



Central Valley Regional Water Quality Control Board

24 June 2022

CERTIFIED MAIL

7021-0950-0001-0236-0918

Justin Kroeze
Fish Hatchery Manager II
California Department of Fish and Wildlife
1234 East Shaw Avenue
Fresno, CA 93710

NOTICE OF APPLICABILITY; GENERAL WASTE DISCHARGE REQUIREMENTS FOR COLD WATER CONCENTRATED AQUATIC ANIMAL PRODUCTION (CAAP) FACILITY DISCHARGES TO SURFACE WATERS; ORDER R5-2019-0079 (CAAP GENERAL ORDER, NPDES NO. CAG135001); CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, MOCCASIN CREEK FISH HATCHERY, TUOLUMNE COUNTY

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) issued a Notice of Applicability (NOA) to the California Department of Fish and Wildlife (Discharger) on 15 January 2015, for coverage under the CAAP General Order for the Moccasin Creek Fish Hatchery (Facility).

On 5 December 2019, the Central Valley Water Board adopted Order R5-2019-0079 renewing the CAAP General Order. The Discharger submitted a Notice of Intent on 2 July 2019 to continue coverage for the Facility under the CAAP General Order. Effective **1 July 2022**, this NOA provides continued coverage for the Facility under the CAAP General Order to discharge to Moccasin Creek, superseding the previous NOA issued 15 January 2015. CAAP General Order R5-2019-0079-010 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG135001 are assigned for this Facility. Please reference your CAAP General Order number **R5-2019-0079-010** in all correspondence and submitted documents. The following enclosures are included as part of this NOA:

- 1) Enclosure A - Administrative Information
- 2) Enclosure B - Location Map
- 3) Enclosure C - Flow Schematic
- 4) Enclosure D - Monitoring and Reporting Program
- 5) Enclosure E - Approved Chemical and Aquaculture Drug Use

The enclosed [CAAP General Order](http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders) (http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders) is also available online. You are urged to familiarize yourself with the entire contents of the enclosed document. The Facility operations and discharges shall be managed in accordance with the

requirements contained in the CAAP General Order, this NOA, and with the information submitted by the Discharger.

I. FACILITY INFORMATION/DISCHARGE DESCRIPTION

The Facility is located off of Highway 49 at the junction of Highways 49 and 120, twenty miles south of Sonora, in Tuolumne County (Section 27 and 34, T1S, R15E, MDB&M) as shown in Enclosure B. The Facility is located on property owned by the City and County of San Francisco. The Facility is owned and operated by the California Department of Fish and Wildlife.

The Facility produces Rainbow Trout, Brown Trout, Brook Trout, and Golden Trout. The fish rearing at the Facility occurs in 48 concrete raceways (10 feet x 100 feet), six circular tanks (15 feet diameter), ten rectangular tanks (3 feet x 15 feet), and 68 rearing troughs (16 inches x 16 feet). The Facility utilizes a flow-through, single-pass water system. The total area of rearing units is 50,380 square feet. Approximately 362,500 pounds of harvested fish are processed annually, and the maximum feeding is 60,000 pounds of food during any given month (Table 1).

The source water for the Facility is Moccasin Reservoir and the typical water intake flow is approximately 22.6 million gallons per day (MGD). However, the intake flow is controlled by the City and County of San Francisco and, at times, the water flow rates entering the Facility can reach up to 25 MGD due to daily fluctuations in Moccasin Reservoir. Prior to discharge at Outfall 001, the Facility utilizes a settling pond for the treatment of wastewater from the raceways and rearing tanks, the hatchery building, ice and feed storage, the fish disease lab, and local surface drainage. Tubifex worms are used in the settling ponds to assist in reducing the sludge level. The Discharger has a contract with a tubifex worm farmer who salvages the worms. When a salvage event is in operation the water to the settling pond is bypassed and the flow-through wastewater is diverted directly into the receiving water at Outfall 002. During this process Facility personnel take care to assure that no chemical treatments are implemented, raceways are not cleaned, and that feeding is kept to a minimum to prevent the discharge of total suspended solids, in the form of food, into the receiving water. The process to salvage the tubifex worms takes about one-half day to complete.

In the Notice of Intent, the Discharger reported the 5-year maximum annual harvestable fish production (Table 1). The Discharger also reported the maximum monthly feed use of 60,000 pounds and average annual feed use of 450,000 pounds for the Facility.

Table 1. 5-Year Maximum Aquatic Animal Production

Species	5-Year Maximum Annual Harvestable Maximum Hatchery Aquatic Animal Production (lbs)
Rainbow trout	300,000
Brown Trout	12,000
Brook Trout	50,000
Golden Trout	500

Wastewater is discharged from the Facility to Moccasin Creek through two outfalls (001 and 002) as shown in Enclosure C, and as described below:

Outfall 001 – Effluent wastewater flow from the settling pond (prior to discharging into Moccasin Creek). The discharge is approximately 30 cfs (19 mgd), which corresponds to the discharge from the entire facility during normal operations.

Outfall 002 – Effluent wastewater flow bypassing the settling pond (prior to discharge into Moccasin Creek). The discharge is approximately 30 cfs (19 mgd), which corresponds to the discharge from the entire facility using bypass during worm farm harvest periods from the settling pond.

All domestic wastewater is discharged to an on-site septic system, which is regulated by the County of Tuolumne.

II. DISCHARGE PROHIBITIONS (CAAP GENERAL ORDER SECTION IV)

The Discharge Prohibitions contained in CAAP General Order Section IV are applicable to this Facility.

III. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS (CAAP GENERAL ORDER SECTION V)

A. Effluent Limitations (CAAP General Order Section V)

Effluent Limitations are specified in Section V of the CAAP General Order. The discharge exhibits reasonable potential for formaldehyde and total suspended solids. There is no reasonable potential for priority pollutant metals based on 2019 monitoring results. The following effluent limitations are applicable to this discharge and are contained in Section V.A of the CAAP General Order:

Discharges to surface waters shall not exceed the effluent limitations contained in Table 2 below.

TABLE 2. EFFLUENT LIMITATIONS

Parameter	Units	Average Monthly Effluent Limitation	Maximum Daily Effluent Limitation
Formaldehyde	mg/L	0.65	1.3

Formalin is applied as an immersion bath treatment. Therefore, compliance with the effluent limitations for formaldehyde may be evaluated using an estimated effluent concentration in lieu of effluent monitoring data. The estimated effluent concentration shall be calculated using the equation as described in the CAAP General Order (Section IX.A of Attachment C, Monitoring and Reporting Program). The CAAP General Order provides that Dischargers may request to modify this equation to account for additional dilution when passing through a settling pond. In their NOI dated 2 July 2019, the Discharger requested a dilution factor that considers the volume of

the settling pond prior to discharge. However, staff have concerns about incomplete mixing in the settling pond. This order does not allow modification of the equation to consider settling pond volume. If the discharger provides more information justifying mixing in the settling pond, this NOA may be amended to modify the calculation.

The Discharger shall minimize the discharge of Total Suspended Solids through the implementation of the best management practices established in Special Provision VII.C.3 of the CAAP General Order.

B. Land Discharge Specifications (CAAP General Order Section V.C)

The Land Discharge Specifications contained in CAAP General Order Section V.C are applicable to this Facility.

IV. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations (CAAP General Order Section VI.A)

The discharge to Moccasin Creek is subject to the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan), therefore, the receiving water limitations contained in the CAAP General Order based on the Basin Plan, as indicated below, are applicable to this discharge.

- Un-ionized Ammonia (VI.A.1) – Not Applicable
- Bacteria (VI.A.2);
- Biostimulatory Substances (VI.A.3);
- Chemical Constituents (VI.A.4);
- Color (VI.A.5);
- Dissolved Oxygen (VI.A.6.a.i, ii and VI.A.6.b) – Per CAAP General Order Section VI.A.6.b., the dissolved oxygen concentration in the Merced River shall not be reduced below 8.0 mg/l;
- Electrical Conductivity (VI.A.7) – Not Applicable;
- Floating Material (VI.A.8);
- Oil and Grease (VI.A.9);
- pH (VI.A.10);
- Pesticides ((VI.A.11.a, b, c, d, e, g);
- Radioactivity (VI.A.12);
- Suspended Sediments (VI.A.13);
- Settleable Substances (VI.A.14);
- Suspended Material (VI.A.15);
- Taste and Odors (VI.A.16);
- Temperature (VI.A.17);
- Toxicity (VI.A.19); and
- Turbidity (VI.A.20.a).

B. Ground Water Limitations (CAAP General Order Section VI.B)

The Groundwater Limitations contained in CAAP General Order Section VI.B are applicable to this Facility.

V. PROVISIONS

Provisions are contained in Section VII of the CAAP General Order, and the applicable provisions are referenced below.

