Central Valley Regional Water Quality Control Board

21 December 2023

Brett Galyean
U.S. Fish and Wildlife Service
24411 Coleman Fish Hatchery Road
Anderson, CA 96007

CERTIFIED MAIL
7019 0700 0002 1109 3501

NOTICE OF APPLICABILITY; GENERAL WASTE DISCHARGE REQUIREMENTS FOR COLD WATER CONCENTRATED AQUATIC ANIMAL PRODUCTION (CAPP) DISCHARGES TO SURFACE WATERS; ORDER R5-2019-0079 (CAAP GENERAL ORDER, NPDES NO. CAG135001); UNITED STATES DEPARTMENT OF FISH AND WILDLIFE, COLEMAN NATIONAL FISH HATCHERY, SHASTA COUNTY

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) issued a Notice of Applicability (NOA) to the United States Department of Interior, Fish and Wildlife Service (Discharger) on 22 December 2015 for coverage under the CAAP General Order for the Coleman National 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 1 November 2019 to continue coverage for the Facility under the CAAP General Order. Effective **1 January 2024**, this NOA provides continued coverage for the Facility under the CAAP General Order for discharge of hatchery wastewater to Battle Creek, superseding the previous NOA issued 22 December 2015. CAAP General Order R5-2019-0079-020 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG135001 are assigned for this Facility. Please reference your CAAP General Order number **R5-2019-0079-020** 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 Aquaculture Drugs and Chemicals Use

The enclosed CAAP General Order (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 at 24411 Coleman Fish Hatchery Road in Anderson, in Shasta County Section 1, T29N, R3W, MDB&M, as shown in Enclosure B of this NOA. The Facility is owned and operated by the U.S. Department of Interior, Fish and Wildlife Service. The Facility is a flow through system that raises Fall-Run, Late Fall-Run, and Winter-Run Chinook Salmon, as well as Steelhead Trout. Chinook Salmon and Steelhead Trout are reared at the Facility to mitigate the loss of historical spawning areas, where access to spawning grounds was blocked by the construction of dams along the Sacramento River.

In the 2019 Notice of Intent, the Discharger reported the predicted 5-year maximum annual harvestable fish production of 140,000 pounds (lbs) of Fall-Run Chinook Salmon, 85,000 lbs of Late Fall-Run Chinook Salmon, 3,200 lbs of Winter-Run Chinook Salmon, and 155,000 lbs of Steelhead Trout (Table 1) with a maximum monthly feed use of 94,000 lbs for the Facility.

Table 1. 5-Year Maximum Aquatic Animal Production

Species	5-Year Maximum Annual Harvestable Maximum Hatchery Aquatic Animal Production (lbs)
Fall Run Chinook Salmon	140,000
Late Run Fall Chinook Salmon	85,000
Winter Run Chinook Salmon	3,200
Steelhead Trout	155,000

The Facility consists of a main hatchery building, several on-site residential housing buildings, a cold storage building, a fish ladder, spawning and maintenance buildings, two settling basins, four dual media traveling bridge filters (containing anthracite coal and sand media), an ozone production and treatment facility, a pollution abatement pond, an unlined earthen percolation pond, several adult salmon holding ponds, 58 concrete lined rearing raceways (30 raceways are 8 feet wide by 80 feet long; 28 raceways are 15 feet wide by 150 feet long), and other ancillary operations.

The Discharger has a water right to divert 109 cubic feet per second (cfs) or 70.5 million gallons per day (mgd) for use in the Facility, plus 13 cfs (8.4 mgd) for downstream water users. Therefore, the maximum water intake for the Facility is 78.9 mgd. The Facility has the ability to divert intake water from Battle Creek at three separate intake structures. The entire 122 cfs inflow to the Facility is diverted at Intake No. 1 from the Colman Powerhouse Tailrace. Intakes Nos. 2 and 3 divert water from the water supply canal and are only used as a backup source when Intake No. 1 is not supplying water.

