

Lahontan Regional Water Quality Control Board

M E M O R A N D U M

TO: Charlton H. Bonham, Director
California Department of Fish & Wildlife
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

FROM: 
PATTY KOUYOUMDJIAN
EXECUTIVE OFFICER
LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD

DATE: June 4, 2014

SUBJECT: TIME SCHEDULE ORDER NO. R6V-2009-0016-A2, ISSUED TO CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE FOR HOT CREEK HATCHERY, MAMMOTH LAKES, MONO COUNTY, WDID NO. 6B260801001

I am approving an amendment to Time Schedule Order No. R6V-2009-0016-A1 (TSO), issued to the California Department of Fish and Wildlife (DFW) for the Hot Creek Hatchery. Compliance with this amended TSO will exempt DFW from specified mandatory minimum penalties.

The TSO was issued on January 11, 2010 and required DFW to take specific actions to correct or prevent discharges of waste that violated the terms of its Waste Discharge Requirements and National Pollution Discharge Elimination System Permit (Permit No. CA0102776). The TSO required DFW to address exceedances of Nitrate+Nitrite (as Nitrogen, or N) concentration effluent limits and exceedances of water flow limits through its Hot Creek Hatchery.

The changes made by Amendment R6V-2009-0016-A2 will extend the DFW effluent limitation compliance date five years, until May 11, 2019, and eliminate monthly monitoring requirements. Instead, the DFW will continue quarterly monitoring as required by their waste discharge permit. The Amendment does not change effluent or flow limitations of TSO.

This extra time allows the Regional Board and DFW to work together to improve operational activities at the hatchery that benefit water quality. The amended TSO will also give Regional Board staff time to evaluate the DFW data to consider re-establishing appropriate effluent limits for the Hot Creek Hatchery facility and water quality objectives for Hot Creek in approximately 2-3 years. Since 2010 the DFW has successfully implemented their compliance plan and submitted results from their monthly monitoring efforts.

If you have any questions regarding this amended TSO please contact me at (530) 542-5412 or Doug Smith, Division Manager, at DFSmith@waterboards.ca.gov or (530) 542-5453.

Attachment: Time Schedule Order No. R6V-2009-0016-A2
Time Schedule Order No. R6V-2009-0016-A1

cc: Hot Creek Hatchery Mailing List

RWB/___/T: Hot Creek Hatchery/TSO Amendment 2/Hot Creek Hatchery, TSO Amendment3 Cover Letter, 2014-06-03 RWB
File Under: SLT File Room, Hot Creek Hatchery, Mono County, 6B260801001
VVL File Room, Hot Creek Hatchery, Mono County, 6B260801001

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

TIME SCHEDULE ORDER NO. R6V-2009-0016-A2

AMENDMENT

**ISSUED TO
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE FOR
HOT CREEK FISH HATCHERY,
MAMMOTH LAKES, MONO COUNTY
WDID NO. 6B260801001**

Mono County

The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds that:

1. The Water Board previously issued Time Schedule Order No. R6V-2009-0016-A1 (attached) to the California Department of Fish and Game (now re-named California Department of Fish and Wildlife, and hereinafter referred to as the Discharger) on January 11, 2010 for its Hot Creek Fish Hatchery (Hatchery). The Order was issued pursuant to Water Code section 13300 to set forth actions that the Discharger shall take to correct or prevent discharges of waste that violate the terms of its Waste Discharge Requirements and National Pollution Discharge Elimination System Permit prescribed by Board Order No. R6V-2006-0027, NPDES Permit No. CA0102776 (permit). Specifically, the Order prescribed actions for the Discharger to take to address exceedances of Nitrate+Nitrite (as Nitrogen, or N) concentration effluent limits and exceedances of water flow limits through the Hatchery. The findings of the Time Schedule Order No. R6V-2009-0016-A1 are incorporated by reference, except as superseded herein.
2. Time Schedule Order No. R6V-2009-0016-A1 requires the Discharger to develop and implement a compliance plan. The Discharger's compliance plan, as approved by the Water Board, describes a program to monitor Nitrate+Nitrite (as N) effluent concentrations and water flow through the Hatchery. The monitoring program results are intended to be evaluated by the Water Board for consideration of establishing and adopting revised discharge standards for the Hatchery in its permit update and for consideration of revising water quality objectives specified for Hot Creek in the Water Board's *Water Quality Control Plan for the Lahontan Region* (Basin Plan) in the area immediately up and down gradient from the Hatchery. The Order also requires the Discharger to achieve full compliance with the effluent limits prescribed in its permit by May 11, 2014.

3. The Discharger has successfully implemented its compliance plan and has submitted the results of the monthly monitoring required to be conducted by Time Schedule Order No. R6V-2009-0016-A1. Water Board staff has determined that the Discharger has provided sufficient monitoring data to allow Water Board staff to consider a change to the water quality objectives specified for Hot Creek in the Water Board's Basin Plan in the area immediately up and down gradient from the Hatchery. Additional monitoring data is no longer necessary for the purpose of revising the water quality objectives for Hot Creek. However, Water Board staff has not yet conducted an evaluation of the data submitted through the Discharger's compliance plan, but expects to propose revised water quality objectives for Hot Creek for Water Board adoption by the end of 2019. Revision of water quality objectives for Hot Creek is a Triennial Review priority Basin Plan amendment project and will proceed as resources allow.
4. Each of the springs has a unique flow rate, as well as unique nitrate concentrations. In particular, nitrates from the springs that flow through the Hatchery 1 (S-003) and Hatchery 2 (S-004) buildings are higher in nitrates than from the two main springs (AB and CD). The naturally occurring high nitrate that flows through the hatcheries causes excessive algae growth, which poses a challenge for the hatchery to control.
5. The Discharger is actively pursuing plans to improve the Hot Creek water quality. Examples of such plans include:
 - Using "vegetation rafts" and other types of filters to remove plant matter,
 - Maintenance dredging of settling ponds,
 - Increase retention time in the settling ponds.
6. It is appropriate to modify Time Schedule Order No. R6V-2009-0016-A1 to extend the compliance deadline while Water Board staff evaluates the submitted monitoring data. This Time Schedule Order (No. R6V-2009-0016-A2) modifies Time Schedule Order No. R6V-2009-0016-A1 to extend the compliance deadline and to return the Discharger to the monitoring program prescribed by its permit. This Order retains the interim Nitrate+Nitrite (as N) effluent limit and flow limit requirements specified in Time Schedule Order No. R6V-2009-0016-A1.
7. Water Code section 13385(j)(3)(C)(ii)(II) allows the Water Board to extend an established time schedule by five years following a public hearing and upon a showing that the discharger is making diligent progress toward bringing the waste discharge into compliance with the effluent limitation.
 - a. The Water Board conducted a public hearing on May 12, 2014.
 - b. The Water Board finds that the Discharger has submitted adequate data in response to its approved compliance plan. Additional data above what is required in the Discharger's permit is not necessary for Water Board staff to consider modification to its water quality objective for Hot Creek as specified in its Basin Plan.
8. Compliance with this amended Time Schedule Order continues to exempt the Discharger from mandatory minimum penalties for violations of effluent limitations for flow and Nitrate+Nitrite (as N) only, in accordance with Water Code section 13385(j)(3).

9. Issuance of this Time Schedule Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.), in accordance with section 15321(a)(2), Title 14, of the California Code of Regulations (CCR).
10. Pursuant to Water Code section 13167.5, a 30-day public comment period was provided in which the public had an opportunity to review and comment upon Time Schedule Order No. R6V-2009-0016-A2. A copy of the proposed amended Time Schedule Order was posted on the Water Board's internet site, and a Notice of Public Comment Period was published in the Mammoth Times newspaper on April 17, 2014.
11. Any person aggrieved by this action of the Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and CCR, 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 Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, state holiday, or furlough day, 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.

IT IS HEREBY ORDERED, that in order to meet the effluent limitations contained in Board Order No. R6V-2006-0027, the Discharger must comply with the following:

1. The following interim effluent limitations for Nitrate + Nitrite (as N) shall remain effective until **May 11, 2019**, or when the Discharger is able to come into compliance, whichever is sooner.

Monitoring Location	Parameter	Average Monthly Effluent Limitation	Maximum Daily Effluent Limitation
M-001	Nitrate + Nitrite (as N) mg/L	0.30	0.417
M-002	Nitrate + Nitrite (as N) mg/L	0.30	0.429
M-003	Nitrate + Nitrite (as N) mg/L	0.45	0.806
M-004	Nitrate + Nitrite (as N) mg/L	0.54	0.956

The effluent concentration of Nitrate + Nitrite (as N) shall be compared to the interim effluent limits above or the corresponding influent¹ concentration plus 20 percent, whichever is greater.

¹ Because AB Spring and CD Spring are mixed and discharged at two locations (M-001 and M-002), the comparison of influent to effluent concentrations shall be done as follows: a flow weighted average Nitrate + Nitrite (as N) concentration shall be calculated for M-001 and M-002 and will be compared to the flow weighted average Nitrate + Nitrite (as N) concentration for AB Spring and CD Spring.

2. The following interim effluent limitation for flow shall remain effective until **May 11, 2019**, or when the Discharger is able to come into compliance, whichever is sooner.

Total Facility effluent flow shall not be greater than the combined influent flow of: AB Spring + CD Spring + Hatchery I Spring + Hatchery II Spring.

If the effluent flow is greater than the measured influent flow due to natural, unmeasured influent sources, it shall not be a violation provided the Discharger includes a certification under penalty of perjury that the Hatchery operation did not add any water to the system.

