Responsiveness Summary

for the
Upland Fin-Fish Hatching and Rearing
General NPDES Permit

April 2000
Publication No. 00-10-021

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Water Quality Program

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Introduction

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System of permits (NPDES permits), which is administered by the Environmental Protection Agency (EPA). The EPA has delegated responsibility to administer the NPDES permit program to the state of Washington on the basis of RCW 90.48, which defines the Department of Ecology's authority and obligations in administering the discharge permit program.

The regulations adopted by the state include requirements for issuing general permits (Chapter 173-226 WAC); water quality criteria for surface waters, ground waters, and sediments (Chapters 173-201A, 200, and 204 WAC); and technology based standards for upland fin-fish hatching and rearing (Chapter 173-221A WAC). The regulations also establish the basis for effluent limitations and other requirements

The Upland Fin-Fish Hatching and Rearing General permit expired in April 2000. In order to renew the hatchery permit, Ecology formed an internal workgroup of permit managers involved in the administration of the hatchery permit.

The draft of the hatchery permit was public noticed on January 5, 2000. The notice was published in five different newspapers of general circulation throughout Washington, inviting the public to submit written comments or give oral testimony on the draft permit. A copy of the notice published in the State Register is provided in Appendix A. In addition, the notice was sent to the interested parties lists of Ecology's Regional Offices. A press release was issued February 29, 2000 to inform the media of the upcoming public hearings. The media advisory is provided in Appendix B. Public Workshop and Hearing was held on March 2, 2000. The public comment period ended March 15, 2000 although late comments were accepted.

The purpose of the comment period and formal hearings was to give the public an opportunity to comment on Ecology's draft for the renewal of the hatchery permit. The purpose of this Responsiveness Summary is to provide Ecology's formal response to those comments.

Several commentors commented on the same basic issues within the draft permit. To reduce repetition, similar comments are addressed collectively. Specific comments are answered individually. Appendix C contains a copy of all written comments and transcribed oral testimony.

Ecology has attempted to clearly and directly respond to the written comments and oral testimony received on the draft permit. If a response is not clear, or if more information is desired, please contact Paul Stasch, Technical Specialist, at (360) 407-6446.

Summary of Public Involvement

1/05/00	Public Notice announcing the public comment period for the draft Upland Fin-fish Hatching and Rearing General permit is published in the State Register and newspapers of general circulation.
2/02/00	Public Notice extending the public comment period for the draft Upland Fin-fish Hatching and Rearing General permit is published in the State Register and newspapers of general circulation.
2/29/00	A news release is provided to the media announcing the Public Workshop and Hearing.
3/02/00	Public Workshop and Hearing is held in Olympia, Washington.
3/15/00	Public comment period ends.

List of Commentors

Written Commentors

1. Ms. Heather Kibbey, Pierce County
2. Mr. Ivor Melmore, Puyallup Watershed Council
3. Mr. Steve Brown, Brown, Davis and Roberts
4. Ms. Catie Mains, Washington Department of Fish and Wildlife
5. Mr. Hugh Lewis, Washington Trout
6. Mr. F. William Waknitz, National Marine Fisheries Service
7. Mr. William Gray, Bureau of Reclamation
8. Ms. Sue Joerger, Puget Soundkeeper Alliance
9. Ms. Robyn du Pre, Resources for Sustainable Communities
10. Mr. Bob Steinruck and Ms. Peggy Patten, Hill Valley Water System
11. Mr. Frank Meriwether, Washington Department of Health

Oral Commentors

1. Mr. Steve Brown, Brown, Davis and Roberts
2. Mr. Jim Zimmerman, Washington Fish Growrs Association

Comments and Responses

General Comment 1 – Extend Public Comment Period

A number of commentors felt Ecology should extend the public comment period, citing inadequate opportunity to comment on the draft permit and permit application.

Response to General Comment 1 -

The original draft permit was public noticed in the State Register and in numerous newspapers of general circulation on January 5, 2000. The draft permit was re-noticed in the State Register and in numerous newspapers of general circulation on February 2, 2000. A news release was provided to the media on February 29, 2000. Thus the notification exceeded the minimum required by regulation. Because this is the third term of the permit and the changes are minor, Ecology does not believe that an extension is warranted. It should be noted that the scope of the public comment period did not include the permit applications. If a member of the public is interested in a permit application, a public disclosure request needs to be made to Ecology. The permit application for coverage is unchanged except for renewed deadline and effective dates.

General Comment 2 – Permit Coverage

Some commentors felt the draft permit did not extend permit coverage to enough facilities and that the general permit was not protective of sensitive water bodies. Other commentors requested clarification about specific situations unique to the operation of their facility.

Response to General Comment 2

The coverage under the Upland Fin-fish Hatching and Rearing General permit was established by the provisions of WAC 173-221A-100. It states a permit is required for facilities that produce more than 20,000 pounds of fin-fish per year, feed more than 5,000 pounds of fish food during any calendar month, or is designated a significant contributor of pollution.

Ecology requires all facilities that produce more than 20,000 pounds of fish per year or feeds more than 5,0000 pounds of feed per month to obtain coverage under the Upland Fin-fish Hatching and Rearing General permit. It is Ecology's policy to require facilities that have a reasonable potential to degrade receiving water quality and those that discharge pollutants to an impaired waterbody if the pollutants discharged are the same for which the waterbody is listed to apply for and receive an individual NPDES permit. A number of hatcheries have been placed under an individual NPDES permit for these reasons.

Specific interpretation of how the permit applies to any situation unique to a given hatchery should be addressed with the appropriate regional permit manager responsible for that facility. The question of applicability of the general permit to a specific facility is addressed during the determination of coverage by the regional permit manager.

General Comment 3 – Atlantic Salmon Discharge Prohibition

A number of commentors addressed the prohibition on the discharge of Atlantic salmon. Private owner/operators felt that the Hatchery permit should be revised to allow the release of Atlantics if the Washington State Department of Fish and Wildlife (WDFW) authorized the release. The WDFW agreed.

Another commentor felt that the prohibition did not go far enough to control the discharge of biological pollutants, specifically, other non-native species known to prey on endangered salmonids and non-native races of hatchery fish.

Response to General Comment 3

In response to the Pollution Control Hearing Boards ruling that Atlantic salmon are a biological pollutant, Ecology decided controlling the escape of Atlantics out of hatcheries would be a prudent precautionary approach. Screening the effluent is the obvious answer to eliminate their inadvertent release. Ecology agrees that if the Washington Department of Fish and Wildlife were to issue a permit for the release of Atlantic salmon, our permit should not prohibit that authorized release, although we believe that is unlikely to occur. As a result, the permit has been revised.

The Upland Fin-fish Hatching and Rearing General permit authorizes the discharge of wastewater from fish hatcheries provided those facilities comply with the provisions of that permit. While there is considerable debate regarding the impacts of artificial propagation on wild salmonids, the permit does not deal with impacts of artificial propagation or other WDFW issues. Ecology considered expanding the discharge prohibition to other non-native species, but decided to limit the prohibition to a species that has not yet become established in waters of the state. For example, Ecology did not see the merit in requiring the effluent to be screened at the Ringold hatchery when the Columbia River has already become one of the premier smallmouth bass and walleye fisheries in the world.

General Comment 4 – Effluent Monitoring and Sampling Exemption

A number of commentors disagreed with Ecology's revisions to, S2 – Discharge Limitations and S3 - Testing Schedule. Some felt the revisions would result in an increase in monitoring costs while others felt that the monitoring should be expanded to include additional parameters, such as biochemical oxygen demand, fecal coliforms and nutrients, and the sampling frequency increased. Others requested clarification on the limitations, such as how are monthly averages calculated or on how Ecology interprets compliance with the limitations when a large amount of glacial flour is suspended in the hatchery influent. Others expressed concern about the tiered monitoring and reporting.

Response to Comment 4

This renewal of the Upland Fin-fish Hatching and Rearing General permit will be its third term. Ten years ago, Ecology decided the use of solids parameters as indicators for the other parameters such as nutrients and biochemical oxygen demand was appropriate. Ecology still believes this approach is valid. It is true that dissolved nutrients will not be detected. This is one of the tradeoffs of a general permit. If there is any indication that the discharge from a facility is adversely impacting the receiving water or contributing to the impairment of a waterbody, Ecology has and will continue to require those facilities to apply for and receive an individual NPDES permit. This situation occurred on the Black River as a result of a Total Maximum Daily Load (TMDL) for nutrients. Ecology cannot justify the additional cost of monitoring for fecal coliforms based on the reported presence of fecal coliform in dog treats. Nor can Ecology justify placing effluent limitations for fecal coliforms for all facilities covered under the general permit based on the possibility for a few facilities to contribute to the contamination of commercial shellfish beds.

After reviewing the comments, it is apparent that Ecology needs to provide a more detailed explanation of the discharge limitations and testing schedule. Some commentors felt compliance monitoring should be increased. In this revision of the permit, Ecology eliminated the percent solids removal sampling requirements. In exchange, effluent monitoring of the offline settling basins was increased, requiring it whenever the settling basin discharged. Ecology decided it was most important to document what was leaving the basins and entering the receiving water. The WDFW commented this represented an increase of approximately 10% in monitoring.

