. In order to examine the relationship between penalties and compliance, Ecology shall establish a settlement reporting system. Ecology shall use the reporting system to better evaluate settlements throughout the agency, to assure that settlements are negotiated consistently, and to track settlement compliance. Ecology shall also develop comprehensive settlement guidelines to help staff make informed decisions and promote consistency across agencies. Guideline topics shall include:

- a. Differences between simple and innovative settlements;
- b. Types of proposed activities that are appropriate for innovative settlements;
- c. Procedures for completing settlement agreements; and
- d. Ecology and Attorney General Office roles in the settlement process.

The Pollution Control Hearings Board is encouraged to process appeals cases related to water quality permit issues within six months through the use of sufficient staff resources such as administrative law judges.

P-5.2. Inspections

Ecology shall conduct a significant number of Class I inspections on an unannounced basis. Similarly, a significant number of Class II inspections shall include an unannounced sampling visit. Ecology shall assure that appropriate permits include such conditions as may be necessary to provide a pre-arranged means for Ecology inspectors to obtain unannounced samples of effluent on a 24-hour basis.

Note: Class I inspections are walk-through inspections, including a visual inspection of the facility and some examination of records (self-monitoring reports, procedures manuals, operation and maintenance records, etc.). Class II inspections include all of the Class I activities plus effluent and some sediment sampling and analyses to determine compliance with the permit.

Ecology shall conduct inspections in accordance with the following minimum schedule:

Type of permit	Number of inspections per year per permit	
	Class I	Class II
Major	2	1
Significant minor	1	0.5
State and minor NPDES	1	0.1

Additional inspections (both announced and unannounced) shall be conducted based on the permittee's record of compliance. Ecology is encouraged to frequently perform quick surprise walk-through visits where a grab sample of the effluent is taken and obvious permit violations are addressed on the spot. Ecology inspectors shall ensure that they notify dischargers prior to leaving the facility of any obvious permit violations and any immediate corrective actions required. Ecology shall also ensure that copies of the results of the inspections reports are sent to permit writers and the dischargers within 90 days of the inspection date for Class I inspections and within 120 days for Class II inspections. Ecology shall ensure that discharge permits are modified as necessary to incorporate appropriate monitoring requirements, effluent limits or other conditions to correct problems identified through inspections.

In conjunction with reporting requirements under element P-15, Ecology shall submit a report to the Puget Sound Council and Action Team on the number and types of inspections (including unannounced inspections) undertaken. The report shall

also describe a system for tracking inspection information, including the number and types of inspections (including unannounced inspections), inspection results, the number and types of violations discovered, actions initiated in response to violations, lab data and inspection report turnaround times, and occasions on which an authorized inspector was denied access to a facility.

Target date for P-5.2: Ecology shall meet the inspection schedule when full funding becomes available.

P-5.3. Inspector's Manual

Ecology shall periodically update, as necessary, the inspector's manual to ensure that the most current EPA or other appropriate information is being used.

P-5.4. Training for Inspectors

Ecology shall establish an ongoing, vigorous program of training for inspectors, including cross training in other environmental regulatory programs, recognition of problems related to cross-media transfer of pollution, and opportunities to reduce or recycle waste at the source. Ecology shall assure that an appropriate percentage of inspectors' time is allocated to training activities. Ecology shall establish minimum training requirements for inspectors and staff involved in enforcement and ensure that all staff complete these requirements before assuming their duties. Ecology shall take advantage of existing training programs, such as those offered by EPA, to the maximum extent practicable.

P-6. Search for Unpermitted or Illegal Discharges

Ecology shall carry out a program for detecting illegal dischargers or wastewater discharges not covered by permits. This shall apply to both direct and indirect wastewater discharges and to direct discharges of stormwater from industrial facilities. Ecology shall ensure that its enforcement guidelines incorporate appropriate automatic penalty provisions for instances when dischargers without permits are discovered. Ecology shall submit a report to the Puget Sound Council and Action Team on the number and characteristics of unpermitted discharges discovered through this element, together with any analysis and recommendations that the department may have.

Target date for P-6: Ecology shall submit report by June 30, 2005.

P-7. Felony Provisions

The Action Team shall submit proposed legislation to the Legislature to amend appropriate sections of the state Water Pollution Control Act (RCW 90.48) to provide for felony penalty provisions. The proposed legislation shall ensure that accidental or emergency bypasses are not subject to the felony penalty, but rather shall target willful violators with demonstrated knowledge and intent to commit the violation.

Target date for P-7: Resubmit to 1993 or subsequent Legislature.

P-8. Data Management

Ecology shall maintain and enhance the Wastewater Permit Life Cycle System (WPLCS). Ecology shall ensure that the WPLCS system incorporates results of Class I and Class II inspections as well as self-monitoring data.

In addition, Ecology shall maintain accurate records of outfall locations (and other useful information pertaining to mapping the effluent effects of discharges as additional funds become available) in the WPLCS as appropriate, and provide this information to the Puget Sound Geographic Information System (GIS).

This data management program shall include features that simplify public access to permit tracking and discharge information.

Target date for P-8: Continue to load data.

P-9. Permit Fees and Aquatic Lands Leasing Rates

P-9.1. Permit Fees

Ecology shall periodically evaluate the adequacy of funding for municipal and industrial permits, review the municipal fee cap and make recommendations, if appropriate, to address any shortfalls. Ecology shall also consider the economic effect of fees on small dischargers and the economic effect of fees on public entities required to obtain permits for stormwater runoff and shall make appropriate adjustments.

P-9.2 Aquatic-Lands Leasing Rate

The Action Team encourages Natural Resources to review policies and laws for leasing aquatic lands as they relate to contamination of state-owned aquatic land. The purpose of the review is to determine whether changes in laws or policies might provide better proprietary management of historical and current particulate contamination and allow for proper compensation to the state for storage of that material on state-owned aquatic lands. In developing any changes to the leasing program, affected groups, including ports, municipal and industrial discharges and stormwater dischargers, shall be consulted.

Pretreatment

P-10. Pretreatment Program Enhancements

The Department of Ecology shall develop and maintain a strong pretreatment program, including permitting (with appropriate conditions for monitoring and control of toxicants in accordance with element P-2), compliance tracking, inspections, spill control, public notice, auditing of local programs and enforcement as needed. Ecology is encouraged to develop such effluent guidelines and technical standards as may be necessary to assist in the efficient administration of state and local pretreatment programs.

With the involvement of local governments; delegated and non-delegated agencies that manage municipal sewage systems that accept pre-treated industrial wastewater; federal and other state agencies; tribal governments; and interested citizens, Ecology shall coordinate and implement the pretreatment program and address the following issues:

- a. Ensuring program consistency across jurisdictions in order to eliminate the creation of pollution-tolerant zones for indirect dischargers.
- b. Ensuring the adequacy of staffing and funding resources.
- c. Coordinating with the solids handling provisions of element P-2 .
- d. Setting minimum pretreatment program requirements for municipal NPDES and pretreatment permits and establishing a quality review mechanism to ensure that those requirements are being included in permits.

- e. Developing mechanisms to ensure that local governments (via comprehensive plans, etc.) identify new indirect dischargers resulting from regional growth and conversion of rural land use to urban uses including coordination with the state Growth Management Act, and evaluating the cost impacts and enforcement issues for municipalities.
- f. Developing computerized tools for tracking and managing program data to effectively track compliance with minimum pretreatment program requirements.
- g. Consulting with Ecology staff, the regulated community, the public, and other state and federal agencies as appropriate to identify and resolve any other barriers to success.

Target dates for P-10: Ongoing.

P-11. Training and Certification of Wastewater Treatment Plant Operators

Municipal Operator Training

Ecology shall ensure that each wastewater treatment plant operator-certification examination covers basic issues and facts about industrial discharges, pretreatment laws and regulations, treatment technologies, maintenance and troubleshooting, and recognition of pretreatment-related problems. Ecology shall consult with the Action Team and affected groups of wastewater treatment plant operators in drafting any additional test questions related to these topics. Ecology will prepare handouts identifying up-to-date pretreatment rules, regulations, and technology. Such handouts shall be mailed to all certified operators at least annually. Ecology shall encourage certified operators to attend pretreatment workshops, conferences and courses for credit toward the mandatory professional growth requirement.

Ecology is encouraged to review its testing and certification methodology to reflect the level of responsibility of the operator for pretreatment programs.

Certification of Industrial Treatment Plant Operators

In conjunction with its technical outreach to dischargers under element P-13, Ecology shall explore and facilitate the development of a voluntary process for certifying operators of both direct and

indirect discharger industrial treatment plants through a private trade or professional association or other appropriate entity. Certification shall initially be voluntary and evolve into a mandatory process. In exploring this approach, Ecology shall consult with industrial dischargers and treatment plant operators, private trade and/or professional organizations, appropriate labor unions, the Action Team, and other interested individuals and groups in Washington and other states.

Target dates for P-11: Initiate development of voluntary certification of industrial operations during the 2003-2005 biennium. Phase in implementation of voluntary program by June 30, 2005. Phase in mandatory program by June 30, 2010.

P-12. Employee Education Assistance

In connection with the current employee education programs required under the state Worker Right-to-Know law (Chapter 49.70 RCW), the departments of Ecology and Labor and Industries shall prepare and implement a coordinated plan for developing and distributing educational materials for employees to appropriate employers in the Puget Sound basin. This plan shall establish a schedule for distribution of such materials to these employers and shall establish a schedule for any necessary rule making by the departments of Ecology or Labor and Industries. Educational materials to be prepared shall provide information on the environmental consequences of waste disposal decisions typically made by employees of the firms and/or agencies included in the program.

Target dates for P-12: Ongoing.