A. Standard Provisions. (CAAP General Order Section VII.A)

The Standard Provisions contained in CAAP General Order Section VII.A are applicable to this Facility.

B. Monitoring and Reporting Program Requirements. (CAAP General Order Section VII.B)

Each Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment C, of the CAAP General Order and as specified in Enclosure D of this NOA.

C. Special Provisions. (CAAP General Order Section VII.C)

Special Provisions are contained in Section VII.C of the CAAP General Order. Only the following Special Provision sections from the CAAP General Order specified in Table 2 below apply to this Facility:

Table 2: Summary of Applicable Special Provisions

Special Provision	CAAP General Order Section Reference
Reopener Provisions	Section VII.C.1
Drug and Other Chemical Use Reporting	Section VII.C.2
Best Management Practices and Pollution Prevention	Section VII.C.3
Waste Disposal	Section VII.C.4
Special Provisions for Municipal Facilities (POTWs Only).	Section VII.C.5 - Not Applicable
Other Special Provisions.	Section VII.C.6 - Not Applicable
Compliance Schedules.	Section VII.C.7 – Not Applicable

VI. COMPLIANCE DETERMINATION (CAAP GENERAL ORDER SECTION VIII.A) – NOT APPLICABLE

VII. OTHER REQUIREMENTS

- A. The discharge from the Facility (Discharge Point 001) shall not exceed a daily average flow of 25 million gallons per day (mgd).

- B.** The CAAP General Order expires on 31 January 2025. Only those CAAP facilities authorized to discharge under the expiring Order and who submit a Notice of Intent at least one year prior to the expiration date of the CAAP General Order (unless the Executive Officer grants permission for a later date) will remain authorized to discharge under administratively continued permit conditions.
- C.** Aquaculture activities defined in the Code of Federal Regulations (40 C.F.R. 122.25(b)) will be subject to the annual fee for general NPDES permits and de minimus discharges that are regulated by individual or general NPDES permits, as described in Title 23 of the California Code of Regulations, Division 3, Chapter 9, Article 1, Section 2200(b)(9) for Category 3 discharges.
- D.** In accordance with section VII.C.3.a of the CAAP General Order, the Discharger shall certify within 90 days from the issuance of this NOA that a Best Management Practices (BMP) Plan has been developed and is being implemented. To satisfy this requirement the Discharger shall submit a letter to the Central Valley Water Board certifying compliance with the BMP Plan requirements by **23 September 2022**. The Discharger can develop a new BMP Plan or an existing BMP Plan may be modified for use under this requirement. The Discharger shall develop and implement the BMP Plan to prevent or minimize the generation and discharge of wastes and pollutants to waters of the United States and waters of the State and ensure disposal or land application of wastes is in compliance with applicable solid waste disposal regulations. The BMP Plan shall include a salinity evaluation and minimization plan to address salt treatments at the Facility. The Discharger shall review the BMP Plan annually and must amend the BMP Plan whenever there is a change in the Facility or in the operation of the Facility which materially increases the generation of pollutants or their release or potential release to surface waters.

VIII. ENFORCEMENT

Failure to comply with the CAAP General Order may result in enforcement actions, which could include civil liability. Effluent limitation violations are subject to a Mandatory Minimum Penalty (MMP) of \$3,000 per violation, as well as discretionary penalties. In addition, late monitoring reports are subject to discretionary penalties and MMPs. When discharges do not occur during a quarterly monitoring report period, the Discharger must still submit a quarterly monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

IX. COMMUNICATION

All notification of non-compliance and questions regarding compliance and enforcement shall be directed to Mohammad Farhad of the Central Valley Water Board's NPDES Compliance and Enforcement Unit. Mr. Farhad can be reached at (916) 464-1181 or by email at Mohammad.Farhad@waterboards.ca.gov.

Questions regarding the permitting aspects of this Order, and written notification for termination of coverage under the CAAP General Order, shall be directed to Danielle

Goode of the Central Valley Water Board's NPDES Permitting Unit. Ms. Goode can be reached at (916) 464-4843 or by email at Danielle.Goode@waterboards.ca.gov.

The Discharger is required to submit all self-monitoring, technical, and progress reports required by this NOA via CIWQS submittal. In general, if any monitoring data for a monitoring location can be submitted using a computable document format (CDF) file upload, then it should be submitted as a CDF file upload. However, certain parameters that cannot be uploaded to the CIWQS data tables, such as the BMP Plan, should be uploaded as a Portable Document Format (PDF), Microsoft Word, or Microsoft Excel file attachment. Also, please upload or enter a cover letter summarizing the content of the report to the submittal tab of the CIWQS module for each submittal.

All other documents not required to be submitted via CIWQS shall be converted to a searchable PDF and submitted by email to the Central Valley Water Board email centralvalleysacramento@waterboards.ca.gov with the following information:

- Attention: NPDES Compliance and Enforcement Section
- Discharger: California Department of Fish and Wildlife
- Facility: Moccasin Creek Fish Hatchery
- County: Tuolumne County
- CIWQS Place ID: 241110

Documents that are 50 megabytes or larger must be transferred to a DVD or flash drive, and mailed to our office, attention "ECM Mailroom-NPDES".

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board (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 NOA 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.

[Links to the laws and regulations applicable to filling petitions](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

(http://www.waterboards.ca.gov/public_notices/petitions/water_quality) may be found on the internet or will be provided upon request.

Patrick Pulupa
Executive Officer

- Enclosures: 1) Enclosure A – Administrative Information
2) Enclosure B – Location Map
3) Enclosure C – Flow Schematic
4) Enclosure D – Monitoring and Reporting Program
5) Enclosure E – Approved Agricultural Drug and Chemical Use

6) CAAP General Order R5-2014-0161 (Discharger only)

cc's: Elizabeth Sablad, USEPA, Region IX, San Francisco (via email only)
Peter Kozelka, USEPA, Region IX, San Francisco (via email only)
Prasad Gullapalli, USEPA, Region IX, San Francisco (via email only)
Division of Water Quality, State Water Resources Control Board, Sacramento
(via email only)
Sarah Torres, PG Environmental (via email at icis-npdes@pge.com)

Enclosure A – Administrative Information
Moccasin Creek Fish Hatchery

ENCLOSURE A - ADMINISTRATIVE INFORMATION

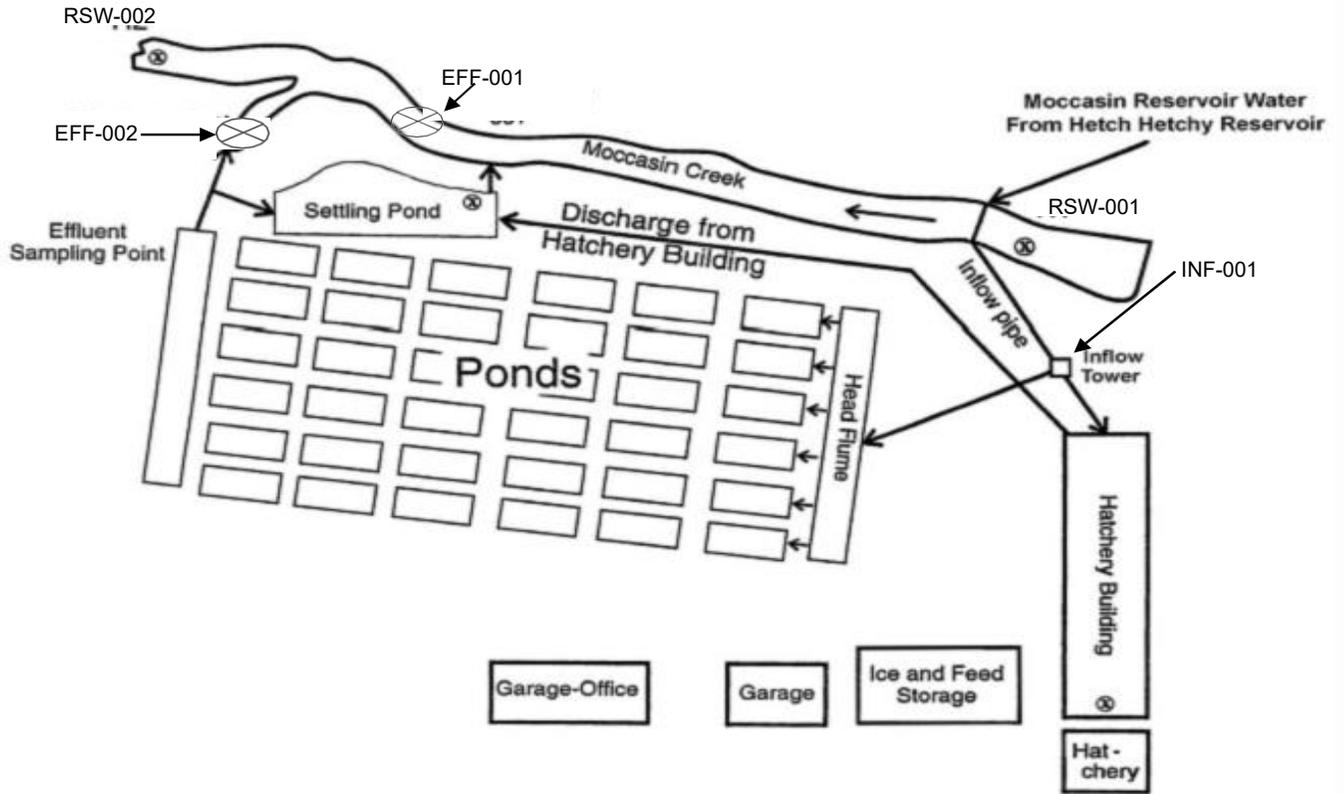
Waste Discharge ID:	5C550800001
CIWQS Facility Place ID:	241110
General Order NOA Enrollee Number:	R5-2019-0079-010
Discharger:	California Department of Fish and Wildlife
Name of Facility:	Moccasin Creek Fish Hatchery
Facility Address:	15300 Highway 49, Moccasin, CA 95347
Facility County:	Tuolumne
Facility Contact, Title and Phone Number:	Justin Kroeze, Fish Hatchery Manager II (209-989-2701)
Name of Landowner:	City and County of San Francisco
Landowner Address:	P.O. Box 160, Moccasin CA 95347
Landowner Contact and Phone Number:	Margaret Hannaford (209-989-2012)
Authorized Person to Sign and Submit Reports:	Gerald Hatler, Environmental Program Manager
Mailing Address:	P.O. Box 159, Moccasin, CA 95347
Billing Address:	Same as mailing address
Total Weight Produced (Year one through five):	459,750 lbs
Type of Facility:	Cold Water Concentrated Aquatic Animal Production Facility, SIC Code 0921
Major or Minor Facility:	Minor
Threat to Water Quality:	2
Complexity:	B
Pretreatment Program:	No
Recycling Requirements:	No
Facility Permitted Flow:	25 million gallons per day (mgd)
Watershed:	Tuolumne River Basin
Receiving Water:	Moccasin Creek
Receiving Water Type:	Inland surface water

