



California Natural Resources Agency  
DEPARTMENT OF FISH AND GAME  
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ARNOLD SCHWARZENEGGER, Governor  
JOHN MCCAMMAN, Director



March 5, 2010

Harold J. Singer, Executive Officer  
Regional Water Quality Control Board, Lahontan Region  
2501 Lake Tahoe Blvd.  
South Lake Tahoe, CA 96150

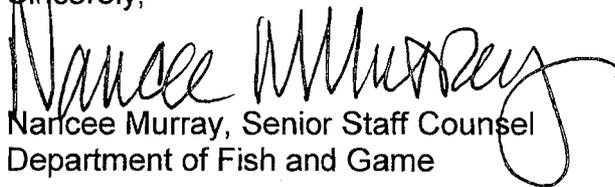
David Coupe, Staff Counsel  
State Water Resources Control Board, Office of Chief Counsel  
1001 I Street  
Sacramento, CA 95814

**TRANSMITTAL OF WRITTEN MATERIALS FOR CONSIDERATION OF COMPLAINT  
NO. R6V-2010-004 FOR MANDATORY ADMINISTRATIVE CIVIL LIABILITY ISSUED  
TO THE CALIFORNIA DEPARTMENT OF FISH AND GAME, HOT CREEK  
HATCHERY, MONO COUNTY**

Pursuant to the February 4, 2010 Hearing Procedures, I am submitting an original and fifteen (15) copies and an electronic copy of California Department of Fish and Game's materials to Mr. Singer and one copy to Mr. Coupe for the above-referenced case. These written materials are also being transmitted to Chuck Curtis and Mayumi Okamoto of the Regional Water Quality Control Board and of the State Water Resources Control Board, respectively.

Please contact me at (916) 654-3818 if you have any questions regarding this matter.

Sincerely,

  
Naricee Murray, Senior Staff Counsel  
Department of Fish and Game

cc (w/enclosure): Jim Starr, Department of Fish and Game  
Mayumi Okamoto, State Water Resources Control Board  
Chuck Curtis, Regional Water Quality Control Board

**REGIONAL WATER QUALITY CONTROL BOARD, LAHONTAN REGION  
PUBLIC HEARING SCHEDULED FOR APRIL 14 – 15, 2010**

**TRANSMITTAL OF WRITTEN MATERIALS FOR CONSIDERATION OF  
COMPLAINT NO. R6V-2010-004**

**FOR**

**MANDATORY ADMINISTRATIVE CIVIL LIABILITY ISSUED TO THE  
CALIFORNIA DEPARTMENT OF FISH AND GAME,  
HOT CREEK HATCHERY, MONO COUNTY**

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**SECTION I**

TESTIMONY OF JAMES STARR and EXHIBITS

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| DFG Exhibit 1m | June 11, 2008, email from Mary Dellavalle to Jim Starr  |
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| DFG Exhibit 1o | December 9, 2008, email from Mary Dellavalle to Jim Starr   |
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| DFG Exhibit 1q | Draft Time Schedule Order dated March 23, 2009  |
| DFG Exhibit 1r | Final Time Schedule Order dated May 11, 2009  |
| DFG Exhibit 1s | Amended Time Schedule Order dated January 12, 2010  |

Exhibit 1

Testimony of James Starr  
in reference to the Notice of Violations issued by  
the Lahontan Regional Water Quality Control  
Board Against the  
Department of Fish and Game's  
Hot Creek Hatchery

## **Introduction:**

My name is James Starr and I am a Staff Environmental Scientist for the Department of Fish and Game (Department) working in the Fisheries Program Branch located in Sacramento, California. I have been employed by the Department since January 1992, and have been in my current position as the National Pollutant Discharge Elimination System (NPDES) Permit Coordinator for Department operated hatcheries since December 29, 2006. I have a Bachelor of Science degree from Arizona State University in Wildlife Management with an emphasis in Fisheries Management. A statement of my qualifications is attached as DFG Exhibit 1a.

## **Purpose:**

Hot Creek Hatchery was assessed a \$225,000.00 fine for violations associated with the normal operations of a Crowded Aquatic Animal Production facility. These violations were assessed in a Complaint issued on February 1, 2010 alleging exceedence of our discharge limits from the facility for Nitrate and Nitrite levels, flow, and potassium permanganate discharge levels, and non-submittal of a Self Monitoring Report (DFG Exhibit 1b). The Department does not dispute the occurrence of the four exceedences of potassium permanganate and the non-submittal of one monthly Self Monitoring Report.

My testimony will address two categories of alleged violations: Flow and Nitrate + Nitrite. This information will consist of flow and laboratory test results that provide evidence that water conditions entering the hatchery already exceeds the discharge conditions that were set in our the 2006 NPDES Permit. I will also present information for the Board's consideration that outlines the steps that the Department has undertaken since the NPDES Permit was issued in 2006 to resolve this issue.

## **Background:**

Hot Creek Hatchery was built in 1941 after a long-term lease was finalized with the Los Angeles Department of Water and Power (LADWP). The LADWP leased approximately 140 acres of land and provided funding to build the hatchery building and supporting structures. The remainder of the hatchery grounds is leased from the U. S. Forrest Service (USFS) through a Special Use Permit. The Department operates that portion of the hatchery pursuant to a special use permit issued by the USFS. In addition, the USFS is a co-permittee with DFG on the NPDES permit for the operation of the Hot Creek Hatchery. The hatchery is located just outside of Mammoth Lakes California along Highway 395 and is constructed in a large mountain meadow at the base of the Sierra Mountains near the edge of a large table. (See DFG Exhibit 1, Figure 1). The hatchery is built so that it can harness all of the natural spring water that flows from the two main supply springs (AB and CD). The topography of the area limits the options for using gravity to shunt water around the discharge point specified in the NPDES permit.

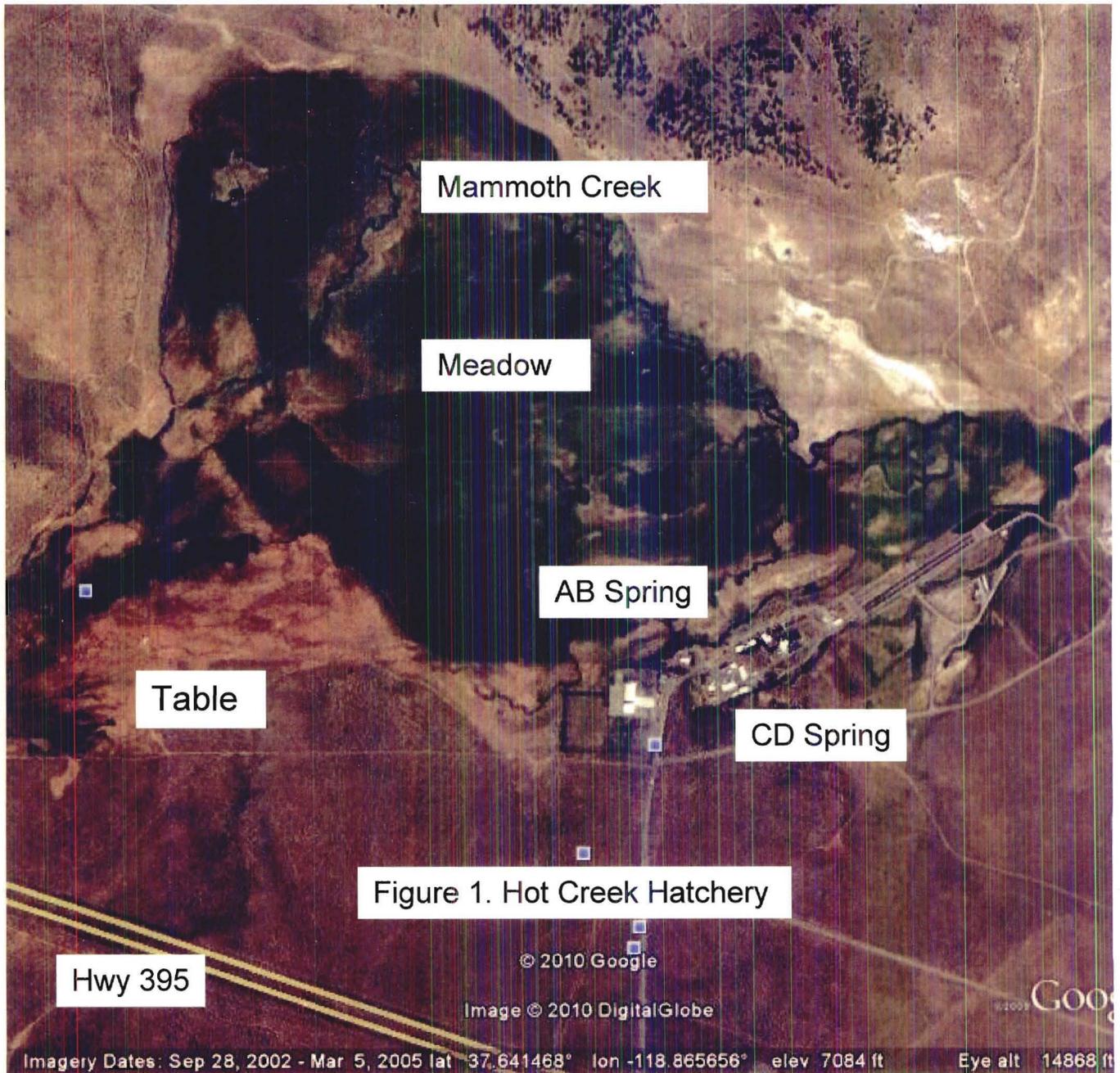


Figure 1. Hot Creek Hatchery

Hot Creek derives its name from the numerous naturally occurring hot springs that join it along its course, which bubble up nearby and in the stream in the vicinity of the hatchery (DFG Exhibit 1c). The hatchery's water supply is derived from two naturally occurring main springs (A-B supply and C-D supply)(See Figures 2 and 3) and several smaller springs. Once the water enters the hatchery from the two main spring sources it is mixed and routed through the hatchery. Three smaller springs supply water to the two hatchery buildings and brood ponds. (DFG Exhibit 1d). The entire hatchery site is inundated with tiny naturally occurring springs and seeps that in some instances can be measured; while others seep up from within the channel making it impossible for the hatchery to document an actual volume of flow entering the hatchery water system.

The hatchery functions as a brood stock hatchery producing eggs and rearing fish to catchable size and operates on a year round basis.

The Owens tui chub is a federal and State listed endangered species and its associated habitat has been listed as critical habitat. "Critical Habitat has been designated at two sites for Owens tui chub: (1) 13 km (8 mi) of Owens River and 15 m (50 ft) of riparian vegetation on either side of the river, encompassing a total of approximately 39 ha (97 ac) in the Owens Gorge; and (2) two spring provinces, and 15 m (50 ft) of riparian vegetation on either side of spring brooks, encompassing approximately 2 ha (5 ac) at Hot Creek Fish Hatchery." (USFWS 1998) (Figure 2 A-B and Figure 3 C-D).

The proximal cause for endangerment of Owens tui chub is hybridization with Lahontan tui chub. This subspecies was illegally introduced into the watershed in the 1950s and has aggressively invaded all historic Owens tui chub habitat range-wide except for the Hot Creek hatchery headsprings and similarly isolated site. Only these, and four small transplanted populations, exist in the world. It was determined in 2007, that AB Spring retains pure Owens tui chub, whereas the adjacent reach of Mammoth Creek contains highly hybridized tui chub. Mammoth Creek and associated irrigation ditches flow within 150 feet of the Owens tui chub critical habitat in AB Spring, but are separated from the Critical Habitat by natural topography and the fact that AB Spring is wholly diverted into the hatchery. If the historic flow path between the AB spring and Hot Creek below the settling ponds is reestablished, because of bypassed flows, then it is likely that fish movement of hybridized tui chubs may occur. Any immigration of hybridized tui chubs into the critical habitat would result in hybridization and the loss of that population for recovery purposes.

In 2005, the Department submitted an application for a renewed NPDES permit for the operation of the Hot Creek Hatchery with the Lahontan Regional Board. The United States Forest Service is a co-Permittee with the Department on the NPDES permit. The drafting of the new NPDES permit was undertaken by a private firm. According to Mr. Mike Seefeldt, Hatchery Manager II (Retired) at Hot Creek Hatchery during this period of NPDES Permit renewal; he contacted them (private firm) to point out areas in the permit that did not accurately reflect the hatchery or its operations. When attempts were made to alter the flow limitations in the permit, Mr Seefeldt reported that "I was told that it could not be changed because that was the figure in the previous permit". Mr. Seefeldt also pointed out that he has witnessed flows that the hatchery ranging from a combined naturally occurring spring flow of 9 cfs up to 34 cfs.



### **Hatchery Flow and Water Supply**

The USGS quadrangle labels Hot Creek as beginning at hot springs 2.7 km upstream of the hatchery (Jellison 2007) and flows eastward until it converges with Mammoth Creek. The hatchery source springs are designated Headwaters

AB, Headwaters CD, Hatchery I, and Hatchery II. Headwaters AB and CD springs are the largest springs and provide approximately 70 percent of the total flow for the hatchery (16-25 cfs; 10.34 MGD - 16.16 MGD respectively). These waters flow a short distance in natural springs before flowing through a grizzly (grate of parallel bars), then passing through a pipe to the head structure which supplies the four main production raceways (A, B, C, & D). The head structure mixes waters from both springs before distributing them to the four production raceways. After flowing through the raceways, the water is distributed between two settling ponds before it is discharged into Hot Creek just above the confluence with Mammoth Creek. The water source for Hatchery I consists of a series of springs and seeps directed into a prime pond supplying the Hatchery I brood stock raceway. Approximately 0.5 km east of the production raceways, the Hatchery II springs flow through the broodstock raceway and hatchery building of the Hatchery II complex before discharging into a ~700 ft. natural channel flowing into Hot Creek. The channel enters Hot Creek approximately 2,000 ft. downstream of the discharges from the three settlings ponds at the main hatchery complex and 1,600 ft downstream of the confluence with Mammoth Creek. (DFG Exhibit 1e). The entire hatchery site is inundated with tiny springs and seeps that in some instances can be measured; while others seep up from within the channel making it impossible for the hatchery to document an actual volume of flow entering the hatchery water system.

DFG Exhibit 1f lists flow data for both the influent (water supply) and the effluent (discharge).

The water system for the hatchery is a once flow through system that utilizes only natural spring flows to supply the water necessary to meet the daily hatchery operational and residential needs. Currently the hatchery utilizes all of the water that enters the facility and any reduction will result in mortality of hatchery reared fish and a decrease in fish production (growth). No additional wells or water sources are used to meet hatchery water needs.

## **Nitrate and Nitrite**

The Nitrate + Nitrite levels entering the facility are, at times, higher then the limits established in the current NPDES Permit for Hot Creek Hatchery. The Department began regularly collecting influent (supply water) Nitrate + Nitrite levels in December 2008 to assist both the Lahontan Regional Board staff and the Department in establishing reasonable discharge levels and document that the water entering the facility contained Nitrate + Nitrite levels that exceeded our NPDES Permit. This information is presented in DFG Exhibit 1g. The Table in DFG Exhibit 1g presents water quality data for Nitrate + Nitrite for both the influent (water supply) and the effluent (discharge) for the period of May 1999 through January 2010. In looking at the table, you will note that there are two columns of numbers:

(1) naturally occurring influent (water supply) and (2) effluent (discharge). The numbers in the naturally occurring influent (water supply) column that are red represent water entering the hatchery that exceeded the conditions established in the NPDES Permit. A quick glance through the naturally occurring influent (water supply) column of data shows that all water entering the hatchery exceeded the conditions set in the current NPDES permit for Hot Creek

Hatchery. In looking at the effluent (discharge) levels, in many instances, the numbers are lower than the naturally occurring influent (water supply) levels of Nitrate + Nitrite.

*PLEASE NOTE: While direct comparison of the influent (water supply) and effluent numbers is not practical, due to mixing of the waters entering the facility, this Table (DFG Exhibit 1g) is used to show that the water entering the hatchery contains higher levels of Nitrate + Nitrite than the conditions in the permit allow. In addition, it also shows that in most cases our discharge of Nitrate + Nitrite is lower than the levels that enter the hatchery.*

An additional study commissioned by the Department (Final Report Hot Creek Stressors Identification - Jellison 2007) identified that "all of the springbrook nitrate concentrations were above the reporting limit for the entire period from 2000-2006. The mean nitrate concentrations of springbrook AB and CD source waters collected on 14 dates from 2000-2006 was 0.31 and 0.29 mg/L, respectively." (DFG Exhibit 1h).

When the Lahontan Regional Board consultant was developing the current NPDES permit for Hot Creek, there seemed to be inconsistencies on how they addressed the various parameters that need to be reported by the permit holder. Specifically, there was a difference between how Total Suspended Solids and Nitrate+Nitrite levels were to be evaluated. In the case of Total Suspended Solids, the permit calls for a "Net" value to be reported. Hot Creek Hatchery NPDES Permit NO. CA0102776; page 9. This means that the permit holder can take the influent (water supply) value for Total Suspended Solids and subtract it from the effluent (discharge) value and report the "net" difference. This allows for variations in the influent (water supply), so that the permit holder is not held accountable for the water entering their facility, just their contribution to the measured parameter as it leaves the facility.

In the case of Nitrate+Nitrite, the allowable level of discharge is a calculated value that was based on Lahontan Regional Water Quality Control Board's Basin Plan. The numbers defined in the Hot Creek Hatchery NPDES Permit NO. CA0102776 were based on the calculations shown on pages F-48 through F-50 of the same permit. These calculated numbers did not take into account baseline information collected by the hatchery and submitted to the Lahontan Regional Board. The numbers calculated for limits of Nitrate+Nitrite are consistently lower than the levels that are entering the hatchery via the influent (water supply) waters.

### **Timeline of Events related to DFG Reporting Impossible Compliance with NPDES Permit as Issued by Lahontan Regional Board:**

In June 2006, the Lahontan Regional Board adopted a new NPDES permit for Hot Creek Hatchery that established monitoring and discharge limits for the hatchery's operations. Not long after the adoption of the NPDES Permit the Department reported that the conditions set forth in that permit would not be able to be met as a result of the existing natural conditions of the influent (supply

water) for the hatchery. In our September 25, 2006, Self Monitoring Report, the Hatchery Manager requested that either an increase or elimination of flow volume limits be implemented by the Lahontan Board staff (DFG Exhibit 1i). No response was received by the Department.

The Department's request to either increase the flow limits for all discharge points, or eliminate them all together continued and is documented in Lahontan Regional Board Transmittal of Written Materials for Consideration of Complaint NO. R6V-2010-0004; tabs 5, 6, 7, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and 27. These requests began in our first submitted Self Monitoring Report in September 2006 and continued with each subsequent Self Monitoring Report.

In the Spring of 2007 I, in my capacity as the Department's NPDES Coordinator, discussed with Lahontan Regional Board staff the flow volume and Nitrate + Nitrite problem at Hot Creek Hatchery and requested that the Lahontan Regional Board modify the Hot Creek Hatchery NPDES permit to accommodate varying flow and Nitrate + Nitrite levels entering the hatchery. After numerous emails and phone conversations with Board staff, Lahontan Regional Board staff recommended to me that the Department submit a memorandum to the Lahontan Regional Board outlining the problems with the NPDES permit for Hot Creek Hatchery that the Department wanted to discuss with Lahontan Regional Board staff. In response to that recommendation, on October 1, 2007, I sent a memorandum to Mr. Mike Plaziak (Supervising Engineering Geologist and Office Manager South Lahontan Watersheds Division) with a formal request to open up communications for modifying the NPDES permit for flow and Nitrite + Nitrate levels along with other issues at Hot Creek Hatchery. (DFG Exhibit 1j) No response was received to this request.

Beginning in December 2007 and continuing through December 2008 (DFG Exhibits 1k through 1o, respectively) Jim Starr emailed Ms. Mary Dellavalle of the Lahontan Regional Board staff inquiring if any actions had been taken by her management to establish a meeting to discuss the modification of the existing Hot Creek Hatchery NPDES Permit terms Regarding flow volume and Nitrate + Nitrite. Responses were given that staff were busy, staff was aware of the problem with the Hot Creek Hatchery NPDES Permit and that staff would get to it after the February 2008 board meeting. (DFG Exhibit 1k).

On December 5, 2008 the Lahontan Regional Board issued a Notice of Violation (NOV) for a list of violations for the time period of August 14, 2006 to May 5, 2008 (DFG Exhibit 1p). This NOV was issued absent any acknowledgement from the Lahontan Regional Board that the Department had tried to work with the Lahontan Regional Board staff to address these issues early on in this process.

On January 30, 2009, Department staff met with the Lahontan Regional Board staff to discuss the issues related to the December 5, 2008 NOV.. During this meeting the Lahontan Regional Board staff informed the Department that efforts would first be directed at developing a Time Schedule Order for Hot Creek Hatchery to try to address the issues related to flow volume conditions and Nitrate + Nitrite levels in the 2006 Hot Creek Hatchery NPDES Permit.

In March 2009 the Lahontan Regional Board released a proposed Time Schedule Order (R6V-2009) (DFG Exhibit 1q) for public review and comment. It was during this phase of the process that the Department realized that the conditions in the proposed Time Schedule Order could not be met based on the information that we had been collecting with regards to our Influent (water supply) water. See DFG Exhibit 1g.

In May, 2009, the Lahontan Regional Board adopted a Time Schedule Order for the Hot Creek Hatchery (R6V-2009-0016) (DFG Exhibit 1r). The Department is sampling 22 sites at various locations around the hatchery to identify the influent, the effluent, and other potential points where Nitrate + Nitrite levels may be occurring. In addition, the Department is also required to monitor flow data both entering and exiting the facility.

In January, 2010, the Lahontan Regional Board issued an amended Time Schedule Order for Hot Creek Hatchery allowing for increased flexibility to accommodate varying Nitrate + Nitrite levels entering the Hot Creek Hatchery. (DFG Exhibit 1s).

On February 1, 2010 the Lahontan Regional Board issued an Administrative Civil Liability Complaint (DFG Exhibit 1b) against the Department for a total of \$225,000 for alleged violations for the time period August 14, 2006 to May 4, 2009.

## **Closing**

The source water for Hot Creek Hatchery are natural flowing springs. These naturally flowing springs along with the increased water temperatures led to the selection of this site to provide an opportunity for an over-winter growing facility for the various stocks of trout bred and reared at the hatchery. Since this facility was built, the Department has never attempted to alter or restrict the flow of water coming from the spring. The many springs and seeps are the only source of water for the hatchery. The surrounding topography of the hatchery assures that no run-off occurs from nearby water sources (Mammoth Creek).

The Owens tui chub (*Gila bicolor snyderi*) occurs in the naturally flowing spring head waters of the hatchery. The presence of this endangered fish in the AB and CD supply springs limits our ability to manipulate the flow of water in those springs. Given the species requirements and site characteristics, release of surface water down the historic channel/raceway between the AB spring and Hot Creek would be reasonably expected to directly eliminate Owens tui chub population from AB Spring. It is likely that the USFWS would oppose such action that would jeopardize the continued existence of this population of the Owens tui chub, which is only one of a handful left in the world.

It is also unlikely that structures to safely barricade the proposed flow path would be successful at preventing invading fish from moving up the channel and into the critical habitat of the Owens tui chub due to absence of sufficient channel gradient. A reduced flow passing through the hatchery would decrease the number of fish the Department could produce and would also impact our ability to raise healthy fish for release to the angling public.

The Department notified the Lahontan Regional Board staff from the submission of the Self Monitoring Report in September of 2006 that the terms of the NPDES Permit issued for Hot Creek Hatchery in June 2006 were impossible to meet due to conditions beyond our control. DFG has consistently requested modification of the current NPDES Permit since its issuance (DFG Exhibit 1i). The Department continued to contact Lahontan Regional Board staff and requested modification of the June 2006 NPDES Permit for Hot Creek Hatchery. When Lahontan Regional Board staff asked Department staff to put that request in writing, the Department did so (DFG Exhibit 1j). Lahontan Regional Board staff indicated that they "are short handed" and would address DFG's concerns soon (DFG Exhibit 1k). Instead of a meeting to discuss the modification of the Hot Creek Hatchery NPDES Permit, the Department received a Notice of Violation and later an Administrative Civil Liability Complaint. The Department acknowledges the work that the Lahontan Regional Board staff did in 2009 to create the Time Schedule Order (TSO) and the effort of the Lahontan Board itself in adopting the TSO and amending the TSO in January 2010. Today, I believe that the amended TSO should give sufficient flexibility regarding flow volume and Nitrate + Nitrite level for the Hot Creek Hatchery to operate.

As I understand it, this complaint is not about the operation of the Hot Creek Hatchery today. Instead, it is about the 2006 through 2009 period, during which time the Department repeatedly notified the Lahontan Regional Board of the problems with the 2006 permit, requested a modification to the 2006 permit and believed that the Lahontan Regional Board staff would be working with the Department to make that modification happen any day.

#### **Literature Cited:**

Jellison, Robert, et. al.; August 2007; Final Report Hot Creek Hatchery Stressor Identification. UC/Sierra Nevada Aquatic Research Laboratory, HCR 79, Box 198; 1016 Mt. Morrison Rd. Mammoth Lakes, CA 93546 USA

U.S. Fish and Wildlife Service. 1998. Owens Basin Wetland and Aquatic Species Recovery Plan, Inyo and Mono Counties, California. Portland, Oregon.

I, James Starr, declare under penalty of perjury under the laws of the State of California that I have read the foregoing "Testimony of James Starr" and know its contents. The matters stated in are true of my own knowledge except as to those matters which are stated based on information and belief, and as to those matters, I believe them to be true.

Executed on March 5<sup>th</sup>, 2010, at Sacramento, California.

  
James Starr

////

Exhibit 1a

Resume of

**James A. Starr**

Staff Environmental Scientist

California Department of Fish and Game - Fisheries Branch

830 S Street, Sacramento, CA 95336

**Education:**

Wildlife Biology/Fisheries Management, BS, Arizona State University, 1987

**Experience:**

**Staff Environmental Scientist**

December 28, 2006 to Present

California Department of Fish and Game

- Department of Fish and Game (Department) Liaison between our owned and operated hatcheries and their respective Regional Water Quality Control Boards
  - draft and review response documents to Board inquiries
  - interface with Board staff to resolve hatchery NPDES issues
- Department Statewide Hatchery National Pollutant Discharge Elimination System Permit (NPDES) Coordinator
  - established uniform format for hatchery Best Management Practices Plans
- Provide guidance and direction to Department Hatcheries on understanding their respective NPDES Permits
- Provide guidance and direction on hatchery sampling protocols
  - collecting water samples
  - calibrating sampling equipment

**Senior Biologist (M/F) (Supervisor)**

March 2001 - December 28, 2006

California Department of Fish and Game

- Supervised eight full time and two part-time employees of various classifications
- Supervised the Temporary Barriers Project in the Sacramento-San Joaquin Delta
- Department liaison for Department of Water Resources' water related projects in the Sacramento-San Joaquin Delta
- Implemented Streambed Alteration Agreement Program for the Bay-Delta Branch
- Prepare and review CEQA documentation for State and federal water projects
- Negotiated with State and federal water projects to establish mitigation for their related water project impacts based on Department Policies
- Brief and advise Environmental Program Manager and Branch Chief on issues related to environment, State Water Project Operations, and California Bay Delta Authority project development in the Sacramento-San Joaquin Valley

**Associate Marine/Fishery Biologist**  
California Department of Fish and Game

September 1996 to March 2001

- Represented the Department of Fish and Game at inter-agency meetings and negotiations
- Lead-person for the Temporary Barriers Monitoring Program
  - directed the duties of one Range B Biologist (M/F)
  - directed the actions of up to three scientific aides
- Oversee and direct aspects of a limited permit pheasant hunt for the Department of Fish and Game on State owned properties in the Sacramento-San Joaquin Delta
  - directed the duties of eight field and office personnel
  - coordinated with local and state law enforcement personnel
  - worked with State agencies to expand hunting opportunities on State owned lands
- Prepare and present verbal and written reports
- Analyze and research data and incorporate into environmental documentation
- Assist the Senior Biologist in the preparation of Incidental Take Permits
- Prepare and review CEQA documentation for State and Federal projects
- Prepare Streambed Alteration Agreements
- Review proposed State and federal Projects for potential impacts to aquatic resources
- Conduct all aspects of Suisun Marsh Diversion Monitoring Program under contract to the Suisun Resources Conservation District.
- Prepare briefing reports for the CALFED Program.

Exhibit 1b



California Regional Water Quality Control Board  
Lahontan Region



CLC

Linda S. Adams  
Secretary for  
Environmental Protection

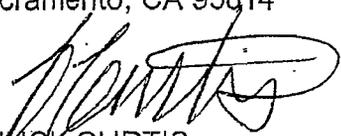
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(530) 542-5400 • Fax (530) 544-2271  
www.waterboards.ca.gov/lahontan

Arnold Schwarzenegger  
Governor

MEMORANDUM

TO: Bruce Kinney, Deputy Regional Manager  
California Dept. of Fish & Game  
407 West Line Street  
Bishop, CA 93514

James Starr, Fisheries Branch  
California Dept. of Fish & Game  
830 S Street  
Sacramento, CA 95814

FROM:   
CHUCK CURTIS  
SUPERVISING WATER RESOURCE CONTROL ENGINEER  
CLEANUP AND ENFORCEMENT DIVISION

DATE: FEB. 01 2010

SUBJECT: COMPLAINT NO. R6V-2010-0004, ISSUED TO THE CALIFORNIA  
DEPARTMENT OF FISH AND GAME FOR MANDATORY MINIMUM  
PENALTY, HOT CREEK FISH HATCHERY, MAMMOTH LAKES, MONO  
COUNTY - WDID NO. 6B260801001

Attached is *Administrative Civil Liability Complaint for Mandatory Minimum Penalty No. R6V-2010-0004* (Complaint). The Complaint contains allegations that the California Department of Fish and Game (DFG) violated effluent limitations specified by Board Order No. R6V-2006-0027, National Pollutant Discharge Elimination System Permit No. CA0102776, from August 14, 2006 through May 4, 2009. The Complaint lists the dates and nature of the violations. In the Complaint, Lahontan Water Board staff proposes that DFG be assessed a mandatory minimum penalty in the amount of **two hundred twenty-five thousand dollars (\$225,000)**.

Waiver of Hearing

Pursuant to Water Code section 13323, the Water Board will hold a hearing on the Complaint no later than 90 days after it is served. DFG may elect to waive its right to a hearing before the Water Board and agree to pay the proposed liability. Waiver of the hearing constitutes acceptance of the assessment of civil liability in the amount of

*California Environmental Protection Agency*

\$225,000, as set forth in the Complaint. If DFG wishes to exercise this option, it must complete the following:

**By 5:00 p.m., March 1, 2010**, an authorized agent must sign the attached waiver and submit it to the Lahontan Water Board's South Lake Tahoe office at the following address:

Lahontan Regional Water Quality Control Board  
Attn: Chuck Curtis, Cleanup and Enforcement Division Manager  
2501 Lake Tahoe Blvd.  
South Lake Tahoe, CA 96150

Please note that DFG's waiver and agreement to pay the proposed liability constitutes a proposed settlement, which will not be effective until reasonable opportunity for public participation has been provided pursuant to Code of Federal Regulations, title 40, section 123.27(d)(2)(iii) and the State Water Resources Control Board's 2002 Enforcement Policy. The Lahontan Water Board will notify interested persons of any proposed settlement and will solicit comments on the settlement for a period of thirty (30) days. Any settlement will not become final until after a public comment period.

As described in the attached waiver, Lahontan Water Board staff may withdraw the Complaint, return payment and issue a new complaint should new information be received during the comment period. If no information is received which causes Water Board staff to withdraw the Complaint, the settlement will be brought before the full Lahontan Water Board for approval at a future meeting. Payment of the liability will be due within 30 days of the settlement becoming final. Payment must be made with a cashier's check or money order and made payable to the *State Water Pollution Cleanup and Abatement Account*.

### **Public Hearing**

Alternatively, if DFG elects to proceed to a public hearing, a hearing is tentatively scheduled to be held at the Lahontan Water Board meeting on **April 14-15, 2010**. The meeting is scheduled to convene at a time and location as announced in the Lahontan Water Board meeting agenda. The agenda will be issued at least ten days before the meeting and will be posted on the Lahontan Water Board web page at [www.waterboards.ca.gov/lahontan](http://www.waterboards.ca.gov/lahontan). At that time, the Lahontan Water Board will accept testimony and public comment and decide whether to affirm, reject, or modify the proposed liability, or whether to refer the matter for judicial civil action.

To ensure the Lahontan Water Board has the opportunity to fully consider written comments, all comments must be submitted in accordance with the deadlines identified in the hearing procedures that will be sent to you under separate cover. Written objections and materials submitted after the deadlines specified in the hearing

Bruce Kinney  
James Starr

- 3 -

procedures will not be accepted, except at the discretion of the Lahontan Water Board Chair. Untimely written material or objections will not be accepted or incorporated into the record if doing so would prejudice the Water Board or any Designated Party. The Chair may choose to modify this rule upon a showing of severe hardship. (Cal Code Regs., title 23, sections 648.1 and 648.4.) Any person seeking to submit late written materials must justify why the materials could not have been submitted earlier.

Please contact State Water Resources Control Board Office of Enforcement Attorney Mayumi Okamoto at (916) 341-5674, or Taylor Zentner at (530) 542-5469 if you have any questions concerning this matter.

Attachments: 1. Complaint No. R6V-2010-0004  
2. Waiver Form

cc: Harold J. Singer, Executive Officer/Lahontan Water Board  
Mayumi Okamoto, Staff Counsel/SWRCB, Office of Enforcement  
David Coupe, Staff Counsel/SWRCB, Office of Chief Counsel  
Hot Creek Hatchery Mailing List

TBZ/chT: Hot Creek MMP ACL – Cover Memo, 1-20-2010  
File: SLT/VVL: Hot Creek Hatchery WDID No. 6B260801001

*California Environmental Protection Agency*

 Recycled Paper

**HOT CREEK FISH HATCHERY  
MAILING LIST**

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STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

In the Matter of California Department  
of Fish and Game: Violation of Effluent  
Limitations Contained in Board Order  
No. R6V-2006-0027 for the Hot Creek  
Fish Hatchery, Mammoth Lakes,  
Mono County, WDID No. 6B260801001

)  
) COMPLAINT NO.  
) R6V-2010-0004  
) FOR MANDATORY  
) ADMINISTRATIVE CIVIL  
) LIABILITY

This Complaint to assess mandatory minimum penalties pursuant to California Water Code (Water Code) sections 13385(h) and (i) is issued to the California Department of Fish and Game (Discharger) based on findings of violations of Waste Discharge Requirements specified for Hot Creek Fish Hatchery (Facility) by the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board), Board Order No. R6V-2006-0027, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0102776.

Staff of the Lahontan Water Board finds the following:

1. On June 14, 2006, the Lahontan Water Board adopted Board Order No. R6V-2006-0027, NPDES Permit No. CA0102776.
2. Water Code section 13385(h)(1) requires the Lahontan Water Board to assess a mandatory minimum penalty of three thousand dollars (\$3,000) for each **serious violation**.
3. Water Code section 13385(h)(2) provides that a **serious violation** occurs if the discharge exceeds the effluent limitations (a) by 40 percent or more for a Group I pollutant, as specified in Appendix A to section 123.45 of title 40, Code of Federal Regulations, or (b) by 20 percent or more for a Group II pollutant, as specified in Appendix A to section 123.45 of title 40, Code of Federal Regulations.
4. Water Code section 13385(i) requires the Lahontan Water Board to assess a mandatory minimum penalty of three thousand dollars (\$3,000) for each violation, not counting the first three violations, if the discharger does any of the following four or more times in a period of six consecutive months (**chronic violations**):
  - a. violates a waste discharge requirement effluent limitation;
  - b. fails to file a report pursuant to Water Code section 13260;
  - c. files an incomplete report pursuant to Water Code section 13260; or

- d. violates a toxicity effluent limitation contained in the applicable waste discharge requirements where the waste discharge requirements do not contain pollutant-specific effluent limitations for toxic pollutants.
5. Water Code section 13385(i)(2) defines a "period of six consecutive months" as, "...the period commencing on the date that one of the violations described in this subdivision [Water Code section 13385(i), or Finding No. 4 of this Complaint] occurs and ending 180 days after that date." However, **serious violations** may qualify as chronic violations for the purposes of determining a "period of six consecutive months," and may count as the first three **chronic violations**, though such violations are not counted twice for the purpose of assessing the penalty amount.
6. Nitrite plus nitrite as nitrogen and flow are Group I pollutants.
7. The NPDES Permit includes the following discharge specifications:
  - a. Section IV.A.1.b requires wastewater discharged from the Facility not to exceed the following effluent limits for nitrate plus nitrite as nitrogen at monitoring locations M-001, M-002, M-003, and M-004:
    - i. 0.23 mg/L Average Monthly
    - ii. 0.31 mg/L Maximum Daily
  - b. Section IV.A.1.b requires wastewater discharged from the Facility not to exceed the following effluent limits for flow:
    - i. At M-001, 6.9 million gallons per day (MGD)
    - ii. At M-002, 6.5 MGD
    - iii. At M-003, 3.8 MGD
    - iv. At M-004, 2.5 MGD
9. Water Code section 13385.1(a)(1) provides that a **serious violation** also means a failure to file a discharge monitoring report required pursuant to Section 13383.
10. According to monitoring reports submitted by the Discharger from August 1, 2006 through May 31, 2009, the Discharger violated the NPDES Permit effluent limitations as listed in the table of violations provided in Attachment A, which is made a part of this Complaint. Additionally, the Discharger failed to submit the monitoring report that was to provide the monthly monitoring results for July 2006, which is also identified in Attachment A.
11. According to the definitions of **serious violations** in Finding Nos. 3 and 9, the Discharger committed 16 serious violations from August 14, 2006 to May 4, 2009, as shown on lines 2, 7, 37, 38, 41, 48, 51, 53, 69 through 72, and 74 through 77 of the table of violations provided in Attachment A of this Complaint. The amount of the mandatory minimum penalty for the 16

serious violations (\$3,000 for each of the 16 violations) is forty-eight thousand dollars (\$48,000).

12. According to the definition of **chronic violations** in Finding No. 4, the Discharger committed 74 chronic violations from September 2006 through May 4, 2009, as shown on lines 4 through 77 of the table of violations provided in Attachment A of this Complaint. Fifteen of these violations also constitute **serious violations** as noted in Finding Nos. 3 and 9. However, these 15 violations do not result in double penalties. The 74 **chronic violations** less the 15 **serious violations** to avoid double penalty results in 59 remaining **chronic violations**. The amount of the mandatory minimum penalty for the 59 remaining **chronic violations** (\$3,000 for each of the 59 violations) is one hundred seventy-seven thousand dollars (\$177,000).
13. The total amount of the mandatory minimum penalty from August 14, 2006 through May 4, 2009 is (\$48,000 + \$177,000) two hundred twenty-five thousand dollars (\$225,000).
14. Issuance of this Complaint is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.) in accordance with the California Code of Regulations title 14, chapter 3, section 15321.

**THE CALIFORNIA DEPARTMENT OF FISH AND GAME IS HEREBY GIVEN NOTICE THAT:**

1. Staff of the Lahontan Water Board proposes that the Discharger be assessed a mandatory minimum penalty in the amount of two hundred twenty-five thousand dollars (\$225,000), pursuant to Water Code section 13385.
2. The Lahontan Water Board will hold a public hearing on this matter at its **April 14 and 15, 2010** meeting, unless the Discharger agrees to waive its right to a public hearing by filling out, signing, and submitting the enclosed "Waiver of Hearing." If the Discharger chooses not to waive its right to a public hearing, the Lahontan Water Board may proceed with the scheduled public hearing and consider testimony received from interested persons during the public hearing and decide whether to accept the amount of proposed mandatory minimum penalty. The Lahontan Water Board may also decide to continue the matter to a future hearing, direct the Cleanup and Enforcement Division Manager to reissue the Complaint to propose additional penalties under Water Code section 13385(c) and (e), or refer the matter to the California Attorney General. The public hearing is scheduled at the regularly scheduled Lahontan Water Board meeting on **April 14 and 15, 2010**, at a location and time yet to be determined. A notice of the

location and time of the meeting will be provided no less than 10 days before the meeting.

3. Notwithstanding the issuance of this Complaint, the Lahontan Water Board shall retain the authority to assess additional penalties for violations of the requirements of the Discharger's waste discharge requirements for which penalties have not yet been assessed or for violations that may subsequently occur.

### WAIVER OF HEARING

You may waive the right to a hearing. Waiver of your right to a hearing constitutes acceptance of the assessment of civil liability in the amount set forth within the Complaint. If you wish to waive your right to a hearing, an authorized person must sign the Waiver of Hearing form prepared for this Complaint, and submit it to the address below.

Lahontan Regional Water Quality Control Board  
Attn: Chuck Curtis, Cleanup and Enforcement Division Manager  
2501 Lake Tahoe Boulevard  
South Lake Tahoe, CA 96150

Please note that any settlement will not be effective until reasonable opportunity for public participation has been provided pursuant to Code of Federal Regulations, title 40, section 123.27(d)(2)(iii) and the State Water Resources Control Board's 2002 Enforcement Policy. The Lahontan Water Board will notify interested persons of any proposed settlement and will solicit comments on the settlement for a period of thirty (30) days. Any settlement will not become final until after a public comment period.

Payment of the liability will be due within 30 days of the settlement becoming final. Payment must be made with a cashier's check or money order and made payable to the *State Water Pollution Cleanup and Abatement Account*.

  
\_\_\_\_\_  
CHUCK CURTIS  
CLEANUP AND ENFORCEMENT  
DIVISION MANAGER

*February 1, 2010*  
\_\_\_\_\_  
Date

Attachment: A - Table of Violations

## Attachment A - Table of Violations

**Hot Creek Hatchery MMP Violations Table**

| No. | Date       | Violation Type   | Location  | Parameter              | Description   | MMP |
|-----|------------|------------------|-----------|------------------------|---|-----|
| 1   | 8/14/2006  |                  | M-004     | Flow                   | Flow rate of 3.16 MGD at M-004 exceeds the Effluent Limit of 2.5 MGD  | 0   |
| 2   | 9/2/2006   | Serious          | Reporting | Reporting              | July 2006 monthly SMR due on September 1, 2006. July 2006 monthly SMR never received                              | 1   |
| 3   | Sep-06     |                  | M-002     | Flow                   | Flow rate of 7.0 MGD at M-002 exceeds the Effluent Limit of 6.5 MGD   | 0   |
| 4   | Sep-06     | Chronic          | M-001     | Flow                   | Flow rate of 7.0 MGD at M-001 exceeds the Effluent Limit of 6.9 MGD   | 1   |
| 5   | Sep-06     | Chronic          | M-004     | Flow                   | Flow rate of 2.7 MGD at M-004 exceeds the Effluent Limit of 2.5 MGD   | 1   |
| 6   | 9/18/2006  | Chronic          | 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                  | 1   |
| 7   | 9/18/2006  | Serious*/Chronic | 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 by more than 40% | 1   |
| 8   | 9/18/2006  | Chronic          | M-004     | Nitrate + Nitrite      | Analytical result of 0.322 mg/L at M-004 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L            | 1   |
| 9   | 10/23/2006 | Chronic          | M-002     | Flow                   | Flow rate of 6.7 MGD at M-002 exceeds the Effluent Limit of 6.5 MGD   | 1   |
| 10  | 11/13/2006 | Chronic          | 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                  | 1   |
| 11  | 11/13/2006 | Chronic          | M-002     | Nitrate + Nitrite      | Analytical result of 0.238 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.23 mg/L                  | 1   |
| 12  | 11/13/2006 | Chronic          | 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                  | 1   |
| 13  | 11/13/2006 | Chronic          | 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                  | 1   |
| 14  | 11/29/2006 | Chronic          | M-001     | Potassium Permanganate | Analytical result of 0.674 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.12 mg/L                  | 1   |
| 15  | 11/29/2006 | Chronic          | 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            | 1   |
| 16  | 11/29/2006 | Chronic          | M-002     | Potassium Permanganate | Analytical result of 0.743 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.12 mg/L                  | 1   |
| 17  | 11/29/2006 | Chronic          | 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            | 1   |
| 18  | 3/26/2007  | Chronic          | M-003     | Flow                   | Flow rate of 4.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 19  | 3/26/2007  | Chronic          | 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                  | 1   |
| 20  | 3/26/2007  | Chronic          | 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                  | 1   |
| 21  | 3/26/2007  | Chronic          | 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                  | 1   |
| 22  | 3/26/2007  | Chronic          | 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                  | 1   |
| 23  | 5/7/2007   | Chronic          | M-003     | Flow                   | Flow rate of 4.1 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 24  | 6/4/2007   | Chronic          | M-003     | Flow                   | Flow rate of 4.94 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD  | 1   |
| 25  | 6/4/2007   | Chronic          | 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                  | 1   |
| 26  | 6/4/2007   | Chronic          | 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                  | 1   |
| 27  | 7/9/2007   | Chronic          | M-003     | Flow                   | Flow rate of 4.6 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 28  | 8/6/2007   | Chronic          | M-003     | Flow                   | Flow rate of 4.18 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD  | 1   |
| 29  | 9/10/2007  | Chronic          | M-003     | Flow                   | Flow rate of 4.2 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 30  | 9/10/2007  | Chronic          | 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                  | 1   |
| 31  | 9/10/2007  | Chronic          | 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                  | 1   |
| 32  | 12/10/2007 | Chronic          | 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                  | 1   |
| 33  | 2/4/2008   | Chronic          | M-003     | Flow                   | Flow rate of 4.30 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD  | 1   |
| 34  | 3/3/2008   | Chronic          | M-003     | Flow                   | Flow rate of 4.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 35  | 3/3/2008   | Chronic          | 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                  | 1   |
| 36  | 3/3/2008   | Chronic          | 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                  | 1   |
| 37  | 3/3/2008   | Serious*/Chronic | 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 by more than 40% | 1   |
| 38  | 3/3/2008   | Serious*/Chronic | 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 by more than 40% | 1   |
| 39  | 3/3/2008   | Chronic          | 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            | 1   |
| 40  | 3/3/2008   | Chronic          | 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            | 1   |
| 41  | 4/7/2008   | Serious*/Chronic | M-003     | Flow                   | Flow rate of 5.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD by more than 40%                              | 1   |
| 42  | 5/5/2008   | Chronic          | M-003     | Flow                   | Flow rate of 5.30 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD  | 1   |
| 43  | 6/2/2008   | Chronic          | 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                  | 1   |
| 44  | 6/2/2008   | Chronic          | 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                  | 1   |
| 45  | 6/2/2008   | Chronic          | 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            | 1   |
| 46  | 6/2/2008   | Chronic          | 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                  | 1   |
| 47  | 6/2/2008   | Chronic          | M-003     | Flow                   | Flow rate of 5.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 48  | 6/2/2008   | Serious*/Chronic | 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 by more than 40% | 1   |
| 49  | 6/2/2008   | Chronic          | 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            | 1   |

## Attachment A - Table of Violations

**Hot Creek Hatchery MMP Violations Table - Continued**

| No.                                    | Date      | Violation Type   | Location | Parameter         | Description   | MMP       |
|--|-----------|------------------|----------|-------------------|---|-----------|
| 50                                     | 7/7/2008  | Chronic          | M-001    | Flow              | Flow rate of 7.0 MGD at M-001 exceeds the Effluent Limit of 6.9 MGD   | 1         |
| 51                                     | 7/7/2008  | Serious*/Chronic | M-003    | Flow              | Flow rate of 6.0 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD by more than 40%                                    | 1         |
| 52                                     | 8/4/2008  | Chronic          | M-001    | Flow              | Flow rate of 7.3 MGD at M-001 exceeds the Effluent Limit of 6.9 MGD   | 1         |
| 53                                     | 8/4/2008  | Serious*/Chronic | M-003    | Flow              | Flow rate of 6.6 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD by more than 40%                                    | 1         |
| 54                                     | 9/8/2008  | Chronic          | 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                        | 1         |
| 55                                     | 9/8/2008  | Chronic          | M-003    | Flow              | Flow rate of 4.8 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1         |
| 56                                     | 9/8/2008  | Chronic          | 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                        | 1         |
| 57                                     | 9/8/2008  | Chronic          | 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                  | 1         |
| 58                                     | 10/6/2008 | Chronic          | M-003    | Flow              | Flow rate of 4.0 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1         |
| 59                                     | 11/2/2008 | Chronic          | M-003    | Flow              | Flow rate of 4.0 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1         |
| 60                                     | 12/1/2008 | Chronic          | 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                        | 1         |
| 61                                     | 12/1/2008 | Chronic          | 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                        | 1         |
| 62                                     | 12/1/2008 | Chronic          | M-003    | Nitrate + Nitrite | Analytical result of 0.254 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L                        | 1         |
| 63                                     | 12/1/2008 | Chronic          | M-003    | Flow              | Flow rate of 4.0 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1         |
| 64                                     | 12/1/2008 | Chronic          | 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                        | 1         |
| 65                                     | 1/5/2009  | Chronic          | M-003    | Flow              | Flow rate of 3.9 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1         |
| 66                                     | 2/2/2009  | Chronic          | M-003    | Flow              | Flow rate of 3.88 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD  | 1         |
| 67                                     | 3/2/2009  | Chronic          | M-001    | Nitrate + Nitrite | Analytical result of 0.272 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.23 mg/L                        | 1         |
| 68                                     | 3/2/2009  | Chronic          | M-002    | Nitrate + Nitrite | Analytical result of 0.266 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.23 mg/L                        | 1         |
| 69                                     | 3/2/2009  | Serious*/Chronic | M-003    | Nitrate + Nitrite | Analytical result of 1.07 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L by more than 40%        | 1         |
| 70                                     | 3/2/2009  | Serious*/Chronic | M-003    | Nitrate + Nitrite | Analytical result of 1.07 mg/L at M-003 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L by more than 40%  | 1         |
| 71                                     | 3/2/2009  | Serious*/Chronic | M-004    | Nitrate + Nitrite | Analytical result of 0.72 mg/L at M-004 exceeds the Average Monthly Effluent Limit of 0.23 mg/L by more than 40%        | 1         |
| 72                                     | 3/2/2009  | Serious*/Chronic | M-004    | Nitrate + Nitrite | Analytical result of 0.72 mg/L at M-004 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L by more than 40%  | 1         |
| 73                                     | 5/4/2009  | Chronic          | 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                        | 1         |
| 74                                     | 5/4/2009  | Serious*/Chronic | M-003    | Nitrate + Nitrite | Analytical result of 0.613 mg/L at M-003 exceeds the Average Monthly Effluent Limit of 0.23 mg/L by more than 40%       | 1         |
| 75                                     | 5/4/2009  | Serious*/Chronic | M-003    | Nitrate + Nitrite | Analytical result of 0.613 mg/L at M-003 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L by more than 40% | 1         |
| 76                                     | 5/4/2009  | Serious*/Chronic | M-004    | Nitrate + Nitrite | Analytical result of 0.624 mg/L at M-004 exceeds the Average Monthly Effluent Limit of 0.23 mg/L by more than 40%       | 1         |
| 77                                     | 5/4/2009  | Serious*/Chronic | M-004    | Nitrate + Nitrite | Analytical result of 0.624 mg/L at M-004 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L by more than 40% | 1         |
| <b>Total Violations Subject to MMP</b> |           |                  |          |                   |   | <b>75</b> |

First three of four violations occurring in a period of six consecutive months. Only the serious violation on Line 2 is subject to MMP.

\* - One of the 15 serious violations that are not included in the MMP calculation for chronic violations.

**WAIVER FORM  
FOR ADMINISTRATIVE CIVIL LIABILITY COMPLAINT**

By signing this waiver, I affirm and acknowledge the following:

I am duly authorized to represent California Department of Fish and Game (hereinafter "Discharger") in connection with Administrative Civil Liability Complaint No. R6V-2010-0004 (hereinafter the "Complaint"). I am informed that California Water Code section 13323, subdivision (b), states that, "a hearing before the regional board shall be conducted within 90 days after the party has been served [with the complaint]. The person who has been issued a complaint may waive the right to a hearing."

**(OPTION 1: Check here if the Dischargers waive the hearing requirement and will pay the liability.)**

- a. I hereby waive any right the Discharger may have to a hearing before the Regional Water Board.
- b. I certify that the Discharger will remit payment for the civil liability imposed in the total amount of **two hundred twenty-five thousand dollars (\$225,000)** by check that references "ACL Complaint No. R6V-2010-0004" made payable to the "*State Water Pollution Cleanup and Abatement Account*."
- c. I understand the payment of the above amount constitutes a proposed settlement of the Complaint, and that any settlement will not become final until after the 30-day public notice and comment period mandated by Federal regulations (40 CFR 123.27) expires. Should the Regional Water Board receive significant new information or comments from any source during this comment period, the complaint may be withdrawn, payment returned, and a new complaint issued. I understand that this proposed settlement is subject to approval by the Lahontan Water Board, and that the Lahontan Water Board may consider this proposed settlement in a public meeting or hearing. I also understand that approval of the settlement will result in the Discharger having waived the right to contest the allegations in the Complaint and the imposition of civil liability. Payment of two hundred twenty-five thousand dollars (\$225,000) will be due within 30 days of the settlement becoming final after the settlement receives Lahontan Water Board approval.
- d. I understand that payment of the above amount is not a substitute for compliance with applicable laws and that continuing violations of the type alleged in the Complaint may subject the Discharger to further enforcement, including additional civil liability.

**(OPTION 2: Check here if the Discharger waives the 90-day hearing requirement in order to extend the hearing date and/or hearing deadlines.)**

I hereby waive any right the Discharger may have to a hearing before the Lahontan Water Board within 90 days after service of the complaint, but I intend to request a hearing in the future. By checking this box, the Discharger requests that the Lahontan Water Board delay the hearing and/or hearing deadlines so that the Discharger may have additional time to prepare for the hearing. It remains within the discretion of the Lahontan Water Board to agree to delay the hearing.

\_\_\_\_\_  
(Print Name and Title)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

Exhibit 1c

ilities are available. Finger-hatchery for airplane stocking -Inyo area. It was at Mount agate the famous California th eggs taken at Cottonwood rmitantly ever since.



By means of two trucks such as this to the railroad station. Photograph by

program carried on at this important part of the work. y bred spawners, are kept at about 10,000,000 eggs, which the State and are also ex-untries.

station—1918-1920, .  
resent

y surveys were made of the o ascertain whether it would f golden trout.

a rugged, almost inaccessible County line, at the head of 1,150 feet. The lakes were trout from Mulkey Creek, a River. It was found that a and furnish excellent spawn-traps were installed and ar-he proper time the following ent, and supplies had to be . The spawning crew reached st of the fish ascending the eggs were taken and trans-

ported by pack animals to Mount Whitney Hatchery. The resulting fry were distributed in waters of that area.

The remoteness of the site from railroads, highways, or human habitation, the high altitude, and severe weather conditions make the trip during the spring months a hazardous undertaking. Nevertheless, the work has been continued and crews have gone into the lakes many seasons to obtain golden trout eggs. The early success of the operation was due to the skill and resourcefulness of George McCloud, who was in charge of Mount Whitney Hatchery and the golden trout egg collecting operations at Cottonwood Lakes during the period 1917 through 1941.

#### Kern River Experimental Hatchery—1927

#### Kern River Hatchery—1928—Present

*Located about 1 mile north of Kernville on the Johnsondale Road, Kern County*

During the latter part of July 1927, Dr. George A. Coleman, the first freshwater fisheries biologist employed by the former Bureau of Fish Culture, carried out a biological survey of the Kern River in the vicinity of Kernville, Kern County. Dr. Coleman recommended that an experimental hatchery be installed.

Experiments to determine the suitability of the water in Kern River below Kern No. 1 Powerhouse for fish cultural purposes got under way in October 1927. The work was done under the direction of J. H. Vogt, who in later years became Assistant Chief, Bureau of Fish Conservation.

Considerable difficulty in rearing fish at the experimental hatchery was encountered and in June 1928 it was decided to move the remaining fish to the ponds of the Kern County Sportsmen's Club. Results at the sportsmen's ponds were sufficiently encouraging to establish a permanent hatchery at the location.

The hatchery was enlarged and improved from time to time and in 1950-51, \$47,588.64 from Wildlife Conservation Board funds was spent for further expansion and improvements. At present the hatchery has 14 natural raceway type ponds, with necessary appurtenances. It produces 126,000 fingerlings and 350,000 catchable-sized trout annually.

#### Hot Creek Experimental Hatchery—1928-1931

#### Hot Creek Hatchery—1931—Present

*Located about midway between Bishop and Lee Vining, Mono County*

Hot Creek Hatchery is situated in a large mountain meadow, 7,100 feet above sea level. Numerous springs with a temperature range from 52 to 60 F rise and flow in several watercourses through the meadow and into Hot Creek.

Hot Creek derives its name from the numerous hot springs that join it along its course, which bubble up near and in the stream in the vicinity of the hatchery. A temperature of 182 F was recorded in one of the hot springs near the hatchery.

The first attempt to rear fish at the location was made by the Rainbow Club of Bishop in the fall of 1928. One earthfill pond was constructed but soon washed out. In 1929, a concrete dam was constructed to form a pond and on February 14, 1930, 10,000 steelhead fingerlings were placed in the pond. Due to an abundance of amphipods and a

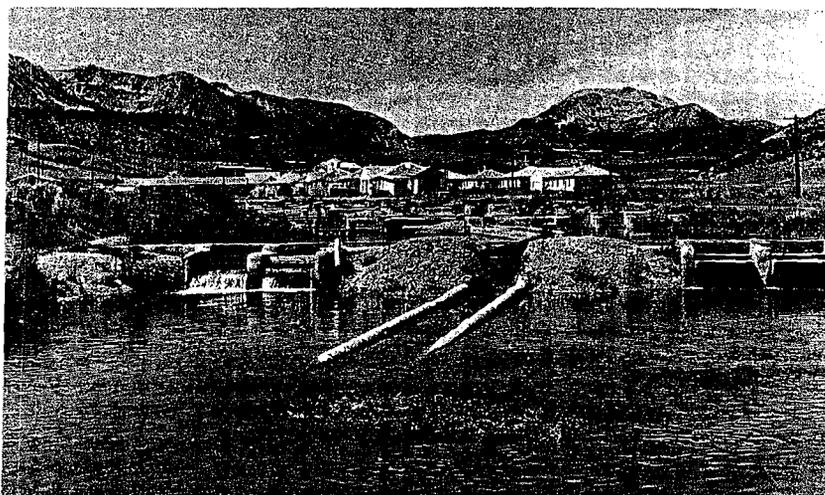


FIGURE 36. Hot Creek Hatchery, 1959.

constant temperature of nearly 60 F, the fish grew rapidly. This clearly demonstrated the advantage of a warmwater trout hatchery. One of the great difficulties previously encountered in fish cultural work in California was the lack of suitable water for winter growth. The then Division of Fish and Game, Bureau of Fish Conservation, became interested in the property and started construction of two ponds on November 16, 1931. These ponds were completed December 4, 1931. The new ponds were first stocked with fingerlings on July 8, 1932.

The Hot Creek location was California's first warmwater trout hatchery and experiments in rearing fish to catchable size at a growth rate of about one inch per month were carried on for several seasons.

To take advantage of the winter growing season, a shipment of fall-spawning rainbow eggs from selectively bred stock was received at Hot Creek Hatchery from Springville, Utah, in 1933. This formed the nucleus of the present Hot Creek rainbow stock.

During the year 1940, the City of Los Angeles Department of Water and Power undertook construction of Grant Lake Dam on Rush Creek and Long Valley Dam on the Owens River, the latter dam forming Crowley Lake. Fishways over these dams were not feasible. An agreement was entered into between the Fish and Game Commission and the City of Los Angeles, whereby in lieu of the construction of fishways the City granted the Commission permanent use of the Hot Creek Hatchery site and contributed \$25,000 toward the construction of the present Hot Creek Hatchery.

Construction was started in the spring of 1941. The new hatchery consisted of 38 ponds, 10 nursery tanks, and 30 troughs, together with broodstock ponds and necessary appurtenances. Output now amounts to about 5,500,000 catchable-sized trout, 700,000 fingerlings, and 13,000,000 eggs annually.

Exhibit 1d

Hot Creek Hatchery  
Route 3, Box 208  
Bishop, CA 93514  
Tel: 714-935-4210

**HISTORY:**

Construction was begun in 1941. In October 1953, WCB allocated \$96,000 for hatchery expansion; in January 1956, \$19,800 was allocated for the construction of a duplex. The duplex was completed in 1956.

**LOCATION:**

Off Highway 395, about 37 miles north of Bishop or 3.5 miles south of Casa Diablo Hot Springs in Mono County. Watch for the sign.

**PHYSICAL DESCRIPTION:**

In the E $\frac{1}{2}$  of the SE $\frac{1}{4}$  of Sec. 34; the S $\frac{1}{2}$  of the NW $\frac{1}{4}$  of the SW $\frac{1}{4}$ ; the S $\frac{1}{2}$  of the NE $\frac{1}{4}$  of the SW $\frac{1}{4}$ ; the SW $\frac{1}{4}$  of the SW $\frac{1}{4}$  of the SE $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Sec. 35, all in T 3 S, R 28 E, MDB&M, It is approximately 140 acres.

The lessor of the land this hatchery is on is the Board of Water and Power Commission of the City of Los Angeles. This lease came into effect in 1940 and is effective for 99 years. The charge for this lease is \$1.00 per year.

The lease states that the City of Los Angeles is the owner of all real property and water and water rights. The State may use the land for constructing, operating, and maintaining a fish hatchery station and fish cultural operations. The State may use the water flowing across, developed upon, or naturally arising on the property for hatchery operation.

**WATER SUPPLY:**

The hatchery water supply is derived from five main springs and numerous smaller springs. The two upper springs supply water for the rearing ponds and nursery tanks. The three lower springs supply water for hatchery troughs, incubators, and broodstock ponds. The flow and temperature characteristics of the springs are as follows:

|                           | <u>Flow cfs</u> | <u>Temperature F</u> |
|---------------------------|-----------------|----------------------|
| A-B supply                | 7               | 62                   |
| C-D supply                | 7               | 60                   |
| Hatchery I (upper spring) | 1               | 57                   |
| Hatchery I (lower spring) | 2               | 56                   |
| Hatchery I and III        | 3               | 55                   |
| Total flow                | <u>20 cfs</u>   | <u>Average 58</u>    |

Exhibit 1e

## Description of Sample and Flow Sites

- (S001) - AB Springs- AB spring supply channel just upstream of AB grizzley. Flow measurements provided by the United States Geologic Service (USGS) real time monitoring station.
- (S002) - CD Springs-CD spring supply channel at USGS Parshall Flume structure. Flow measurements provided by USGS and or hatchery staff.
- (PSHI-C) - Production Series-Head boxes for raceway series where AB and CD inflow waters are mixed for each series before flowing down the raceways. Sample taken from Head box C.
- (RDI-SP1) - Raceway series discharge to Settling Pond 1-Sample taken at inflow pipeline at the head of settling pond 1.
- (RDI-SPII) - Raceway series discharge to Settling Pond II-Sample taken at inflow pipeline at the head of settling pond II.
- (M-001) - Settling Pond I Discharge-Sample taken at outflow of settling pond I. Flow measurements taken below outfall at head of outlet channel for settling pond I.
- (M-002) - Settling Pond II Discharge –Sample taken at outfall of settling pond II. Flow measurements taken at flume below outfall of settling pond.
- (ABSC) - AB Side Channel-Old meandering channel starting just below AB grizzley running easterly on the Northern border of the facility joining near the start of settling pond I discharge channel This channel receives flows from high water table drains and seeps from general area on the upper Northeast side of the facility. Samples and flows taken just above confluence with Settling Pond 1 effluent channel.
- (HCUB-1) - Upper region of Hot Creek-Sample taken midway between boundary fence and confluence of Mammoth Creek.
- (R-001) - Mammoth Creek-Samples taken at point 25 feet above confluence with Hot Creek. Flows measurements taken at USGS station 150 yards upstream of confluence with Hot Creek.
- (HCMR) - Hot Creek midway region-Sample taken midway between Mammoth Creek confluence and Brood II discharge channel.
- (R-002) - Hot Creek Lower-Sample taken at a point 50 feet below confluence with Brood II channel and flow.

## Description of Sample and Flow Sites - continued

- (CDSC-1) - CD Side Channel- Old meandering channel just below CD grizzly which receives high water table drain water along with various seeps and flows from Southern general area of the facility, the channel running easterly and flows to the head of McBurney Settling Pond. Samples and flows taken at point where channel flows under parking lot road.
- (S-003-1) - Hatchery 1 Spring Supply- This spring group has multiple supplies that contribute to the final discharge. To address this issue, reasonable attempts will be made to measure and sample the most significant supplies. The first samples will be taken at the head of the brood series and will reflect the mixture of the water entering the brood series and will be measured mid way down brood pond.
- (S-003-2) - When Hatchery I Building is in use, inflow sample will be taken at the line supplying the hatchery deep tanks and will reflect the covered spring supply only.
- (HBD-1) Sample is taken at the discharge point as the effluent exits the structure and flows measured coming into the building.
- (DSH1) - An additional sample will be taken at the discharge point below spawning house 1.
- (MBT-1) - A measurable tributary to McBurney Pond\* north of the spawning house will be sampled and flow measured).
- \*Below the Brood 1 series and spawning house 1 are other supplemental springs that flow into McBurney Pond but for all intensive purposes due to there minute volume, flows would be non measurable.*
- (M-003) - McBurney Pond Discharge- Samples and flow measurements will be taken at the outflow of the pond.
- (S-004-1) - Hatchery II Spring Supply- Samples would be collected at the pipe inflow from the covered spring to the brood series headbox.
- (S-004-2) - A portion of the water that enters the brood series is diverted into the Hatchery II building. After the water passes through the hatchery building and prior to it entering the brood series a sample and flow measurement will be taken at the floor drain just prior to exiting the building. Total flow of the Hatchery II Spring Supply will be measured midway down brood series II, pond 1.
- (M-004) - Outfall spawning House II-Samples will be collected at the USGS flow measurement station and a discharge flow measurement.
- (SHDC) - Spawning House II Discharge Channel- