15 January 2015

CERTIFIED MAIL
7011 2970 0003 5615 9871

Greg Kollenborn
Senior Hatchery Supervisor
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 FACILITY DISCHARGES TO SURFACE WATERS, ORDER R5-2014-0161 (CAAP GENERAL ORDER); 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 (hereinafter "Discharger") on 20 December 2012, for coverage under the CAAP General Order for the Moccasin Creek Fish Hatchery (hereinafter "Facility").

On 5 December 2014, the Central Valley Water Board adopted Order R5-2014-0161 renewing the CAAP General Order. The Discharger submitted a Notice of Intent on 30 June 2014, to continue coverage for the Facility under the CAAP General Order. Effective **15 January 2015**, this NOA provides continued coverage for the Facility under the CAAP General Order to discharge to the Moccasin Creek, superseding the previous NOA issued 20 December 2012. CAAP General Order R5-2014-0161-023 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG135001 are assigned for this Facility. Please reference your CAAP General Order number **R5-2014-0161-023**, 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 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/. You are urged to familiarize yourself with the contents of the entire CAAP General Order. 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.

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 it is operated by the California Department of Fish and Wildlife.

The Facility produces Rainbow Trout, Lahontan Cutthroat 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 50,950 square feet. Approximately 459,750 pounds of harvested fish are processed annually and the maximum feeding is 70,000 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 and the maximum monthly feed use for the Facility (Table 1):

Table 1. Aquatic Animal Production and Feed Use

Species	Maximum Annual Harvestable Aquatic Animal Production (lbs) [1]	Maximum Monthly Feed Use (lbs) [1]
Rainbow Trout	450,000	70,000
Lahontan Cutthroat Trout	7,000	
Brown Trout	1,500	
Brook Trout	1,000	
Golden Trout	250	

[1] Maximum production and feed use within the last 5 years

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.

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. Effluent Limitations and Discharge Specifications of the CAAP General Order. The discharge exhibits reasonable potential for formaldehyde and total suspended solids. There is no reasonable potential for chlorine and copper. The following effluent limitations are applicable to this discharge and are contained in Section V.A of the CAAP General Order:

a. 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]	1.3[1]

[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 the CAAP General Order (Section IX.A of Attachment C, Monitoring and Reporting Program).

b. 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.

RECEIVING WATER LIMITATIONS

The discharge to the Moccasin Creek is within the Sacramento and San Joaquin River Basins, therefore, the receiving water limits contained in the CAAP General Order for the Sacramento and San Joaquin River Basins are applicable to this discharge.

OTHER REQUIREMENTS

1. The discharge from the Facility shall not exceed a daily average flow of 25 mgd.

2. The Discharger shall continue to electronically submit Self-Monitoring Reports (SMRs) 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. 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.

4. The CAAP General Order expires on **31 December 2019**. Only those enrolled CAAP facilities authorized to discharge and who submit a Notice of Intent at least 180 days prior to the expiration date of the CAAP General Order will remain authorized to discharge under administratively continued permit conditions.

5. 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 **15 April 2015**. 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.

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.

COMMUNICATION

All monitoring report submittals, 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 Mohammad.Farhad@waterboards.ca.gov.

Questions regarding the permitting aspects of this CAAP General Order, and written notification for termination of coverage under the CAAP General Order, shall be directed to Dania Jimmerson of the Central Valley Water Board's NPDES Permitting Unit. Ms. Jimmerson can be reached at (916) 464-4742 or Dania.Jimmerson@waterboards.ca.gov.

Please note that we have transitioned to a paperless office. Therefore, all documents other than monitoring reports shall be converted to a searchable Portable Document Format (PDF) and submitted by email to centralvalleysacramento@waterboards.ca.gov. Documents that are 50 MB or

larger should be transferred to a CD, DVD, or flash drive and mailed to our office, attention “ECM Mailroom.”

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.

Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

Original signed by Adam Laputz
Pamela C. Creedon
Executive Officer

Enclosures (6):
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 Drug and Chemical Use
6) CAAP General Order R5-2014-0161 (Discharger only)

