



Central Valley Regional Water Quality Control Board

4 June 2012

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NOTICE OF APPLICABILITY; GENERAL WASTE DISCHARGE REQUIREMENTS FOR COLD WATER CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY DISCHARGES TO SURFACE WATERS, ORDER R5-2010-0018-01 (CAAP GENERAL ORDER); CALIFORNIA DEPARTMENT OF FISH AND GAME AND MERCED IRRIGATION DISTRICT, MERCED RIVER FISH HATCHERY, MERCED COUNTY

Our office received a Report of Waste Discharge on 9 February 2009, a Notice of Intent for coverage under the CAAP General Order on 29 March 2012, and supplemental information 7 May 2012 for the Merced River Fish Hatchery (Facility) from the California Department of Fish and Game and the Merced Irrigation District, which hereafter are jointly referred to as the Discharger. California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) staff has determined that the discharge from the Facility meets the required conditions for approval under the CAAP General Order. The Discharger has been assigned CAAP General Order R5-2010-0018-020 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG135001. Administrative information for the Facility is provided in Attachment A, a location map is provided in Attachment B, and a flow schematic is provided in Attachment C, which are included as part of this Notice of Applicability (NOA). Please reference CAAP General Order **R5-2010-0018-020** in all your correspondence and submitted documents.

The CAAP General Order is enclosed and may also be viewed at the following web address:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2010-0018-01.pdf

You are urged to familiarize yourself with the contents of the entire CAAP General Order. Facility operations and discharge shall be managed in accordance with the requirements contained in the CAAP General Order, this NOA, and with the information submitted by the Discharger. Attachment C of the CAAP General Order prescribes mandatory monitoring and reporting requirements.

CAAP General Order R5-2010-0018-020 shall become effective when the existing individual NPDES permit for the Facility, Order R5-2004-0120 (NPDES No. CA0080055), is rescinded by a separate action of the Central Valley Water Board, which is scheduled for **1/2/3 August 2012**.

FACILITY INFORMATION/DISCHARGE DESCRIPTION

The Facility is at 4998 Robinson Road in Snelling, in Section 7, T5S, R15E, MDB&M, as shown in Attachment B, a part of this NOA. The Merced Irrigation District owns the property and California Department of Fish and Game operates the Facility. The Facility currently raises Chinook salmon from eggs to fingerlings for mitigation and enhancement of the Merced River and other rivers in the region. The Discharger plans to raise steelhead trout at the Facility. The Discharger estimates the Facility will produce 25,000 pounds of Chinook salmon and 500 pounds of steelhead trout annually. The Discharger estimates a maximum monthly feed use of 22,000 pounds and an average annual feed use of 40,000 pounds. The Facility operates year round; however, the normal period of discharge is from October through June. Fish typically are raised from early November through April, May, or June, when they are released.

The Facility diverts water from the Merced River at the Crocker-Hoffman Dam. The water is distributed through the Facility, which includes a hatchery building; two parallel, 500-foot concrete raceways; a spawning channel; a fish ladder; and a full flow-settling basin. Discharges from the Facility occur through either Discharge Point-001 or Discharge Point-002. Discharge Point-001 discharges wastewater from the 561,000 gallon settling basin to the Merced River. Discharge Point-002 discharges wastewater directly from the raceways, bypassing the settling basin, to the Merced River when the facility is releasing fish to the river. Discharge Point-001 is located at point latitude 37° 30' 55" N and longitude 120° 22' 20" W. Discharge Point-002 is located at point latitude 37° 30' 58" N and longitude 120° 22' 23" W.