The Discharger maintains a fish ladder within Battle Creek that allows fish passage upstream from the Facility between March and August; however, fish are diverted into the

hatchery during the remaining months of the year. Excess adult salmon, not taken for egg or milt, are provided to a seafood processing company and/or the Bureau of Indian Affairs for distribution to Native Americans. All other carcasses and defunct eggs are sent to a rendering company.

To remove silt, sediment, bacteria, viruses, and pathogens, intake water is treated with at least one of the following, prior to distribution to the incubation trays and/or concrete rearing raceways:

- *Settling Basins:* A portion of intake water, approximately 50 cfs, is treated in two concrete lined settling basins, each with a capacity of about 1.2 million gallons and a detention time of approximately 1.5 to 2 hours. The settling basins are dewatered and cleaned annually to remove accumulated deposits.

- *Dual-Media Traveling Bridge Filters:* There are four dual-media traveling bridge filters containing both a sand and anthracite coal filter media with a total detention time of 15 to 30 minutes and a design flow rate of about 95.8 cfs. The traveling bridge filters are used daily and backwash cycles for filter cleaning are automated, with cleaning frequency dependent on the turbidity differential between feed water and filtrate. All backwash water is piped to a pollution abatement pond. In addition, the traveling bridge filters are cleaned with sodium hypochlorite at least once per year. The sodium hypochlorite is retained for 48 to 96 hours prior to discharge to a pollution abatement pond.

- *Ozone Treatment Facility:* A portion of treated water from the dual-media traveling bridge filters are routed to the ozone treatment facility. Ozone remains in contact with water for 15 minutes, which is sufficient time to oxidize any viral, bacterial, and protozoan organisms that could affect fish reared at the Facility. The ozone treatment facility is automated, and computer controlled and has a maximum design capacity of 66.8 cfs.

Hatchery wastewater is discharged from the Facility at an approximately rate of 24.6 to 55.4 mgd, on average, continuously to Battle Creek at Discharge Point 001, Discharge Point 002, Discharge Point 003, and Discharge Point 004 as shown in Enclosure C, a part of this NOA, and as described below:

Discharge Point 001 – Untreated overflow water from the Hatchery Canal and the settling basins is routed through a creek, unofficially named “Neves Creek,” and discharged to Battle Creek at Discharge Point 001. No wastes are introduced into the freshwater entering Neves Creek; therefore, discharge at this location should be similar to the comingled surface water quality of Battle Creek and the Coleman Powerhouse tailrace. The estimated flow from this location is between 2.7-17.2 mgd. Latitude: 40° 23’ 54.74” N; and Longitude: 122° 08’ 38.03” W.

Discharge Point 002 – When chemicals are not used continuous flow-through water from the concrete lined raceways and the hatchery building is discharged to Battle Creek at Discharge Point 002. However, oxytetracycline is added to fish feed, and fish are fed in the raceways, oxytetracycline has the potential to be introduced into the discharge waste stream. The estimated flow from this location is between 8.6-32.2 mgd. Latitude: 40° 23’ 53.86” N; and Longitude: 122° 08’ 42.65” W.

Discharge Point 003 – Water from the concrete lined raceways and the hatchery building, during any cleaning operations, medication application, or chemical use, is routed to a pollution abatement pond prior to discharge to Battle Creek at Discharge Point 003. The unlined earthen pollution abatement pond (approximately five acres in area) has a detention time of about 12 hours to several days, which depends on the volume of water discharged during cleaning operations. The estimated flow from this location is between 2.1-16.1 mgd. Latitude: 40° 23’ 53.50” N; and Longitude: 122° 08’ 48.83” W.

Discharge Point 004 – Continuous flow-through water from the spawning building and adult holding ponds is discharged to Battle Creek through a fish ladder at Discharge Point 004. Source water from the adult holding ponds is continuous flow-through water from the raceways, pre-release pond, and Neves Creek. Mature fish swim upstream through the fish ladder against discharge flows and are collected in adult holding ponds to be harvested for eggs and milt. Feed and/or medication are not used in the adult holding ponds. The fish ladder is only utilized during the spawning season from September to March. The estimated flow from this location is between 12.3-14.4 mgd. Latitude: 40° 23’ 53.79” N; and Longitude: 122° 08’ 42.40” W.

During the spawning season, wash water from the spawning building, which generally contains eggs and blood, is pumped to a 0.5-acre unlined earthen evaporation/percolation pond on the east side of the Facility (near 40° 23’ 55.74” N latitude and 122° 08’ 48.83” W longitude). There is no direct discharge from the unlined earthen evaporation/percolation pond to surface water.

Domestic wastewater – An on-site domestic well is used to supply the Facility with potable water. The potable water is disinfected with ultraviolet light before distribution throughout the Facility. Domestic wastes from the Facility are discharged to a septic tank/leachfield system. In addition, each of the five residences has their own septic tank and effluent from each tank is routed to a shared leachfield.

The Discharger has spill prevention measures in place for the storage and use of onsite chemicals. The Facility has generators for backup power with an energy generation capacity of 2,500 kilowatts (KW), which requires fuel storage in three diesel fuel tanks with a total volume of 9,000 gallons (gal). In addition, the Facility has one gasoline tank (500 gal), one waste oil tank (500 gal), and one tank for storage of formaldehyde (110 gallon stainless steel pressure tank within a containment tank). All tanks have double walls with tertiary containment. Waste oil, from equipment oil changes, is periodically collected by an outside vendor.

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.A)

Effluent Limitations are specified in Section V of the CAAP General Order. The discharge exhibits reasonable potential for formaldehyde and chlorine. The following effluent limitations are applicable to this discharge and are contained in Section V.A of the CAAP General Order:

1. The 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
Chlorine	mg/L	--	0.018

2. The Discharger shall minimize the discharge of Total Suspended Solids through the implementation of the Best Management Practices and Pollution Prevention Plan established in Special Provision VII.C.3 of the CAAP General Order.

B. Effluent Limitations – Applicable to Discharges to Specific Water Bodies (CAAP General Order Section V.B)

1. Final Copper Effluent Limitations – Not Applicable

Copper sulfate is not utilized at the Facility and there is no reasonable potential for total recoverable copper. Therefore, an effluent limitation for total recoverable copper is not imposed on the Discharger.

C. 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 (CAAP GENERAL ORDER SECTION VI)

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

The discharge to Battle 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 and VI.B.6.b) – Per CAAP General Order Section VI.A.6.a.iii., the dissolved oxygen concentration in Battle Creek shall not be reduced below 7.0 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);
- 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);
- Total Dissolved Solids (VI.A.18) – Not Applicable;
- 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 3 below apply to this Facility:

Table 3. 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)

A. Formaldehyde Effluent Limitations (CAAP General Order Section V.A.1)

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 as described in CAAP General Order Section IX.A of Attachment C, Monitoring and Reporting Program.

VII. OTHER REQUIREMENTS

A. The combined Discharge from the Facility at Discharge Points 001, 002, 003, and 004 shall not exceed 122 cfs (78.9 mgd). A description of each Discharge location is provided in Table D-1 of Enclosure D, a part of this NOA.

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.

The Executive Officer grants an extension to the deadline prescribed in the CAAP General Order (above); if a complete Notice of Intent is submitted **180 days** prior to the expiration date of the CAAP General Order the Facility shall remain authorized to discharge under the administratively continued permit conditions.

C. Aquaculture activities defined in 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 (California Code of Regulations 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 **20 March 2024**. 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 practices used during salt treatments at the Facility to minimize salinity discharges to the receiving water. 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 monitoring report submittals, notification of the beginning and end of discharge, questions regarding compliance and enforcement, and questions regarding permitting aspects shall be directed to Erin Jonasson of the Central Valley Water Board's NPDES Unit. Erin Jonasson can be reached at (530) 224-6128 or by email at Erin.Jonasson@waterboards.ca.gov.

The Central Valley Water Board is implementing a Paperless Office system to reduce our paper use, increase efficiency, and provide a more effective way for our staff, the public, and interested parties to view documents in electronic form. Therefore, the Discharger is required to submit all self-monitoring, technical, and progress reports required by this NOA using the State Water Resources Control Board's California Integrated Water Quality System program website (http://www.waterboards.ca.gov/ciwqs/index.html). 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 (centralvalleyredding@waterboards.ca.gov) with the following information:

Attention: NPDES Compliance and Enforcement Section
Discharger: U.S. Department of Fish and Wildlife
Facility: Coleman National Fish Hatchery
County: Shasta County
CIWQS Place ID: 215094

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) may be found on the internet or will be provided upon request.

Clint Snyder, AEO

Digitally signed by Clint Snyder, AEO
Date: 2023.12.19 14:19:45 -08'00'

Water Boards

Patrick Pulupa
Executive Officer

EJ: vt

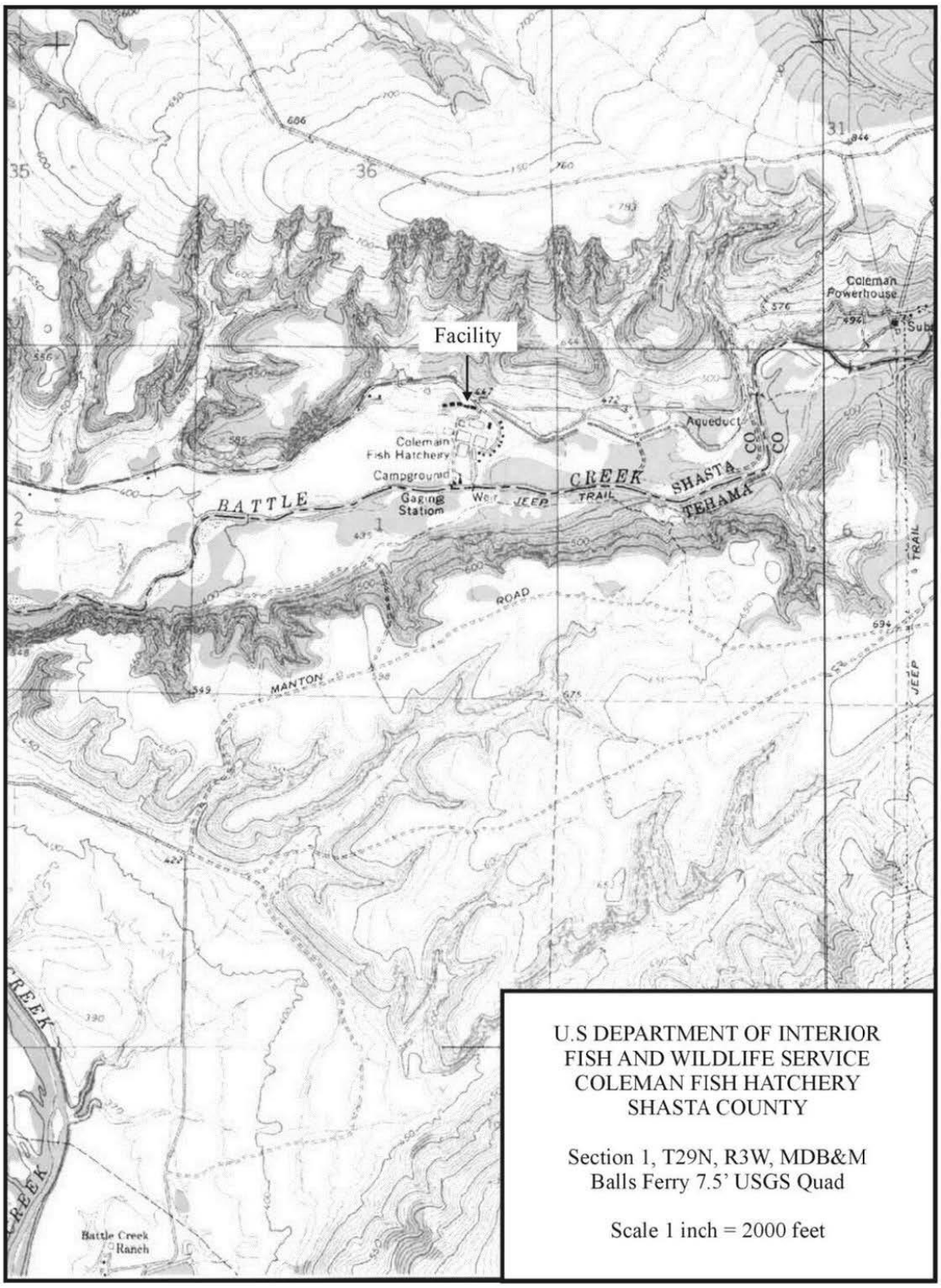
Enclosures: Enclosure A – Administrative Information
Enclosure B – Location Map
Enclosure C – Flow Schematic
Enclosure D – Monitoring and Reporting Program
Enclosure E – Approved Aquaculture Drug and Chemical Use
CAAP General Order R5-2019-0079 (Discharger only)