ENCLOSURE B – LOCATION MAP



ENCLOSURE C – FLOW SCHEMATIC

Moccasin Creek Fish Hatchery Schematic Diagram



ENCLOSURE D – MONITORING AND REPORTING PROGRAM

This Facility is in the category of production of greater than 100,000 pounds of aquatic animals produced per year. The Discharger is required to comply with all the Monitoring and Reporting Requirements contained in Attachment C of the CAAP General Order for facilities with production greater than 100,000 pounds of aquatic animals per year, and as required in Enclosure D in this NOA. A summary of the monitoring requirements is provided below:

I. GENERAL MONITORING PROVISIONS

The Discharger shall comply with the General Monitoring Provisions specified in the CAAP General Order, Attachment C, Section I.

II. MONITORING LOCATIONS

The monitoring locations are defined as follows in Table D-1 below, and a flow schematic showing the site-specific monitoring locations is provided in Enclosure C to this NOA.

Table D-1. Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
	INF-001	Moccasin Reservoir Intake. Location where influent sample can be collected prior to entering the Facility at one of the influent valves. [Latitude: 37° 48' 41.976" N; Longitude: 120° 18' 25.092" W]
001	EFF-001	Effluent wastewater flow from the settling pond (prior to discharging into Moccasin Creek). This effluent discharge represents the effluent from the entire facility during normal operations . [Latitude: 37° 48' 47.2284" N; Longitude: 120° 18' 27" W]
002	EFF-002	Effluent wastewater flow bypassing the settling pond (prior to discharge into Moccasin Creek). The discharge from the entire facility using bypass during worm farm harvest periods from the settling pond. [Latitude: 37° 48' 49.8234" N; Longitude: 120° 18' 27.3594" W]
	RSW-001	100 feet upstream from the point of discharge in Moccasin Creek

Enclosure D – Monitoring and Reporting Program
Moccasin Creek Fish Hatchery

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
		[Latitude: 37° 48' 44.9634" N; Longitude: 120° 18' 24.372" W]
	RSW-002	100 feet downstream of Outfall 001 discharge to the Moccasin Creek. [Latitude: 37° 48' 50.724" N; Longitude: 120° 18' 27.612" W]

III. INFLUENT MONITORING REQUIREMENTS (INF-001)

- A. When discharging at Outfall(s) 001 or 002, the Discharger shall monitor the influent to the Facility at Monitoring Location INF-001 as specified in Table D-2 below. Samples shall be collected at approximately the same time as effluent and receiving water samples.