The hatchery's settling basin dimensions are 300 ft. x 50 ft. x 5 ft. (561,000 gallons). Except during periods of fish release to the Merced River, all flow through the Facility passes through the settling basin before discharge to the river. The Report of Waste Discharge states that the average and maximum daily flows through the raceway portion of the hatchery are 5.1 and 5.2 million gallons per day (mgd), respectively. The Report of Waste Discharge also states that the average and maximum daily flows through the hatchery/nursery portions of the Facility are 0.6 and 0.7 mgd, respectively. Therefore, the total reported average and maximum daily flows through the Facility are 5.7 mgd and 5.9 mgd, respectively. At a flow of 5.7 mgd, the retention time in the settling basin is approximately 2.4 hours. The settling basin is constructed on permeable gravel, which allows percolation of wastewater to shallow groundwater adjacent to the Merced River. The Discharger estimates that approximately 1.5 mgd or 26 percent of the total reported flow through the facility likely percolates into the shallow groundwater. The Discharger's estimation is based off the daily discharge average of 4.22 mgd that occurred at the Facility during the first eight months of 2003.

The Discharger indicated the use of the following drugs and chemicals at the Facility to treat fish for parasites, fungi, and bacteria, as well as to clean rearing raceways in order to reduce the spread of disease among the confined fish population: potassium permanganate, hydrogen peroxide, iodine, sodium chloride, florfenicol, oxytetracycline HCL, penicillin G, amoxicillin trihydrate, erythromycin, Romet-30, tricaine methanesulfonate (MS-222), carbon dioxide gas, sodium bicarbonate, Chloramine-T, and SLICE (emamectin benzoate).

INTAKE WATER CREDITS

The maximum effluent concentrations for copper and lead exceed the screening levels specified in Table H-1 of the CAAP General Order. The Discharger, however, has demonstrated that the discharge from the Facility meets the conditions for granting intake water credits for copper and lead. The source of the pollutants is the intake from the receiving water, which is the same water body that the Facility discharges. Based on the Discharger's copper and lead monitoring data from November 2009 – June 2010, the screening levels for copper and lead were exceeded in the intake water. However, the

effluent concentrations generally did not exceed the intake concentrations and the Discharger does not add copper or lead in the process. Therefore, the water quality-based effluent limitations for copper and lead have been established considering intake water credits.

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATION of the CAAP General Order. **Effective upon the date that Order R5-2004-0120 (NPDES No. CA0080055) is rescinded**, the following effluent limitations are applicable to this discharge and are contained in Sections V.A and V.B of the CAAP General Order.

1. **Total Suspended Solids, Settleable Solids, Formaldehyde, and Chlorine** – The Discharger shall comply with the effluent limitations required in Section V.A.1 (Table 1) for total suspended solids, settleable solids, formaldehyde, and chlorine.
2. **pH** – The Discharger shall comply with the effluent limitations required in Section V.B.1.a for pH.
3. **Total Recoverable Copper** – The Discharger shall comply with the effluent limitations required in Section V.B.3.c for total recoverable copper. An intake water credit has been granted for copper; therefore, compliance with this limitation shall be in accordance with the application of intake water credits in Section V.B.3.d.
4. **Total Recoverable Lead** – An intake water credit has been granted for lead. In accordance with Section V.A.2, the monthly average total recoverable lead concentration and mass in the effluent shall not exceed the corresponding monthly average concentration and mass measured in the influent.

MONITORING REQUIREMENTS

The CAAP General Order requires that discharges comply with the Monitoring and Reporting Program that is incorporated as Attachment C to the CAAP General Order. Influent, effluent, and receiving water monitoring requirements are based on the pounds of aquatic animals produced. This Facility is in the category of production less than 100,000 pounds produced per year.

Site-specific monitoring locations for the influent, effluent, and receiving water monitoring are shown in Attachment C to this NOA (Facility Flow Schematic), and as described in the following table:

Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	Effluent wastewater flow from the settling basin prior to discharge to the Merced River
002	EFF-002	Effluent wastewater flow from the two raceways when discharging directly to the Merced River
--	RSW-001 INF-001	At the entrance of the intake pipe on the Crocker-Hoffman Dam in the Merced River
--	RSW-002	50 feet downstream from Discharge Point 002 in the Merced River

Effective upon the date that Order R5-2004-0120 (NPDES No. CA0080055) is rescinded, the Discharger is required to comply with all the Monitoring and Reporting Requirements contained in Attachment C to the CAAP General Order for facilities with production less than 100,000 pounds per year. A summary of the monitoring requirements is provided below:

1. **Influent Monitoring** – The Discharger shall monitor the influent (INF-001) in accordance with Table C-3 of the CAAP General Order for settleable solids, pH, electrical conductivity @ 25°C, copper (total recoverable), hardness, and total suspended solids.