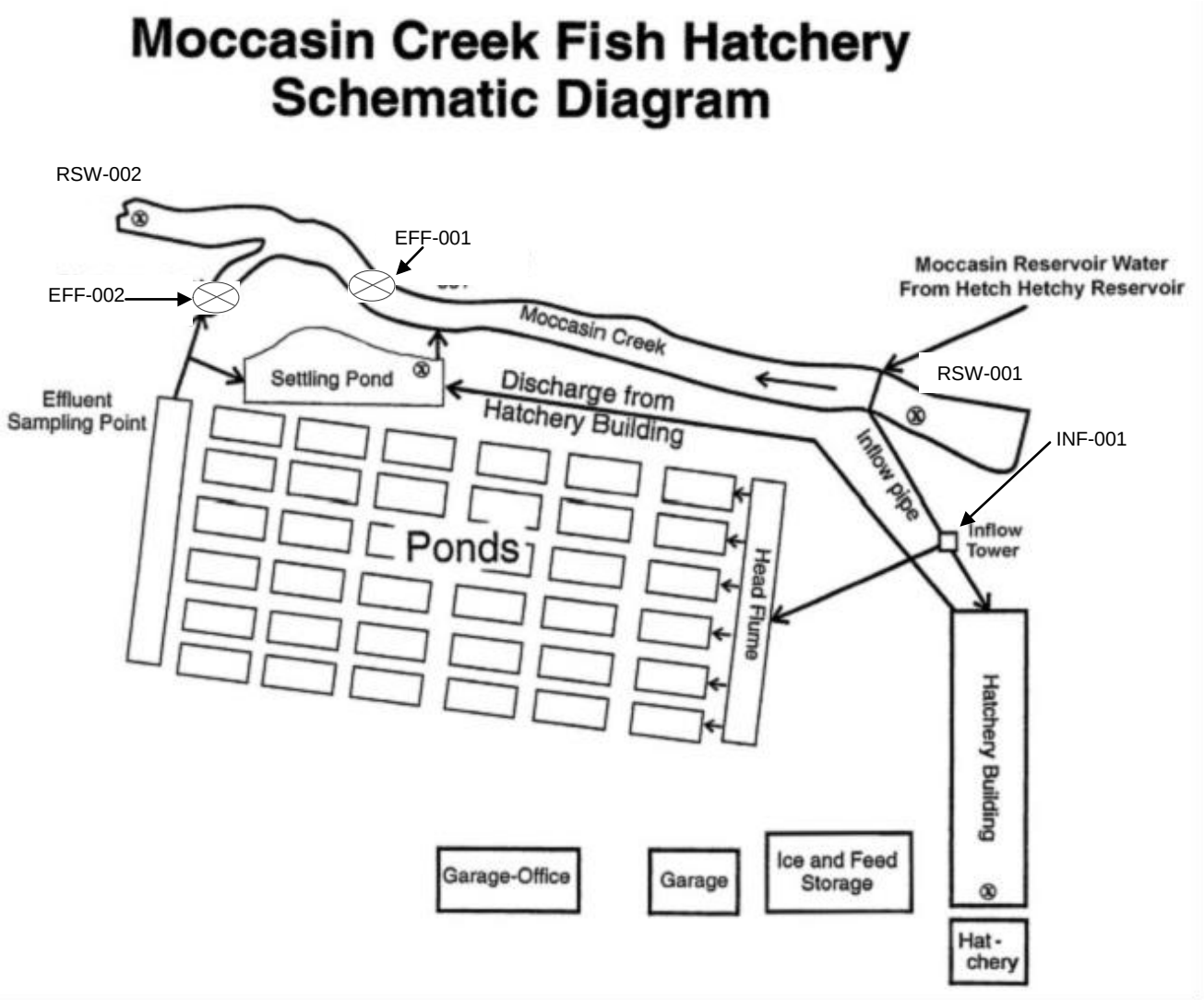
cc: David Smith, U.S. EPA, Region IX, San Francisco (via email only)
Phil Isorena, State Water Resources Control Board, Sacramento (via email only)
Terry Jackson, California Department of Fish and Wildlife, Rancho Cordova

ENCLOSURE A – ADMINISTRATIVE INFORMATION

Name of Facility	Moccasin Creek Fish Hatchery
Type of Facility	Cold Water Concentrated Aquatic Animal Production Facility, SIC Code 0921
WDID	5C550800001
General Order NOA Enrollee Number	R5-2014-0161-023
Discharger	California Department of Fish and Wildlife
Facility Address	Off of Hwy 49 at intersection of Hwy 120 and Hwy 49, 20 miles south of Sonora, Tuolumne County
Land Owner (Address)	City and County of San Francisco P.O. Box 160 Moccasin, CA 95347 (Contact Person: Margaret Hannaford) (209-989-2012)
Facility Contact, Title and Phone	Tom Grove, Hatchery Operator 209-989-2312
Authorized Person to Sign and Submit Reports	Greg Kollenborn, Senior Hatchery Supervisor
Mailing Address	P.O. Box 159 Moccasin, CA 95347
Billing Address	1234 East Shaw Ave., Fresno, CA 93710
Total Weight Produced (Annual)	459,750 lbs
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
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



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:

A. Monitoring Locations. The monitoring locations are defined as follows in Table D-1 and a flow schematic showing the site-specific monitoring locations is provided in Enclosure C to the 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]
Outfall 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]
Outfall 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 [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]

B. Influent Monitoring Requirements. When discharging at Outfall(s) 001 or 002, the Discharger shall monitor the influent to the Facility at Monitoring Location INF-001 as follows:

Table D-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	S.U.	Grab	1/month[2]	[1]
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/month[2]	[1]
Total Suspended Solids	mg/L	Grab	1/month[2]	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136.