Public Involvement

P-13 Public Outreach

Ecology shall establish a central clearinghouse for the public to contact regarding permits, and shall actively contact and assist groups and individuals regarding the NPDES and state waste-discharge permit program and related activities. For each permit or action under consideration, Ecology shall seek out those who may be interested or affected, inform them of the significance of the action, highlight key decision-making points, and provide technical assistance in working through the process. The public outreach staff shall take an active role in reviewing permit fact sheets for completeness and

understandability by the public and publicizing which permits are open for public comment. Ecology shall also assist citizens and environmental groups, as well as federal and state agencies and local tribal governments upon their request in reviewing NPDES permits (element P-3), and shall ensure that they get copies of draft permits for dischargers that may affect their jurisdiction or areas of interest.

Ecology shall also expand its permit mailing lists to achieve broad circulation, regularly provide program information in general publications (e.g., newsletters, brochures), provide informative and widespread public notice of draft permits, and establish criteria for deciding when a public hearing will be held on a permit. Public information efforts shall include dissemination of both positive and negative information, as it is available, on pollution compliance by permittees. In establishing criteria, adopting guidelines and developing rules, Ecology shall actively seek and provide opportunity for meaningful public involvement in accord with the public involvement policy of this plan.

Target dates for P-13: Ongoing.

P-14. Technical Outreach to Dischargers, and Prevention, Reduction and Minimization Strategies

Ecology shall provide technical outreach to dischargers on permit requirements called for in the permit writers' manual, including the requirements of pollution prevention, reduction and minimization and other Ecology programs. Ecology shall establish a regular discharger newsletter to inform all dischargers of upcoming changes in permitting requirements and the reasons for them, along with other useful information such as pollution prevention, reduction and minimization strategies. To the maximum extent possible, Ecology shall consolidate information related to controlling water pollution with other environmental requirements to provide useful, timely, coordinated and accessible information and one-stop answers regarding multiple environmental programs. For maximum efficiency, the program shall emphasize delivery of information through existing mechanisms such as trade and professional organizations rather than to individual dischargers. Ecology shall coordinate this program with the business assistance (pollution prevention pays) program and other Ecology

programs as appropriate that provide information to businesses.

In coordination with Ecology, the Action Team shall initiate the development of a Technology Institute at the University of Washington or other appropriate state universities (pursuant to RCW 28B.20.420 and 422). The institute shall identify, develop and promote the latest pollution control technologies (emphasizing field-tested, cost-effective waste recycling, reduction and minimization strategies, as well as treatment technologies or combinations thereof) for the applied purpose of determining all known and available technology for use in the regulatory process for direct and indirect dischargers. The Action Team shall coordinate efforts to disseminate the results of the technology institute's work. In conjunction with Ecology, the Action Team support staff shall investigate appropriate mechanisms for long-term funding of the institute including the State General Fund, taxes or permit fees. The Action Team support staff shall also research funding mechanisms to assist businesses with implementation of strategies for controlling pollution.

Target dates for P-14: Action Team to initiate the Technology Institute by September 30, 2005.

P-15. Ecology Reporting Requirements

Ecology shall publish a report on the NPDES and state permits in the Puget Sound basin that it has considered for issuance, renewal or modification.

In the report, Ecology shall briefly summarize for the previous 12 months the following items and compare them to goals and historical trends when such data are available:

- a. Permit quantity: The number of permits issued (major, minor, state, 401 certifications); the number of backlog expired permits; comparison to state/EPA agreement; the amount of permit fees collected.
- b. Permit quality: The number and percent of issued permits that fully met the minimum checklist requirements (element P-4).
- c. Inspections performance: The number and types of inspections (element P-5).
- d. Compliance and enforcement trends: Rates for significant noncompliance among direct and indirect dischargers, and enforcement actions and trends.

- e. Major accomplishments toward implementing elements P-1 through P-8, P-10 (pretreatment), P-13 (public outreach, and P-14 (discharger outreach).

Ecology is encouraged to include other information that may be useful, to present the information in tabular, comparative or other form that facilitates review and analyses, to comment on its experience in implementing these elements, and to provide appropriate recommendations.

Target dates for P- 15: Submit report by June 30, 1991, and every two years thereafter.

P-16. Measuring Program Effectiveness

The Puget Sound Action Team support staff shall evaluate program results through use of program and environmental performance measures. This supports the adaptive management approach described in the Estuary Management Program of the *Puget Sound Management Plan*. At a minimum, these evaluations should incorporate information from the following monitoring and assessment sources:

- a. Program measures that track implementation of this program:
 - Reporting called for in Element P-15.
 - Number of facilities where effluent is applied to land or reused.
- b. Case studies that assess the effectiveness of program actions:
 - Studies of environmental conditions around marine outfalls.
- c. Performance of environmental conditions for which this program is a major or important determinant (recognizing that these measures may be affected by several plan programs):
 - Number of water bodies on the 303(d) list.
 - Area of sediments that exceed sediment management standards.
 - Permit compliance rates.
 - Amount of wastewater reused.