APPENDIX E

NPDES Hatchery Effluent Monitoring

STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE
FISH PROGRAM
Science Division
Biological Data Systems- Hatchery Data Unit

February 20, 2007

TO: Kirk Truscott

FROM: Ann West

SUBJECT: NPDES Compliance Report

I am sending you a spreadsheet with a summary of NPDES discharge data that you requested for particular WDFW facilities for the monitoring period of January 1, 2005 through December 31, 2006. I am also providing you with a summary, *NPDES Monitoring for WDFW Facilities*, which includes parameters for discharge monitoring.

The WDFW facilities from which you requested discharge reports are: Chelan Hatchery, Eastbank Hatchery, Turtle Rock Hatchery, Wells Hatchery, Chiwawa Ponds, Carlton Acclimation Pond, Methow Hatchery, Similkameen Acclimation Pond, Twisp Acclimation Pond, Chewuch Acclimation Pond, in addition I am including Dryden Acclimation Pond. NPDES permits are not required for the Twisp and Chewuch acclimation facilities, because they are below the levels that require a discharge permit. A facility is required to have get coverage if they a) have more than 20,000 lbs production (net gain in weight) in a year b) feed more than 5,000 lbs feed in any given month or c) is determined to be a significant contributor of pollution.

There were three total violations reported at two of these NPDES permitted facilities during the period January 1, 2005 through December 31, 2006. Similkameen Hatchery total suspended solids drawdown violation of 327.4 mg/L and settleable solids drawdown violation 1.3 ml/ L in May 2005 were due to excess silt entering hatchery from ice and heavy rains. The drawdown permit limit for TSS is 100 mg/L and SS is 1.0 mg/L. Chelan's total suspended solids net average of 6.4 mg/L violation was due to a leaky abatement pond valve allowing approximately 10% of the wastewater from raceway cleaning to bypass pollution abatement pond in November 2006. The net average permit limit for total suspended solids is 5.0 mg/L. The hatchery promptly corrected the leaky valve. Similkameen Hatchery data also includes Influent Waste (IW) samples that were collected during the months of October through April at the request of the Central Regional Office of Ecology, after a site visit. The results are not required under the permit, but were provided for their information.

Please contact me at 360-902-2680 if you have any comments concerning this report.

acw
Attachments

cc: WDFW - John Kerwin, Catie Mains, Rick Stilwater

NPDES MONITORING FOR WDFW FACILITIES.

All WDFW hatcheries monitor their discharge in accordance with the National Pollutant Discharge Elimination System (NPDES) permit. This permit is administered in Washington by the Washington Department of Ecology under agreement with the United States Environmental Protection Agency. The permit was renewed effective June 1, 2005 and will expire June 1, 2010.

Facilities are exempted from sampling during any month that pounds of fish on hand fall below 20,000 lbs and pounds of feed used fall below 5,000 lbs, with the exception of offline settling basin discharges which are to be monitored once per month when ponds are in use and discharging to receiving waters.

Sampling at permitted facilities includes the following parameters:

<FLOW Measured in millions of gallons per day (MGD) discharge.

<SS EFF Average net settleable solids in the hatchery effluent, measured in ml/L.

<TSS COMP Average net total suspended solids, composite sample (6 x/day) of the hatchery effluent, measured in mg/L.

<TSS MAX Maximum daily net total suspended solids, composite sample (6 x/day) of the hatchery effluent, measured in mg/L.

<SS PA Maximum settleable solids discharge from the pollution abatement pond, measured in ml/L.

<SS % Removal of settleable solids within the pollution abatement pond from inlet to outlet, measured as a percent. No longer required under permit effective June 1, 2000.

<TSS PA Maximum total suspended solids effluent grab from the pollution abatement pond discharge, measured in mg/L.

<TSS % Removal of suspended solids within the pollution abatement pond from inlet to outlet, measured as a percent. No longer required under permit effective June 1, 2000.

<SS DD Settleable solids discharged during drawdown for fish release. One sample per pond drawdown, measured in ml/L.

<TRC Total residual chlorine discharge after rearing vessel disinfection and after neutralization with sodium thiosulfate. One sample per disinfection, measured in ug/L.

In addition, at Similkameen Hatchery only, the following sampling was conducted at the request of WA Dept of Ecology, but is not required under NPDES permit:

<SS IW Settleable solids influent grab taken as wastes are pumped into the pollution abatement pond, measured in mg/L.

<TSS IW Total suspended solids influent grab as wastes are pumped into the pollution abatement pond, measured in mg/L.