3. Water quality monitoring and reporting will occur as required by the Discharger's permit, Water Board Order No. R6V-2006-0027, which specifies quarterly monitoring. Monitoring and reporting requirements of Time Schedule Orders Nos. R6V-2009-0016 and R6V-2009-0016-A1 are rescinded
4. **Full compliance with all final effluent limits** must be achieved by **May 11, 2019**. Compliance with final effluent limits will be the result of the Discharger implementing corrective actions to comply with effluent limits set forth in Board Order No. R6V-2006-0027, and/or revision of Board Order No. R6V-2006-0027 by the Water Board to include modified effluent limits based on monitoring information the Discharger submitted in compliance with TSO R6V-2009-0016-A1.
5. If the Discharger fails to comply with the provisions of this Order, judicial enforcement by the Attorney General may be sought. If compliance with these effluent limitations is not achieved by the full compliance date, the discharge would not be exempt from the mandatory minimum penalties for violation of certain effluent limitations, and would be subject to issuance of a Cease and Desist Order in accordance with CWC section 13301.
6. Upon legal notice to all concerned parties and an opportunity for public comment for 30 days, this Order may be amended to establish new conditions or modify interim effluent limitations for Nitrate + Nitrite (as N) and flow should monitoring data or other new information indicate that such modifications are necessary.



PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

June 4, 2014

Date

Attachment: Water Board Order No. R6V-2009-0016-A1

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

TIME SCHEDULE ORDER NO. R6V-2009-0016-A1

**ISSUED TO
CALIFORNIA DEPARTMENT OF FISH AND GAME FOR
HOT CREEK FISH HATCHERY,
MAMMOTH LAKES, MONO COUNTY
WDID NO. 6B260801001**

_____ Mono County _____

The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds that:

1. The California Department of Fish and Game (Discharger) operates the Hot Creek Fish Hatchery (Facility), located at 85 Old School Road, Mammoth Lakes, CA 93546.
2. The Facility is owned and operated by the Discharger on property owned by the Los Angeles Department of Water and Power and the United States Forest Service. The Facility consists of two hatcheries (Hatchery I and Hatchery II), two spawning houses, 42 fingerling tanks, 40 fingerling troughs, nine brood ponds, 42 production ponds, four production raceways, and three settling ponds.

Water for Facility operations is obtained from four springs: AB Spring (S-001), CD Spring Group (S-002), Hatchery I Spring (S-003), and Hatchery II Spring (S-004). AB Spring and CD Spring Group supply water to the four production raceways. Hatchery I Spring supplies Hatchery I, the Hatchery I brood ponds, and the Hatchery I spawning house. Hatchery II Spring supplies Hatchery II, the Hatchery II brood ponds, and the Hatchery II spawning house. Devices to control or divert water flow from the influent springs are not currently installed at the facility. The flow rates of all springs vary due to the naturally occurring hydrogeologic conditions:

Wastewater produced from the Facility's four raceways receives sedimentation treatment in two parallel flow-through settling ponds before being discharged to Hot Creek at monitoring points M-001 and M-002. Wastewater produced from Hatchery I, the Hatchery I brood ponds, and the Hatchery I spawning house receives sedimentation treatment in the McBurney Pond, and is discharged to Hot Creek at monitoring point M-003. No treatment is provided for the wastewater produced from Hatchery II, the Hatchery II brood ponds, and the Hatchery II spawning house before it is

discharged at monitoring point M-004, a small tributary to Hot Creek. A Facility Plan is included as Attachment A, which is made a part of this Time Schedule Order.

3. Water Board staff has determined it is appropriate to modify Time Schedule Order No. R6V-2009-0016 to further clarify the interim effluent limits for Nitrate + Nitrite (as N) and flow. This Time Schedule Order (No. R6V-2009-0016-A1) modifies Time Schedule Order No. R6V-2009-0016, which was originally issued to the Discharger on May 11, 2009.¹ None of the interim effluent or flow limits or other requirements specified in Time Schedule Order No. R6V-2009-0016 are substantively modified by this Order.
4. The *Water Quality Control Plan for the Lahontan Region* (Basin Plan), as amended, designates the beneficial uses of waters in the Region. The designated beneficial uses of surface waters in Hot Creek are:
 - a. Municipal and Domestic Supply (MUN)
 - b. Agricultural Supply (AGR)
 - c. Industrial Service Supply (IND)
 - d. Ground Water Recharge (GWR)
 - e. Water Contact Recreation (REC-1)
 - f. Non-contact Water Recreation (REC-2)
 - g. Commercial and Sportfishing (COMM)
 - h. Aquaculture (AQUA)
 - i. Cold Freshwater Habitat (COLD)
 - j. Wildlife Habitat (WILD)
 - k. Rare, Threatened, or Endangered Species (RARE)
 - l. Migration of Aquatic Organisms (MIGR)
 - m. Spawning, Reproduction, and Development (SPWN)
5. On June 14, 2006, the Water Board adopted Board Order No. R6V-2006-0027, for the discharge from Hot Creek Hatchery to Hot Creek. Board Order No. R6V-2006-0027 prescribes waste discharge requirements, which rescind those prescribed by Board Order No. 6-99-55.