Table D-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH	S.U.	Grab	1/month
Electrical Conductivity @ 25 degrees Celsius	µmhos/cm	Grab	1/month
Total Suspended Solids	Mg/L	Grab	1/month

- B. **Table D-2 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-2.

- Parameters shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
- Constituents shall be monitored using analytical methods with sufficiently sensitive reporting levels consistent with the SSM Rule specified in 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv).

- C. **Influent Monitoring for Facilities with Intake Water Credits.** Not applicable.

IV. EFFLUENT MONITORING REQUIREMENTS (EFF-001).

- A. When discharging at Outfall(s) 001 or 002, the Discharger shall monitor the effluent at Monitoring Location EFF-001 as specified in Table D-3 below. Effluent samples shall be representative of the volume and quality of the discharge. Effluent samples shall be collected during or immediately following raceway cleaning or administration of drug or

Enclosure D – Monitoring and Reporting Program
Moccasin Creek Fish Hatchery

chemical treatments and must be representative of the volume and quality of the discharge at the time when representative levels of solids, drugs, chemicals, or other pollutants are present in the discharge. Time of collection of samples shall be recorded.

Table D-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	cfs	Meter	1/month
Total Suspended Solids (TSS)	mg/L	Grab	1/month
Net TSS (effluent minus influent)	mg/L	Net Calculation	1/month
Turbidity	NTU	Grab	1/month
pH	S.U.	Grab	1/month
Electrical Conductivity @ 25 degrees Celsius	µmhos/cm	Grab	1/month
Formaldehyde	mg/L	Grab	1/month during Formaldehyde use

B. Table D-3 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-3.

1. Parameters shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
2. Electrical conductivity samples shall be collected monthly. If sodium chloride is used, the monthly monitoring of electrical conductivity shall be conducted during treatment.
3. Pollutants shall be monitored using analytical methods with sufficiently sensitive reporting levels consistent with the SSM Rule specified in 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv)
4. Estimated concentrations of formaldehyde may be reported in lieu of analytical monitoring during formaldehyde use. If calculations are reported then formaldehyde concentrations should be reported daily to match the concentrations reported in the Monthly Chemical Use Report (Attachment F). See Section IX.A for calculation procedures. If analytical monitoring is conducted, when Formaldehyde is added to the waters of the Facility,

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formaldehyde concentration shall be measured during time of peak discharge of Formaldehyde, at least one hour after start of treatment.

5. Per Section IX.A, the discharger shall report all aquaculture drug and chemical use as part of the Monthly Drug and Chemical Use Report that is submitted on a quarterly basis.

C. Effluent Monitoring for Facilities with Intake Water Credits. Not applicable.

V. LAND DISCHARGE MONITORING REQUIREMENTS.

A. Septic Tank/Leachfields. The monitoring requirements contained in CAAP General Order, Attachment C, Section VI.A are applicable to this Facility.

B. Sewage Lagoons. Not applicable.

VI. RECEIVING WATER MONITORING REQUIREMENTS.

A. Sampling Locations. When discharging at Outfall(s) 001 or 002, receiving water samples shall be collected from Monitoring Locations RSW-001 and RSW-002 as specified below.

Table D-4. Receiving Water Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
Dissolved Oxygen	mg/L	Grab	1/month
Temperature	Degrees C	Grab	1/month
Turbidity	NTU	Grab	1/month
pH	S.U.	Grab	1/month
Electrical Conductivity @ 25 degrees Celsius	µmhos/cm	Grab	1/month

Table D-4 Testing Requirements. The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-4.

1. Parameters shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
2. When copper sulfate is added to waters of the facility, hardness (as CaCO₃) shall be measured monthly during treatment.

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B. Receiving Water Observations. In conducting the receiving water sampling, a log shall be kept of the receiving water conditions. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter
- b. Discoloration
- c. Bottom deposits
- d. Aquatic life
- e. Visible films, sheens, or coatings
- f. Fungi, slimes, or objectionable growths
- g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring report.