The Discharger has been granted intake water credits for copper (total recoverable) and lead (total recoverable). Therefore, in accordance with Section III.C (Influent Monitoring for Facilities with Intake Water Credits), influent monitoring is required for flow, copper (total recoverable), and lead (total recoverable). Influent copper (total recoverable) shall be monitored as required in Table C-3, and quarterly influent grab samples shall be collected for lead (total recoverable). Samples for copper (total recoverable) and lead (total recoverable) must be taken simultaneously from the influent and effluent or phased to account for the time that it takes water to travel from the water intake to the discharge point. For every influent sample taken, an effluent sample must be taken. In addition, influent flow shall be monitored continuously.

2. **Effluent Monitoring** – The Discharger shall monitor the effluent in accordance with Section IV.A and Table C-5 of the CAAP General Order for flow, settleable solids, net settleable solids, turbidity, pH, electrical conductivity @ 25°C, copper (total recoverable), hardness, formaldehyde, chlorine, total suspended solids, and net total suspended solids.

The Discharger has been granted intake water credits for copper (total recoverable) and lead (total recoverable). Therefore, in accordance with Section IV.3 (Effluent Monitoring for Facilities with Intake Water Credits) the Discharger shall also monitor the effluent for flow, copper (total recoverable) and lead (total recoverable). Effluent copper (total recoverable) shall be monitored as required in Table C-5, and quarterly effluent grab samples shall be collected for lead (total recoverable). Samples for copper (total recoverable) and lead (total recoverable) must be taken simultaneously from the influent and effluent or phased to account for the time that it takes water to travel from the water intake to the discharge point. For every effluent sample taken, an influent sample must be taken. In addition, effluent flow shall be monitored continuously.

3. **Receiving Water Monitoring** – The Discharger shall monitor the receiving water in accordance with Section VIII.A, Section VIII.B (receiving water observations), and Table C-7 of the CAAP General Order for receiving water conditions, dissolved oxygen, temperature, turbidity, pH, electrical conductivity @ 25°C, and hardness.
4. **Land Discharge Monitoring Requirements** – The Discharger shall conduct septic tank maintenance inspections at least once per year and submit the results in the annual report in accordance with Section VI.A. The Discharger shall also conduct leachfield inspections and submit the results in the monthly monitoring report in accordance with Section VI.A.
5. **Other Monitoring Requirements** – The Discharger shall submit a Monthly Drug and Chemical Use Report (Section IX.A) and conduct Priority Pollutant Metals Monitoring (Section IX.B) in accordance with the CAAP General Order.

The first self-monitoring report (SMR) required under the CAAP General Order is the August 2012 SMR, which shall be submitted by 1 October 2012. Until then, the Discharger shall continue submitting SMRs required by Order R5-2004-0120.

SATISFACTION OF ANTI-BACKSLIDING REQUIREMENTS

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the previous individual NPDES permit, Order R5-2004-0120, with the exception of effluent limitations for copper (total recoverable).

Copper (total recoverable) – The previous Order included daily maximum and monthly average effluent limits for copper (total recoverable) that varied with the hardness of the discharge. The Discharger no longer uses copper sulfate at the Facility, and based on intake and effluent copper data, the operations do not increase the concentrations of copper to the Merced River. Based on new information provided by the Discharger, an intake water credit has been granted for copper. The effluent limits for copper are as stringent as in the previous Order; however, the intake water credit results in a potential less stringent requirement for copper.

The less stringent requirement for copper (total recoverable) is consistent with the federal anti-backsliding regulations, because there is new information that was not available at the time the previous Order was adopted and the discharge is in compliance with state and federal Antidegradation requirements. The less stringent copper effluent limit is consistent with state and federal anti-backsliding requirements. Any impact on existing water quality will be insignificant.