¹ Because these modifications are clarifying changes to Time Schedule Order No. R6V-2009-0016 and not substantive modifications, the modifications contained in this Time Schedule Order (No. R6V-2009-0016-A1) are considered effective upon the original adoption date of May 11, 2009.

6. Board Order No. R6V-2006-0027 contains new effluent limitations for flow and Nitrate + Nitrite (as N), which in part include:

Parameter	Units	Location	Effluent Limitations	
			Average Monthly	Maximum Daily
Flow	mgd	M-001	--	6.9
		M-002	--	6.5
		M-003	--	3.8
		M-004	--	2.5
Nitrate + Nitrite (as N)	mg/L	All locations (M-001 thru M-004)	0.23	0.31

Board Order No. 6-99-55 did not contain effluent limits for flow and Nitrate + Nitrite (as N).

7. Based upon data provided in the Discharger's self monitoring reports, the wastewater discharged from the Facility chronically violates the effluent limitations cited above in Finding No. 6. A table identifying effluent limitation violations for the period of July 1, 2006 – December 31, 2008 is included as Attachment B, which is made a part of this Time Schedule Order.
8. California Water Code (Water Code) sections 13385(h) and (i) require the Water Board to impose mandatory minimum penalties upon dischargers that violate specified effluent limitations. Water Code section 13385(j) exempts certain violations from the mandatory minimum penalties. Water Code section 13385(j)(3) exempts the discharge from mandatory minimum penalties

"where the waste discharge is in compliance with either a cease and desist order issued pursuant to section 13301 or a time schedule order issued pursuant to section 13300, if all the [specified] requirements are met."

9. The Water Board finds that the requirements for exempting effluent limitation violations from mandatory minimum penalties, as specified by Water Code section 13385(j)(3), will continue to be satisfied upon issuing this Time Schedule Order. For such exemptions, Water Code section 13385(j)(3) requires that:

- a. The Time Schedule Order is issued on or after July 1, 2000, and specifies the actions the discharger is required to take in order to correct the violations that would otherwise be subject to mandatory minimum penalties.
- b. The Discharger is not able to consistently comply with the new effluent limitations contained in Board Order No. R6V-2006-0027 for flow and Nitrate + Nitrite (as N). These effluent limitations are new requirements that became applicable to the waste discharge requirements after the effective date of the waste discharge requirements, and after July 1, 2000. Additionally, new or modified control measures are required to comply with the effluent limitations, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
- c. The Water Board through issuing and enforcing this Time Schedule Order, has established a time schedule for bringing the discharge into compliance with the effluent limitations as soon as possible, taking into consideration the technological, operational, and economic factors that affect design, development, and implementation of control measures necessary to comply with the effluent limitations.

This Time Schedule Order includes interim requirements, including (1) interim effluent limitations for flow and Nitrate + Nitrite (as N), (2) actions and milestones leading to compliance, and (3) associated compliance dates, as required for time schedules exceeding one year. The Time Schedule Order does not exceed five years as required by Water Code section 13385(j)(3).

The Time Schedule Order requires the Discharger to prepare and implement a pollution prevention plan for pollutants of concern pursuant to Water Code section 13263.3.

The Water Board's finding that the above-referenced requirements will be satisfied upon issuing this Time Schedule Order is based upon Water Board staff's review of the Discharger's effluent monitoring data, and the Facility design and operations.

10. Water Code section 13300 states:

"Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching

capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."

The Water Board finds that the discharges from the Facility are violating waste discharge requirements prescribed by the Water Board, as discussed in Finding No. 7, above. The Water Board is therefore authorized to issue a Time Schedule Order pursuant to Water Code section 13300.

11. This Time Schedule Order provides a schedule for the Discharger to develop, submit, and implement methods of compliance that may include, but not be limited to, pollution prevention activities (operations and maintenance), constructing new treatment facilities to meet the effluent limitations, and developing and complying with revised effluent limitations, if deemed appropriate by the Water Board. Revising effluent limits will require the Water Board to adopt a new NPDES Permit.
12. Pursuant to Water Code section 13300, Time Schedule Order No. R6V-2009-0016-A1 is being issued to set forth actions that the Discharger shall take to correct or prevent discharges of waste that violate Board Order No. R6V-2006-0027.
13. Compliance with this Time Schedule Order exempts the Discharger from mandatory minimum penalties for violations of effluent limitations for flow and Nitrate + Nitrite (as N) only, in accordance with Water Code section 13385(j)(3).
14. Since the time schedules for completing actions necessary to bring the waste discharge into compliance exceed one year, this Time Schedule Order includes interim requirements, including interim effluent limitations, and dates for their achievement, as required by Water Code section 13385(j)(3)(C).

The compliance time schedules in this Time Schedule Order include interim performance-based effluent limitations for Nitrate + Nitrite (as N) and flow.