[2] Samples shall be collected approximately at the same time as effluent samples.

C. Effluent Monitoring Requirements. When discharging at Outfall 001 or 002 the Discharger shall monitor the effluent at corresponding Monitoring Locations EFF-001 or EFF-002, respectively, as follows.

Table D-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	cfs	Meter	1/month	
Total Suspended Solids (TSS)	mg/L	Grab	1/month	[1]
Net TSS (effluent minus influent)	mg/L	Net Calculation	1/month	
Turbidity	NTU	Grab	1/month	[1]
pH	S.U.	Grab	1/month	[1]
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/month[2]	[1]
Formaldehyde	mg/L	Grab[4]	1/month during Formalin use[3,4]	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136.

[2] Samples shall be collected monthly. If sodium chloride is used, the monthly monitoring of EC shall be conducted during treatment.

[3] Per Section IX.A of the CAAP General Order, 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.

[4] Estimated concentrations of formaldehyde may be reported in lieu of analytical monitoring during Formalin use. See Section IX.A of the CAAP General Order for calculation procedures. If analytical monitoring is conducted, when Formalin is added to the waters of the Facility, formaldehyde concentration shall be measured during time of peak discharge of Formalin, at least one hour after start of treatment.

D. Receiving Water Monitoring Requirements. When discharging at Outfall 001 or 002, receiving water samples shall be collected from RSW-002 as follows.

Table D-4. Receiving Water Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	Grab	1/month	[1]
Temperature	°C	Grab	1/month	[1]
Turbidity	NTU	Grab	1/month	[1]
pH	S.U.	Grab	1/month	[1]
Electrical Conductivity @ 25°C	µmhos/ cm	Grab	1/month	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136.

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.

E. Land Discharge Monitoring Requirements. The Discharger shall conduct septic tank and leachfield inspections annually and report the findings in the annual self-monitoring reports (SMRs) in accordance with Section VI.A of the CAAP General Order.

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

G. Annual Feeding and Production Report. The Discharger shall develop an annual feeding and production report in accordance with Section IX.B of the CAAP General Order. The report shall be submitted **28 February, annually**, and include 1) monthly food usage in pounds for each calendar month for the previous year, and 2) annual production of aquatic animals in pounds per year for the previous year.

H. Priority Pollutant Metals Monitoring. When discharging at Outfall 001 the Discharger shall monitor the effluent at corresponding Monitoring Locations EFF-001, and the influent receiving water at INF-001 for the metals listed in Table G-1 of the CAAP General Order, once during the term of Order R5-2014-0161. The monitoring shall occur after **1 January 2018, but no later than 1 July 2019**. 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/ciwqs/index.html), within 60 days of the final sampling event.

REPORTING REQUIREMENTS

Monitoring in accordance with the renewed CAAP General Order is required to begin on the effective date of **1 January 2015**. SMRs are required to be submitted quarterly and annually. The first SMR required under the renewed CAAP General Order is due **1 May 2015**, and shall include monitoring conducted from 1 January through 31 March 2015. 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 2015	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/year	1 January 2015	January 1 through December 31	1 Feb of following year

In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, maximum daily effluent limitation, 1-hour average effluent limitation, or receiving water limitation contained in this Order, the Discharger shall notify the Central Valley Water Board by telephone within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within 5 days, unless the Central Valley Water Board waives confirmation. The written notification shall include the information required by the Standard Provision contained in Attachment B section V.E.1. [40 C.F.R. 122.41(l)(6)(i)].

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.

Drug or Chemical	Maximum Daily Amount Used	Method of Application	Maximum Amount in Effluent
Acetic acid	500-1000ppm	Dip in container	Not discharged
Amoxycillin trihydrate	40mg/kg injected	Injected	Negligible
Carbon Dioxide	Variable	Injected into tank	Unknown (not used)
Chloramine T	200ppm/1 hr raceway	Drip	1.3ppm
Florfenicol	15mg/kg in feed	In feed	negligible
Formaldehyde	25ppm	Drip for 8 hrs	1.38ppm
Hydrogen Peroxide	100ppm/1hr/raceway	Drip	6.4ppm with no
Iodine	100ppm	Egg bath in	100ppm
Oxytetracycline HCL	100ppm	Bath in tanks	0.22ppm*
Penicillin G	150IU/ml	6hr bath in tanks	0.33IU/ml*
Potassium Permanganate	2ppm/1hr/raceway	Drip	0.13ppm
Romet(Sulfaimethoxine-ormetoprim)	50 mg/kg in feed	In feed	Negligible
Sodium Bicarbonate	Variable/142-642 mg/l for 5 minutes	Bath in tank	Unknown (not used)
Sodium Chloride	3%(19lbs/66gal tank)	Added directly	3%(19lbs/66gal tank)
Tricaine Methanesulfonate	40ppm in container	In container	Not discharged