Ecology intended to change all limits expressed as maximum daily into instantaneous maximum. The residual maximum daily found in the footnote will be corrected. When a limit is expressed as a monthly average, a Permittee can take more samples than the minimum required by the permit for averaging. However, if they do, all results must be included in the calculations and summary reported to Ecology on the discharge monitoring report. It is a violation of the permit to pick and choose results. The instantaneous maximum is the ceiling that cannot be exceeded. If multiple samples are taken for the monthly average, none of the samples may exceed the instantaneous maximum. It should be noted that the effluent limits for hatcheries are set by regulation (Chapter 173-221A WAC). Ecology applauds those facilities that exceed the minimum monitoring requirements required by the permit.

Tiered monitoring in general permits has created many problems with our compliance monitoring database (WPLCS). Ecology is currently working on a way to differentiate when a Permittee did not need to report and when a Permittee failed to report. This is an internal data management issue. The reporting threshold requirement was modified in this version of the permit with the hope of simplifying the decision of when to report. If the Permittee is still unclear about the monitoring and reporting requirements in the permit, it is recommended the Permittee contact their regional permit manager for specific guidance on data reporting.

General Comment 5 – Total Residual Chlorine

Some commentors felt the total residual chlorine limit was too high and felt the limit should be placed in section S2 – Discharge Limitations. Another commented the chlorine limit represented backsliding.

Finally, one commentor questioned whether Ecology was applying the chlorine limit in a consistent manner.

Response to General Comment 5

The limit for total residual chlorine in the draft permit was incorrect due to an error. Even though the limit was correct in the fact sheet, the limit of 19 g/L in the draft permit represented an error of one million times. The correct limit is 19 ug/L. While unfortunate, Ecology does not view this simple typographical error as significant since it was so inconsistent with the Water Quality Criterion for chlorine. The total residual chlorine limit was included in section S2- Discharge Limitations. The total residual chlorine limit will be corrected wherever it occurs in the final permit.

Ecology does not agree that the corrected total residual chlorine limit in the draft permit represents backsliding and feels the limit is protective of aquatic resources. The previous version of the permit required the permittees to pass a "constant bioassay." No definition of what constitutes a "constant bioassay" exists; nor does a definition for when one is failed. Based on this considerable uncertainty, Ecology decided to use the Acute Water Quality Criterion for chlorine at the end of pipe and not provide an allowance for dilution with the other process wastewater discharges. Rearing vessel disinfection water is intermittent and relatively insignificant in terms of volume. Not all facilities use chlorine and Ecology will encourage facilities to find less toxic alternatives. There is one hatchery on the Black River under an individual NPDES permit that is being required to de-chlorinate their effluent to meet the Acute Water Quality Criterion for chlorine.

The total residual chlorine limit will also be placed in section S2 – Discharge Limitations.

General Comment 6 – Disease Control Chemical Usage

Many commentors were concerned with the release of antibiotics to waters of the state. Some felt it constituted a take under the Endangered Species Act (ESA). Others felt it would result in drug resistant organisms in the receiving waters below permitted facilities. Some felt the permit failed to control any disease control chemicals other than what is required by Federal Drug Administration application provisions. The WDFW commented that a workgroup is needed to draft language that reflects the current state of the art and science of fish disease prevention.

Response to General Comment 6

Ecology's expertise lies with environmental quality not in fish health. Faced with that realization, Ecology included a provision for prior notification for extra-label emergency drug and chemical use. While this is not the perfect answer, it does provide an opportunity for Ecology permit managers to be present during drug application to observe any potential adverse effects to the receiving waters. The control of antibiotic use and the quantification of their subtle effects are more difficult. Ecology has not developed Water Quality Standards for specific antibiotics. However, it should be noted that the permit requires detailed record keeping for drug and chemical usage and the disposal of concentrated spent dip solutions. Ecology recognizes this is an indirect approach but it does provide a mechanism to identify

those facilities more dependent on drug and chemical use. As for the use of antibiotics constituting a take under ESA, the take would have to be real and quantifiable not just speculative.

Ecology does not support delaying the issuance of the permit by commissioning an external workgroup to discuss health care for fishes at this late hour. However, Ecology encourages the WDFA to develop a current comprehensive document on the state of disease prevention in the fish culture industry

Comment 7

The operation of hatcheries deprives watersheds of essential nutrients from salmon carcasses.

Response to Comment 7

Ecology recognizes that in the natural order of things, the annual spawning cycle of salmon resulted in the mass redistribution of nutrients from the ocean upstream to the headwaters of many waterbodies. The magnitude of this cycle has been reduced in part because today there are fewer salmon returning. Ecology is not prepared to attribute nutrient deprivation to hatchery operations. It should be noted that the WDFW has begun to reseed some watersheds with carcasses to provide these nutrients. Carcass management is addressed in the Permittee's Pollution Prevention Plan. Members of the general public may request copies of a Permittee's plan.

Comment 8

Page 5, S1.A1; add the following phrase, "to surface waters of the state."

Response to Comment 8

Ecology agrees and the permit will be modified accordingly.

Comment 9

The permit needs to protect domestic water supply.

Response to Comment 9

This NPDES permit is intended to authorize the discharge of wastewater to surface waters of the state. There is no evidence that the Permittee in question has caused any pollution of a domestic supply system. If there were evidence to the contrary, Ecology would require some form of corrective action that would likely be outside the scope of the general permit.

Comment 10

Page 9, S3, footnote c; TSS influent should be a flow proportional grab sample, not a flow proportioned composite sample.

Response to Comment 10

Ecology disagrees. If the influent to the hatchery is from multiple sources, particularly if a solids allowance is to be deducted from the effluent, the influent sample needs to be a flow proportions composite sample made up of individual grab samples.

Comment 11

The phrase "substantially deviates" in section S5.C should be defined.

Response to Comment 11

Ecology agrees with the commentor that "substantially deviates" should be defined as a change in production of greater than 20%. The permit will be modified accordingly.

Comment 12

Add the phrase, "under this permit" to the first sentence of S6.

Response to Comment 12

Ecology agrees and the permit will be modified accordingly.

Comment 13

Add a subsection k to Section S6, "Facility monitoring plan, including map identifying all sampling locations."

Response to Comment 13

Ecology agrees and the permit will be modified accordingly.

Comment 14

Add subsection e to G5, "Department of Ecology employees observing a suspected violation shall immediately contact the facility to determine the cause and to implement corrective action."

Response to Comment 14

Ecology disagrees that the wording of General Condition G5 needs to be modified. However, Ecology does agree that potential violations should be brought to the attention of the Permittee in a timely fashion. The permit states obligations on the permittees. All Department of Ecology employees are not aware of this permit nor should they be required to be.

Comment 15

Add total residual chlorine to G16 as one of the parameters not requiring the use of an accredited laboratory.

Response to Comment 15

Ecology agrees. The permit will be modified accordingly.

Comment 16

Add "onsite for a minimum of five years" to Section G17.

Response to Comment 16

Ecology feels this is not necessary given that a five-year retention time is specified later in this same section.

Comment 17

Figure 1 should be modified to delete IW for the offline settling basin.

Response to Comment 17

Ecology agrees. The permit will be modified accordingly.

Comment 18

One commentor recommended that Ecology provide definitions for some specific terms used in the permit.

Response to Comment 18

Ecology feels most of the terms already have widely accepted definitions. However, it is appropriate to define "substantially deviates." The permit will be modified accordingly.

Summary of Changes to the Draft Permit

The following modifications were made to the permit:

Definitions -

A definition for the term "substantially deviates" has been added to the permit. The term, substantially deviates, is now defined as a production change of greater than 20%.

Permit Coverage -

The phrase, "to surface waters of the state" was added to S1.A.1.

Discharge Limitations -

The discharge limitation of 19 grams per liter for total residual chlorine will be changed to 19 micro grams per liter in S2.E.

The phrase, "unless specifically authorized in writing by the Washington Department of Fish and Wildlife" was added to S2.F.

Testing Schedule –

The discharge limitation of 19 grams per liter for total residual chlorine will be changed to 19 micro grams per liter in S3.D.

Monitoring and Reporting Requirements –

There were no changes to this section of the permit as a result of public comment received during the public comment period.

Operating Requirements and Conditions –

There were no changes to this section of the permit as a result of public comment received during the public comment period.

Pollution Prevention Plan -

The phrase "under this permit" has been added to the end of the first sentence of the first paragraph under S6.

A subsection k was added to S6 to require a facility monitoring plan, including a map identifying all sampling locations.

General Conditions -

Section G16 was modified to add total residual chlorine as one of the parameters not required to be analyzed by an accredited laboratory.

Section G18 was modified to include language out of the municipal permit shell for publicly owned facilities.

Figures –

Figure 1 was modified to delete IW for the offline settling basin.

Appendix A

Public Notice

Appendix B

Press Release for Public Hearing and Workshop

Appendix C

Written Comments and Transcribed Oral Testimony