VII. OTHER MONITORING REQUIREMENTS.

A. Monthly Drug and Chemical Use Report. The Discharger shall develop a monthly drug and chemical use report in accordance with CAAP General Order, Attachment C, Section IX.A describing all aquaculture drugs or chemicals used at the Facility. The report shall be submitted with the quarterly self-monitoring reports.

B. Priority Pollutant Metals Monitoring. In accordance with CAAP General Order, Attachment C, Section IX.B., the Discharger shall monitor the effluent (Monitoring Location EFF-001) when discharging at Outfall(s) 001 or 002 and the upstream receiving water (Monitoring Location RSW-001) for the metals listed in Table G-1 of the CAAP General Order once during the term of the CAAP General Order. **The monitoring shall occur no later than 1 January 2023.** The Discharger shall electronically submit the priority pollutants metals monitoring results using the State Water Board's [California Integrated Water Quality System](http://www.waterboards.ca.gov/water_issues/programs/ciwqs) (CIWQS) Program Web site (http://www.waterboards.ca.gov/water_issues/programs/ciwqs) **within 60 days of the final sampling event.** Refer to CAAP General Order, Attachment G for the specific monitoring requirements. Constituents shall be monitored using analytical methods with sufficiently sensitive reporting levels consistent with the SSM Rule specified in 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv).

C. Annual Feeding and Production Report. The Discharger shall develop an annual feeding and production report in accordance with CAAP General Order, Attachment C, Section IX.C. The annual report shall be submitted on **1 February, annually**, and included the following information:

1. Monthly food usage in pounds for each calendar month.
2. Annual production of aquatic animals in pounds per year.

VIII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements. The Discharger shall comply with the General Monitoring and Reporting Requirements specified in the CAAP General Order, Attachment C, Section X.A.

B. Self-Monitoring Reports (SMRs). The Discharger shall comply with the Self-Monitoring Report requirements specified in the CAAP General Order, Attachment C, Section X.B. Monitoring in accordance with the renewed CAAP General Order is required to begin on the effective date of 1 November 2020. SMRs are required to be submitted quarterly and annually. The Discharger shall comply with the reporting requirements specified in CAAP General Order, Attachment C, Section X. The first SMR required under the renewed CAAP General Order is due 1 February 2021 and shall include monitoring conducted from 1 November through 31 December. Table D-5, below, summarizes the SMR due dates required under the CAAP General Order. Quarterly monitoring reports must be submitted until your coverage is formally terminated in accordance with the CAAP General Order, even if there is no discharge during the reporting quarter.

Table D-5. SMRs required in the MRP (Attachment C, CAAP General Order)

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1/month	1 November 2022	First day of calendar month through last day of calendar month	1 May (1 Jan – 31 Mar) 1 Aug (1 Apr – 30 Jun) 1 Nov (1 Jul – 30 Sep) 1 Feb of following year (1 Oct – 31 Dec)
1/quarter	1 November 2022	1 January through 31 March 1 April through 30 June 1 July through 30 September 1 October through 31 December	1 May 1 Aug 1 Nov 1 Feb of following year
1/year	1 November 2022	January 1 through December 31	1 Feb of following year

C. Other Reports

- 1. Analytical Methods Report.** The Discharger shall complete and submit an Analytical Methods Report by 24 August 2022. The Analytical Methods Report shall include the following for each constituent to be monitored in accordance with this Order: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RLs consistent with the SSM Rule per 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv), and with the Minimum Levels (MLs) in the SIP, Appendix 4. The “Reporting Level or RL” is synonymous with the “Method Minimum Level” described in the SSM Rule. If an RL is not less than or equal to the applicable objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule. Central Valley Water Board staff will provide a tool with the NOA to assist the Discharger in completing this requirement. The tool will include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report.

Enclosure D – Monitoring and Reporting Program
Moccasin Creek Fish Hatchery

2. **Analytical Methods Report Certification.** Prior to beginning the Priority Pollutant Metals Monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Priority Pollutant Metals Monitoring and confirming that samples will be collected and analyzed as described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by Central Valley Water Board staff with the NOA that the Discharger can use to satisfy this requirement. Central Valley Water Board staff will provide a tool with the NOA to assist the Discharger in completing this requirement. The tool will include the Analytical Methods Report Certification form, which will acknowledge the scheduled start date of the Effluent and Receiving Water Characterization monitoring and certifies that samples will be taken and analyzed as described in the previously submitted and approved Analytical Methods Report. If there are changes to the approved Analytical Methods Report, the Discharger shall outline those requested changes in the form and not commence characterization monitoring until the requested changes have been reviewed and approved by Central Valley Water Board staff.