NOTICE OF APPLICABILITY REQUIREMENTS

The Discharger is hereby authorized to discharge to the Merced River under the terms and conditions of the CAAP General Order. In addition to the requirements contained in the CAAP General Order, the following shall also apply:

1. The discharge from the Facility shall not exceed a monthly average flow of 7.8 mgd during the effective period of the CAAP General Order.
2. The Discharger shall continue to submit Self-Monitoring Reports (SMRs) electronically using the State Water Resources Control Board's California Integrated Water Quality System (CIWQS) Program website (<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS website will provide directions for SMR submittal in the event there will be service interruption for electronic submittal.
3. The State Water Resources Control Board (State Water Board) has determined that individual or general permits for aquaculture activities defined in 40 CFR 122.25(b) will be subject to the same annual fee, which currently is \$1,943 (State Water Board Resolution 2011-0042), but may be subject to change.
4. The CAAP General Order expires on **1 January 2015**, and enrollees will continue to be authorized to discharge until coverage becomes effective under a reissued Order or until Central Valley Water Board staff formally terminates your coverage. Only those CAAP facilities authorized to discharge and who submit a Notice of Intent at least **180** days prior to the expiration date of Order R5-2010-0018-01 will remain authorized to discharge under administratively continued permit conditions.

ENFORCEMENT

Failure to comply with the CAAP General Order and/or this NOA may result in enforcement actions, which could include administrative civil liability. Effluent limitation violations and some late reporting violations are subject to Mandatory Minimum Penalties (MMPs) of \$3,000 per violation [California Water Code Sections 13385(h) and (i)]. If you have no discharge during a monitoring period, you must submit a monthly self-monitoring report indicating that no discharge occurred. You must notify the Central Valley Water Board staff within 24 hours of noncompliance or anticipated noncompliance.

COMMUNICATION

All monitoring reports submittals, notification of non-compliance, and questions regarding compliance and enforcement shall be directed to Jill Walsh of the Central Valley Water Board's Compliance and Enforcement Unit. Jill Walsh can be reached at (559) 445-5130 or at jwalsh@waterboards.ca.gov.

Questions regarding the permitting aspects of your CAAP General Order, and written notification for termination of coverage under the Order, shall be directed to Alexander Mushegan at (559) 488-4397 or at amushegan@waterboards.ca.gov.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet or will be provided upon request. The Internet address is: http://www.waterboards.ca.gov/public_notices/petitions/water_quality.

Original Signed by Clay L. Rodgers for

Pamela C. Creedon
Executive Officer

Attachments (3): 1) Attachment A – Facility Administrative Information
2) Attachment B – Location Map
3) Attachment C – Facility Schematic

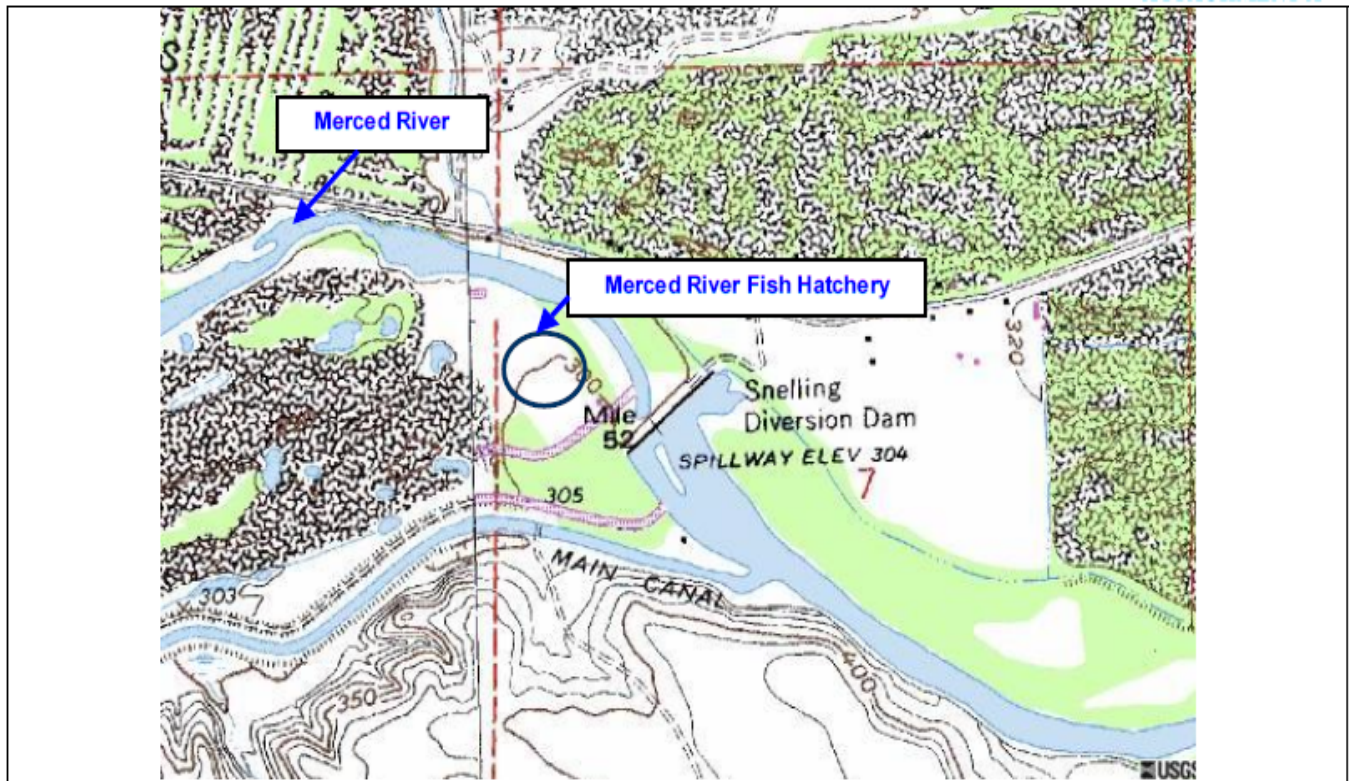
Enclosures (1): 1) CAAP General Order R5-2010-0018-01 (Discharger only)

cc: David Smith, U.S. EPA, Region IV, San Francisco
Jim Starr, Fisheries Branch, California Department of Fish and Game, Sacramento
Mike Cozart, Merced River Fish Hatchery, Snelling
Philip Isorena, State Water Resources Control Board, Sacramento

ATTACHMENT A – FACILITY ADMINISTRATIVE INFORMATION

Name of Facility	Merced River Fish Hatchery
Type of Facility	Cold Water Aquaculture Facility, SIC Code 0921
WDID	5C240804001
General Order NOA Enrollee Number	R5-2010-0018-020
Discharger	California Department of Fish and Game (Facility Owner/Operator) and Merced Irrigation District (Property Owner)
Facility Address	4998 Robinson Road Snelling, CA 95369
Land Owner (Address)	Merced Irrigation District 744 West 20 th Street Merced, CA 95340 (Contact: Bryan Kelly 209-722-7561)
Facility Contact, Title and Phone	Greg Kollenborn, Senior Fish Hatchery Supervisor 559-243-4014 ext. 257
Authorized Person to Sign and Submit Reports	Greg Kollenborn, Senior Fish Hatchery Supervisor Jim Starr, Senior Environmental Scientist Mike Cozart, Hatchery Manager
Mailing Address	1234 East Shaw Ave. Fresno, CA 93710 (Contact: Greg Kollenborn)
Billing Address	1234 East Shaw Ave. Fresno, CA 93710 (Contact: Greg Kollenborn)
Total Weight Produced (Annual)	25,500 lbs
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Facility Permitted Flow	7.8 million gallons per day (mgd)
Watershed	San Joaquin River Basin
Receiving Water	Merced River
Receiving Water Type	Inland surface water

ATTACHMENT B – LOCATION MAP



Drawing Reference:

U.S.G.S TOPOGRAPHIC MAPS
7.5 MINUTE QUADRANGLE

SITE LOCATION MAP

California Department of Fish and Game and
Merced Irrigation District
Merced River Fish Hatchery
Merced County
Section 7, T5S, R15E, MDB&M



approx. scale
1 in. = 1000 ft.

ATTACHMENT C – FACILITY FLOW SCHEMATIC