Nitrate + Nitrite (as N) Interim Effluent Limitations

The method for developing interim effluent limitations for Nitrate + Nitrite (as N) is based on the method used for California Toxics Rule constituents. Two limitations are developed: (1) maximum daily effluent limitation, and (2) average monthly effluent limitations. The method is explained in the State Implementation Plan for Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, 2005 (SIP), Section 2.2.1. While this policy only applies to toxic constituents, for

consistency, this method is applied to develop the interim effluent limitations for Nitrate + Nitrite (as N).

In developing the interim maximum daily limitations, when there are ten or more sampling data points, sampling and laboratory variability is accounted for by establishing interim limits that are based on normally distributed data where 99.9% of the data points will lie within 3.3 standard deviations of the mean (*Basic Statistical Methods for Engineers and Scientists*, Kennedy and Neville, Harper and Row). Therefore, the interim maximum daily limitations for Nitrate + Nitrite (as N) in this Time Schedule Order are established as the mean plus 3.3 standard deviations, based upon the available data (more than ten sampling points). Where actual sampling shows an exceedance of the proposed 3.3-standard deviation interim limit, the method allows for the maximum detected concentration being used as the interim limitation.

Derivation of the maximum daily interim limitations for the Facility's four discharge locations, based upon 50 data points each, for Nitrate + Nitrite (as N) are summarized below:

Location	Constituent	Mean mg/L	Standard Deviation	Mean + 3.3 Standard Deviations	Observed Maximum mg/L
M-001	Nitrate + Nitrite (as N)	0.255	0.049	0.4167	0.36
M-002	Nitrate + Nitrite (as N)	0.257	0.052	0.4286	0.37
M-003	Nitrate + Nitrite (as N)	0.329	0.144	0.8042	0.806
M-004	Nitrate + Nitrite (as N)	0.372	0.177	0.9561	0.936

Interim average monthly effluent limitations are necessary to assure that the Discharger will operate the facility to keep effluent concentrations of Nitrate + Nitrite (as N) within the capability of the facility. The Water Board used the discharge monitoring data as a basis for the average monthly effluent limitations for the Facility's four discharge locations. An average monthly effluent limitation is the product of the sample mean and the long-term average multiplier. The long-term average multiplier is based on normally distributed data at the 95% percentile, using the mean as the long-term average. According to the SIP, the sample frequency is set to 4 samples per month for purposes of selecting a long-term average multiplier.

Monitoring Point	Coefficient of Variation (rounded)	Long-term Average Multiplier
M-001	0.2	1.17
M-002	0.2	1.17
M-003	0.4	1.36
M-004	0.5	1.45

Therefore, the interim average monthly effluent limitations for Nitrate + Nitrite (as N) are as follows:

Monitoring Point	Mean (mg/L)	x	Long-term Average Multiplier	=	Average Monthly Effluent Limitation (mg/L)
M-001	0.255	x	1.17	=	0.30
M-002	0.258	x	1.17	=	0.30
M-003	0.329	x	1.36	=	0.45
M-004	0.372	x	1.45	=	0.54

A summary of interim effluent limitations for Nitrate + Nitrite (as N) is as follows:

Monitoring Point	Average Monthly Effluent Limitation (mg/L)	Maximum Daily Effluent Limitation (mg/L)
M-001	0.30	0.417
M-002	0.30	0.429
M-003	0.45	0.806
M-004	0.54	0.956

Flow Interim Effluent Limitations

Influent water for the Facility is supplied by natural springs. Devices to control or divert water flow from the influent springs are not currently installed at the facility. The influent flow rates, and therefore effluent flow rates, are entirely dependant upon the natural hydrogeologic conditions. Therefore, the interim effluent limitation for flow, in million gallons per day (MGD), is set as follows:

$$\text{M-001 flow} + \text{M-002 flow} + \text{M-003 flow} + \text{M-004 flow} = \text{Total Facility Effluent Flow}$$

Total Facility Effluent Flow shall not be greater than:

$$\text{AB Spring Flow} + \text{CD Spring Flow} + \text{Hatchery I Spring Flow} + \text{Hatchery II Spring Flow}$$

15. The Water Board finds that the Discharger can implement measures to maintain compliance with the interim effluent limitations included in this Time Schedule Order. Interim effluent limitations are established when compliance with the final effluent limitations cannot be achieved by the existing discharge. Discharge of constituents in concentrations in excess of the final effluent limitations, but in compliance with the interim effluent limitations, can degrade water quality and may adversely affect the beneficial uses of the receiving water (Hot Creek) on a long-term basis. The interim limitations, however, establish an enforceable ceiling concentration and discharge rate until compliance with the final effluent limitations can be achieved.
16. Issuance of this Time Schedule Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.), in accordance with section 15321(a)(2), Title 14, of the California Code of Regulations.
17. Pursuant to Water Code section 13167.5, a 30-day public comment period was provided in which the public had an opportunity to review and comment upon Time Schedule Order No. R6V-2009-0016. A copy of the proposed Time Schedule Order was posted on the Water Board's internet site, and a Notice of Public Comment Period was published in the Mammoth Times newspaper on March 26, 2009. The Discharger submitted comments which were taken into consideration. No other comments were submitted.
18. Any person aggrieved by this action of the Water Board may petition the State Water Board to review the action in accordance with 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 Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, state holiday, or furlough day, 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.

IT IS HEREBY ORDERED, that in order to meet the effluent limitations contained in Board Order No. R6V-2006-0027, the Discharger must comply with the following:

1. The following interim effluent limitations for Nitrate + Nitrite (as N) shall become effective immediately (issuance date of Time Schedule Order No. R6V-2009-0016) and shall remain effective until **May 11, 2014**, or when the Discharger is able to come into compliance, whichever is sooner.

Monitoring Location	Parameter	Average Monthly Effluent Limitation	Maximum Daily Effluent Limitation
M-001	Nitrate + Nitrite (as N) mg/L	0.30	0.417
M-002	Nitrate + Nitrite (as N) mg/L	0.30	0.429
M-003	Nitrate + Nitrite (as N) mg/L	0.45	0.806
M-004	Nitrate + Nitrite (as N) mg/L	0.54	0.956

The effluent concentration of Nitrate + Nitrite (as N) shall be compared to the interim effluent limits above or the corresponding influent² concentration plus 20 percent, whichever is greater.

2. The following interim effluent limitation for flow shall become effective immediately (issuance date of Time Schedule Order No. R6V-2009-0016) and shall remain effective until **May 11, 2014**, or when the Discharger is able to come into compliance, whichever is sooner.

Total Facility effluent flow shall not be greater than the combined influent flow of: AB Spring + CD Spring + Hatchery I Spring + Hatchery II Spring.

If the effluent flow is greater than the measured influent flow due to natural, unmeasured influent sources, it shall not be a violation provided the Discharger includes a certification under penalty of perjury that the hatchery operation did not add any water to the system.

² Because AB Spring and CD Spring are mixed and discharged at two locations (M-001 and M-002), the comparison of influent to effluent concentrations shall be done as follows: a flow weighted average Nitrate + Nitrite (as N) concentration shall be calculated for M-001 and M-002 and will be compared to the flow weighted average Nitrate + Nitrite (as N) concentration for AB Spring and CD Spring.

3. The Discharger shall take specific actions as indicated in the following time schedule to achieve compliance with all requirements of Board Order No. R6V-2006-0027 or revisions to Board Order No. R6V-2006-0027, if deemed necessary and appropriate by the Water Board.

<u>Task</u>	<u>Due Date</u>
A. Submit Method of Compliance Work Plan/Schedule	July 31, 2009
B. Submit Pollution Prevention Plan	October 30, 2009
C. Submit Quarterly Assessment Reports	As Described Below
D. Full Compliance with Final Effluent Limits	May 11, 2014

- a. Task A - The **Method of Compliance Work Plan/Schedule** (Compliance Work Plan) must be prepared for, at a minimum, the following parameters:

- nitrate + nitrite,
- total nitrogen,
- ammonia
- flow

At a minimum, the Compliance Work Plan must include the following elements:

- i. **Facilities and Receiving Waters Impacts Assessment Proposal (Facilities Assessment)**. This proposal must identify and/or include:
1. The methods the Discharger proposes to use to characterize each Facility component's (e.g., raceways, brood ponds, settling ponds) effect(s) upon water quality related to, but not limited to, the above-referenced parameters.
 2. The methods the Discharger proposes to use to characterize the effects of the Facility's discharges upon the receiving waters (Hot Creek) with respect to, but not limited to, the above-referenced parameters.
 3. A sampling and analysis plan that includes the quality assurance and quality control procedures necessary to ensure valid and representative data is obtained and reported.
 4. An implementation schedule for the assessment activities identified in the proposal.

Water quality sampling and analysis will, at a minimum, occur on a monthly basis at all sampling locations identified in this proposal. Monitoring reports will be submitted to both of the Water Board's Victorville and South Lake Tahoe offices on a quarterly basis as described below.

The Executive Officer will review and respond to any Discharger request to modify the water quality sampling and analysis identified in this proposal following a minimum monitoring period of one year. The Discharger's request must provide justification for the proposed modification. The Executive Officer will provide either written acceptance of the proposed modification, or a written explanation why the request is being denied. Additionally, if data indicates that additional sample locations or parameters are needed to accurately understand how Facility components impact water quality, additional sample locations and/or parameters may, at the written direction of the Executive Officer, be added at any time.

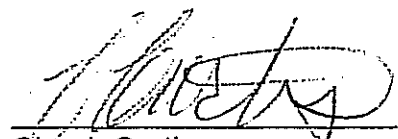
- ii. **Initial Corrective Actions Proposal.** This proposal must identify measures that may reduce concentrations of the above-referenced nitrogen species, and that will be implemented by **January 31, 2010**.
 - iii. **Compliance Schedule.** This schedule must identify the activities (e.g., assessments, feasibility studies/pilot projects, study/project reports, final compliance plan development) necessary to comply with the effluent limits for flow and Nitrate + Nitrite (as N) specified in Board Order No. R6V-2006-0027, or revisions to such effluent limitations, as the Water Board deems necessary and appropriate.
- b. Task B - The **Pollution Prevention Plan** must be prepared for nitrate, nitrite, total nitrogen, total kjeldahl nitrogen, and ammonia, and shall meet the requirements specified in Water Code section 13263.3(d)(2).
 - c. Task C - The **Quarterly Assessment Reports** must, at a minimum, include the following information:
 - i. Analytical data from monitoring identified in the Facilities Assessment. The results will be provided in tabulated and graphical format, and include the analytical data collected **each month** for that quarter, in addition to the analytical data provided in all previous quarterly reports.

- ii. Results of flow measurements at each of the locations identified in the Facilities Assessment. The results will be provided in tabulated and graphical format, and include the flow data collected **each month** for that quarter, in addition to the analytical data provided in all previous quarterly reports.
- iii. Laboratory reports with sample analysis and quality assurance/quality control documentation.
- iv. A discussion of any trends observed in the data.
- v. A discussion of any results that exceed the interim effluent limits and/or effluent limits contained in Board Order No. R6V-2006-0027.
- vi. A description of any compliance activities implemented during that quarter.
- vii. A description of any compliance activities the Discharger proposes to implement during the next quarter.
- viii. Quarterly Assessment Reports must be submitted according to the following schedule:

<u>Monitoring Period</u>	<u>Quarterly Assessment Report Due Date</u>
January – March	May 1 st
April – June	August 1 st
July – September	November 1 st
October – December	February 1 st

- d. Task D - **Full compliance with all final effluent limits** must be achieved by **May 11, 2014**. Compliance with final effluent limits will be the result of the Discharger implementing corrective actions to comply with effluent limits set forth in Board Order No. R6V-2006-0027, and/or revision of Board Order No. R6V-2006-0027 by the Water Board to include modified effluent limits based on information obtained from the Facilities Assessment, and potentially other studies.
4. If the Discharger fails to comply with the provisions of this Order, judicial enforcement by the Attorney General may be sought. If compliance with these effluent limitations is not achieved by the full compliance date, the discharge would not be exempt from the mandatory minimum penalties for violation of certain effluent limitations, and would be subject to issuance of a Cease and Desist Order in accordance with CWC section 13301.

5. Upon legal notice to all concerned parties and an opportunity for public comment for 30 days, this Order may be amended to establish new conditions or modify interim effluent limitations for Nitrate + Nitrite (as N) and flow should monitoring data or other new information indicate that such modifications are necessary.



Chuck Curtis
Supervising Water Resource Control Engineer

Date

January 11, 2010

Attachment A – Facility Plan
Attachment B – Violation Summary

TBZ:clhT: TSO R6V-2009-0016 A1, 01-06-2009, TBZ, SCF,clc,MeO.doc
File Under: SLT File Room, Hot Creek Hatchery, Mono County, 6B260801001
VVL File Room, Hot Creek Hatchery, Mono County, 6B260801001

ATTACHMENT A

Facility Plan

ATTACHMENT B
Violation Summary

Attachment B
Hot Creek Hatchery Effluent Limit Violations Table

Date	Location	Parameter	Description
8/14/2006	M-004	Flow	Flow rate of 3.16 MGD at M-004 exceeds the Effluent Limit of 2.5 MGD
Sep-06	M-002	Flow	Flow rate of 7.0 MGD at M-002 exceeds the Effluent Limit of 6.5 MGD
Sep-06	M-001	Flow	Flow rate of 7.0 MGD at M-001 exceeds the Effluent Limit of 6.9 MGD
Sep-06	M-004	Flow	Flow rate of 2.7 MGD at M-004 exceeds the Effluent Limit of 2.5 MGD
9/18/2006	M-003	Nitrate + Nitrite	Analytical result of 0.260 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
9/18/2006	M-004	Nitrate + Nitrite	Analytical result of 0.322 mg/L at M-004 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
9/18/2006	M-004	Nitrate + Nitrite	Analytical result of 0.332 mg/L at M-004 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L
10/23/2006	M-002	Flow	Flow rate of 6.7 MGD at M-002 exceeds the Effluent Limit of 6.5 MGD
11/13/2006	M-001	Nitrate + Nitrite	Analytical result of 0.240 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
11/13/2006	M-002	Nitrate + Nitrite	Analytical result of 0.240 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
11/13/2006	M-003	Nitrate + Nitrite	Analytical result of 0.231 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
11/13/2006	M-004	Nitrate + Nitrite	Analytical result of 0.277 mg/L at M-004 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
11/13/2006	M-001	Nitrate + Nitrite	Analytical result of 0.674 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.12 mg/L
11/29/2006	M-001	Potassium Permanganate	Analytical result of 0.674 mg/L at M-001 exceeds the Instantaneous Maximum Effluent Limit of 0.25 mg/L
11/29/2006	M-001	Potassium Permanganate	Analytical result of 0.743 mg/L at M-001 exceeds the Instantaneous Maximum Effluent Limit of 0.12 mg/L
11/29/2006	M-002	Potassium Permanganate	Analytical result of 0.743 mg/L at M-002 exceeds the Instantaneous Maximum Effluent Limit of 0.25 mg/L
11/29/2006	M-002	Potassium Permanganate	Analytical result of 0.743 mg/L at M-001 exceeds the Instantaneous Maximum Effluent Limit of 0.25 mg/L
3/26/2007	M-003	Flow	Flow rate of 4.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
3/26/2007	M-001	Nitrate + Nitrite	Analytical result of 0.247 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
3/26/2007	M-002	Nitrate + Nitrite	Analytical result of 0.243 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
3/26/2007	M-003	Nitrate + Nitrite	Analytical result of 0.249 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
3/26/2007	M-004	Nitrate + Nitrite	Analytical result of 0.236 mg/L at M-004 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
5/7/2007	M-003	Flow	Flow rate of 4.1 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
6/4/2007	M-003	Flow	Flow rate of 4.94 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
6/4/2007	M-001	Nitrate + Nitrite	Analytical result of 0.251 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
6/4/2007	M-002	Nitrate + Nitrite	Analytical result of 0.239 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
7/9/2007	M-003	Flow	Flow rate of 4.6 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
8/6/2007	M-003	Flow	Flow rate of 4.18 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
9/10/2007	M-003	Flow	Flow rate of 4.2 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
9/10/2007	M-001	Nitrate + Nitrite	Analytical result of 0.236 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
9/10/2007	M-002	Nitrate + Nitrite	Analytical result of 0.243 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
12/10/2007	M-003	Nitrate + Nitrite	Analytical result of 0.266 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
2/4/2008	M-003	Flow	Flow rate of 4.30 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
3/3/2008	M-001	Flow	Flow rate of 4.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
3/3/2008	M-001	Nitrate + Nitrite	Analytical result of 0.264 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.23 mg/L

Attachment B - Continued
Hot Creek Hatchery Effluent Limit Violations Table - Continued

Date	Location	Parameter	Description
3/3/2008	M-002	Nitrate + Nitrite	Analytical result of 0.265 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
3/3/2008	M-003	Nitrate + Nitrite	Analytical result of 0.380 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
3/3/2008	M-004	Nitrate + Nitrite	Analytical result of 0.406 mg/L at M-004 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
3/3/2008	M-003	Nitrate + Nitrite	Analytical result of 0.380 mg/L at M-003 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L
3/3/2008	M-004	Nitrate + Nitrite	Analytical result of 0.406 mg/L at M-004 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L
4/7/2008	M-003	Flow	Flow rate of 5.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
5/5/2008	M-003	Flow	Flow rate of 5.30 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
6/2/2008	M-001	Nitrate + Nitrite	Analytical result of 0.292 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
6/2/2008	M-002	Nitrate + Nitrite	Analytical result of 0.312 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
6/2/2008	M-002	Nitrate + Nitrite	Analytical result of 0.312 mg/L at M-001 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L
6/2/2008	M-003	Nitrate + Nitrite	Analytical result of 0.255 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
6/2/2008	M-003	Flow	Flow rate of 5.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
6/2/2008	M-004	Nitrate + Nitrite	Analytical result of 0.364 mg/L at M-004 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
6/2/2008	M-004	Nitrate + Nitrite	Analytical result of 0.364 mg/L at M-004 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L
7/7/2008	M-001	Flow	Flow rate of 7.0 MGD at M-001 exceeds the Effluent Limit of 6.9 MGD
7/7/2008	M-003	Flow	Flow rate of 6.0 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
8/4/2008	M-001	Flow	Flow rate of 7.3 MGD at M-001 exceeds the Effluent Limit of 6.9 MGD
8/4/2008	M-003	Flow	Flow rate of 6.6 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
9/8/2008	M-003	Nitrate + Nitrite	Analytical result of 0.287 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
9/8/2008	M-003	Flow	Flow rate of 4.8 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
9/8/2008	M-004	Nitrate + Nitrite	Analytical result of 0.316 mg/L at M-004 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
9/8/2008	M-004	Nitrate + Nitrite	Analytical result of 0.316 mg/L at M-004 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L
10/6/2008	M-003	Flow	Flow rate of 4.0 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
11/2/2008	M-003	Flow	Flow rate of 4.0 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
12/1/2008	M-001	Nitrate + Nitrite	Analytical result of 0.258 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
12/1/2008	M-002	Nitrate + Nitrite	Analytical result of 0.256 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
12/1/2008	M-003	Nitrate + Nitrite	Analytical result of 0.259 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L
12/1/2008	M-003	Flow	Flow rate of 4.0 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD
12/1/2008	M-004	Nitrate + Nitrite	Analytical result of 0.253 mg/L at M-004 exceeds the Average Monthly Effluent Limit of 0.23 mg/L