ENCLOSURE E – APPROVED AQUACULTURE DRUGS AND CHEMICALS USE

The following drugs and chemicals are used at the Facility to treat fish for parasites, fungi, and bacteria, as well as to clean rearing raceways to reduce the spread of disease among the confined fish population.

The estimated effluent concentrations of aquaculture drugs and chemicals shall be calculated using the equation as described in the CAAP General Order (Section IX.A of Attachment C, Monitoring and Reporting Program). The Discharger may request to modify this equation to account for additional dilution when passing through a settling pond. In their NOI dated 2 July 2019, the Discharger requested a dilution factor that considers the volume of the settling pond prior to discharge. However, staff have concerns about incomplete mixing in the settling pond. This order does not allow modification of the equation to consider settling pond volume. If the discharger provides more information justifying mixing in the settling pond, this NOA may be amended to modify the calculation.

Table E-1. Approved Aquaculture Drugs and Chemicals Use

Drug or Chemical	Maximum Daily Amount Used	Method of Application	Maximum Amount in Effluent
Acetic Acid	500-1,000 ppm	Dip in container	None/ND
Amoxicillin Trihydrate	40 mg/kg of fish	Injected intraperitoneally	None/ND
Carbon Dioxide	Variable	Bath	None/ND
Chloramine T (Halamid® Aqua)	20 ppm/1 hr/raceway	Drip	1.3 ppm EFF001, 30cfs
Chorulon® - Chronic Gonadotropin	50-1816 IU/lb	Intramuscular injection	None/ND
Epsom Salt (Magnesium Sulphate)	100 mg/kg	Feed	Negligible/ND
Erythromycin	40 mg/kg of fish	Injected intraperitoneally Feed	None/ND Negligible/ND
Enteric Redmouth (ERM) Vaccine		Dip	None/ND
Florfenicol (Aquaflor®)	15 mg/kg of feed	Medicated feed	Negligible/ND
Formalin (37% formaldehyde solution)	50-250 ppm	Bath Eggs	1.3 ppm EFF001, 30 cfs
Hydrogen Peroxide (35%)	100 ppm/1 hr/raceway	Drip Bath Eggs	6.44 ppm with no chemical breakdown EFF001, 30 cfs

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Drug or Chemical	Maximum Daily Amount Used	Method of Application	Maximum Amount in Effluent
Ivermectin	0.1 mg/kg	Injected intramuscularly	None/ND
Lactococcus vaccine	1 liter/100 kg of fish	Immersion	Negligible/ND
MS-222/ tricaine methanesulfonate (Finquel®, Tricaine-S®)	40 ppm	Bath in container	None/ND
Ovaplant® Salmon Gonadotropin- releasing hormone analogue (sGnRH _a)	10-75 ug/kg	Dorsal injection pellet implant	None/ND
Oxytetracycline dihydrate (Terramycin® 200)	3.75 g/100 lbs of fish	Additive to feed	Negligible/ ND
Oxytetracycline HCL	100 ppm	Bath	0.22 ppm (see table note 1) EFF001, 30 cfs
Penicillin G Potassium	150 IU/mL	Bath	0.33 IU/mL (see table note 1) EFF001, 30 cfs
Potassium Permanganate (Cairox™)	2 ppm/1 hr/raceway	Drip Bath	0.13 ppm EFF001, 30 cfs
PVP Iodine	100 ppm	Bath/Eggs in container	None/ND
Romet (Sulfamethoxazole-ormetoprim)	50 mg/kg in feed	In feed	Negligible
SLICE® (emamectin benzoate; 0.2% aquaculture premix)	50 ug/kg	Medicated Feed	Negligible/ND
Sodium bicarbonate	142-642 mg/L	Bath in container	None/ND
Sodium chloride (salt)	3%	Flush Bath	65 ppm EFF001, 30 cfs
Sulfadimethoxazole-ormetoprim (Romet-30®)	50 mg/kg	Additive to feed	Negligible/ ND

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Drug or Chemical	Maximum Daily Amount Used	Method of Application	Maximum Amount in Effluent
Tricaine Methanesulfonate	40 ppm in container	In container	Not discharged
Vibrio Vaccine		Dip	None/ND