cc electronically:
Elizabeth Sablad, USEPA, Region IX, San Francisco
Prasad Gullapalli, U.S. EPA Region IX, San Francisco
Division of Water Quality, State Water Board, Sacramento
Shasta County Department of Resource Management, Division of Environmental Health, Redding

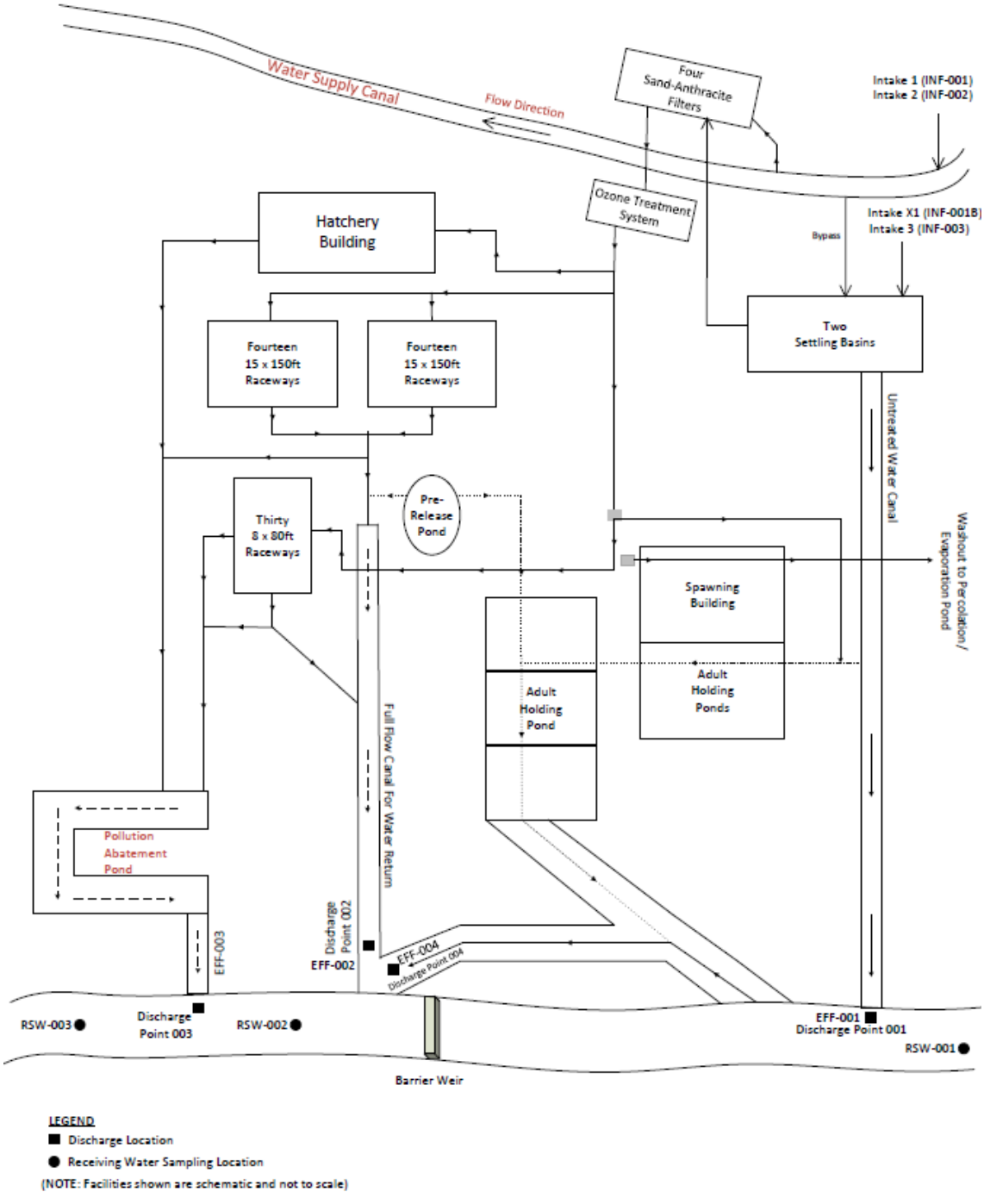
ENCLOSURE A - ADMINISTRATIVE INFORMATION

Waste Discharge ID:	5A450707001
CIWQS Facility Place ID:	215094
General Order NOA Enrollee Number:	R5-2019-0079-020
Discharger:	U.S. Department of Interior, Fish and Wildlife Service (Facility Owner/Operator)
Name of Facility:	Coleman National Fish Hatchery
Facility Address:	24411 Coleman Fish Hatchery Road
Facility City, State Zip:	Anderson, CA 96007
Facility County:	Shasta County
Facility Contact, Title and Phone Number:	Brett Galyean Deputy Complex Manager (530) 365-8622
Landowner:	U.S. Department of Interior, Fish and Wildlife Service
Landowner Address:	24411 Coleman Fish Hatchery Road
Landowner City, State Zip:	Anderson, CA 96007
Landowner Contact and Phone Number:	Brett Galyean (530) 365-8622
Authorized Person to Sign and Submit Reports:	Brett Galyean
Mailing Address:	Same as Facility Address
Billing Address:	Same as Facility Address
Estimated Annual Total Weight Produced:	383,200 pounds/year
Type of Facility:	CAAP 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:	78.9 million gallons per day (mgd)
Watershed:	Sacramento River Basin
Receiving Water:	Battle Creek
Receiving Water Type:	Inland surface water

ENCLOSURE B – LOCATION MAP



ENCLOSURE C – FLOW SCHEMATIC



ENCLOSURE D – MONITORING AND REPORTING PROGRAM

The Discharger is required to comply with all the Monitoring and Reporting Requirements contained in Attachment C of the CAAP General Order, as specified in this NOA Enclosure D.

This Facility is the category of production of greater than 100,000 pounds of aquatic animals produced per year. Tables D-2, D-3, and D-4 below are based on the monitoring in the CAAP General Order, Attachment C for facilities producing greater than 100,000 pounds of aquatic animals produced per year (CAAP General Order, Attachment C, Sections Ill.A, IV.A.1, and VIII.C, respectively).

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, a part of this NOA.

Table D-1. Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
	INF-001a and INF-001b	Intake No. 1: At a location where a representative sample can be collected for surface water diverted from the Coleman Powerhouse Tailrace near 40° 24' 13.50" N latitude and 122° 7' 26.71" W longitude. INF-001a and INF 001b have maximum intake design flow rates of 72 cfs and 50 cfs, respectively. Monitoring can be completed from either of the two intake pipes.
	INF-002	Intake No. 2: At a location where a representative sample can be collected for surface water diverted from Battle Creek into INF-002 near 40° 24' 10.63" N latitude and 122° 7' 30.87" W longitude. Intake No. 2 is only used as a backup source when Intake No. 1 is not supplying water.
	INF-003	Intake No 3: At a location where a representative sample can be collected for surface water diverted from Battle Creek into INF-003 near 40° 24' 4.61" N latitude and 122° 7' 47.49" W longitude. Intake No. 3 is only used as a backup source when Intake No. 1 is not supplying water.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	Untreated overflow water from the Hatchery Canal and the settling basins is routed to Neves Creek and discharged to Battle Creek at Discharge Point 001. At a location where a representative Discharge Point 001 sample can be collected after the last point at which wastes are introduced and prior to the discharge entering Battle Creek. [Approximate location: 40° 23' 54.74" N latitude and 122° 08' 38.03" W longitude]
002	EFF-002	When chemicals are not utilized, continuous flow-through water from the concrete lined raceways and the hatchery building is discharged to Battle Creek through Discharge Point 002. A representative Discharge Point 002 sample shall be collected after the last point at which wastes are introduced, prior to the discharge comingling with EFF-004 discharge, and prior to the discharge entering Battle Creek. [Approximate location: 40° 23' 53.86" N latitude and 122° 08' 42.65" W longitude]
003	EFF-003	Hatchery wastewater from the pollution abatement pond is discharged to Battle Creek at Discharge Point 003. A representative Discharge Point 003 sample shall be collected after the last point of wastewater treatment and prior to the treated wastewater entering Battle Creek. [Approximate location: 40° 23' 53.50" N latitude and 122° 08' 48.83" W longitude]
004	EFF-004	Continuous flow-through water from the spawning building and adult holding ponds is discharged to Battle Creek through a fish ladder at Discharge Point 004. A representative Discharge Point 004 sample shall be collected, prior to the hatchery wastewater comingling with EFF-002, and prior to the flow-through hatchery wastewater entering Battle Creek. [Approximate location: 40° 23' 53.79" N latitude and 122° 08' 42.40" W longitude]
	RSW-001	Located about 25 ft. **upstream** of the location where discharge from Discharge Point 001 flows into Battle Creek. [Approximate location: 40° 23' 53.77" N latitude and 122° 08' 37.71" W longitude]
	RSW-002	Located about 25 ft. **downstream** of the location where discharge from Discharge Point 002 flows into Battle Creek. [Approximate location: 40° 23' 53.42" N latitude and 122° 08' 46.89" W longitude]
	RSW-003	Located about 25 ft. **downstream** of the location where discharge from Discharge Point 003 flows into Battle Creek. [Approximate location: 40° 23' 54.27" N latitude and 122° 08' 43.82" W longitude]

III. INFLUENT MONITORING REQUIREMENTS (CAAP General Order, Attachment C, Section III.A)

A. When there is a discharge at Discharge Point(s) 001, 002, 003 and/or 004, and when any intake location is in operation, the Discharger shall monitor the source water supply to the Facility at Monitoring Location that are in use during any operating month (INF-001a/INF-001b, INF-002, and/or INF-003) for the frequencies/parameters as specified in Table D-2 below. When INF-001a and INF-001b are in use, a representative sample of the influent from both locations can be made by sampling one location only, either INF-001a or INF-001b. Influent 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

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

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. 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).

B. Influent Monitoring for Facilities with Intake Water Credits – Not Applicable

IV. EFFLUENT MONITORING REQUIREMENTS (CAAP GENERAL ORDER, ATTACHMENT C, SECTION IV.A.1)

A. When there is a discharge at Discharge Point(s) 001, 002, 003 and/or 004, the Discharger shall monitor the effluent at Monitoring Location(s) EFF-001, EFF-002, EFF-003, and EFF-004, respectively, for the frequencies/parameters as specified below in Table D-3. Effluent samples shall be collected during or immediately following raceway cleaning or administration of drug or 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/week
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
Chlorine	mg/L	Grab	1/quarter during chlorine use

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. 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).

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 (CAAP General Order, Attachment F). See CAAP General Order, Attachment C, Section IX.A for calculation procedures. If analytical monitoring is conducted, when Formaldehyde is added to the waters of the Facility, formaldehyde concentration shall be measured during time of peak discharge of Formaldehyde, at least one hour after start of treatment.

5. Per CAAP General Order, Attachment C, 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.

6. Total chlorine residual must be monitored with a method sensitive to and accurate at the permitted level of 0.018 mg/L.

7. Total Suspended Solids (TSS) samples shall be collected during the expected month of highest feeding.

B. Effluent Monitoring for Facilities with Intake Water Credits – Not Applicable

V. LAND DISCHARGE MONITORING REQUIREMENTS (CAAP General Order, Attachment C, Section VI)

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 – SURFACE WATER (CAAP General Order, Attachment C, Section VIII)

A. Sampling Locations. When there is a discharge at Discharge Point(s) 001, 002, 003 and/or 004, receiving water samples shall be collected from Monitoring Locations RSW-001, RSW-002, and RSW-003 for the frequencies/parameters as specified in Table D-4 below. Receiving water samples shall be collected at approximately the same time as effluent samples.

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 quarterly self-monitoring report.

C. Receiving Water Monitoring. The Discharger shall monitor the receiving water at Monitoring Locations RSW-001, RSW-002, and RSW-003 as follows:

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.

VII. OTHER MONITORING REQUIREMENTS (CAAP GENERAL ORDER, ATTACHMENT C, SECTION IX)

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 Locations EFF-001, EFF-002, EFF-003, and EFF-004) 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 beginning on or after 1 January 2021, but 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** (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).

Due to the issuance date of the NOA being past 1 January 2023, the Priority Pollutant Metals Monitoring **shall occur no later than 6 months following the effective date of the NOA.**

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 (CAAP GENERAL ORDER, ATTACHMENT C, SECTION X)

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 January 2024**. 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 May 2024** and shall include monitoring conducted from 1 January through 31 March. 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 January 2024	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 January 2024	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 January 2024	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 **19 February 2024**. 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.

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.

Table E-1. Approved Aquaculture Drugs and Chemicals Use

Drug or Chemical	Maximum Daily Amount Used	Method of Application	Maximum Amount in Effluent
Paracide-S at 37% active Formaldehyde	26.2 L (6.9 gallons)	Drip	1.0 mg/L
Calcium Hypochlorite 68% active Chlorine	200 lbs	Bath	1.0 µg/L
Trichloro-S-triazinatrione at 99% active Chlorine	0.86 lbs (390.4 g)	Drip	7.8 µg/L
PVP Iodine (Iodophor)	16.9 L (4.5 gallons)	Bath	0.17 mg/L
Terramycin 200 at 44% active Oxytet	1.3 lbs	Feed	0.02 mg/L
ERM Bacterin	6 L at 1 g bacterin/L	Bath	0.07 mg/L
Chloramine T	112 lbs	Bath	20 mg/L
Tricaine Methanesulfonate (MS-222) at 350 mg/L	33.2 grams in 95 L of water	Bath	0.63 mg/L
Sodium Chloride	200 lbs	Bath	58 mg/L
Carbon Dioxide	4,683 g	Bath	0.11 g/L
Florfenicol	456 g	Feed; approved by Vet	5 mg/L
Ovaplant® Salmon Gonadotropin-releasing hormone analogue (sGnRHa)	0.0125 g	Injection	0.0248 ng/L
Aqui-S®	227g	Bath	30 mg/L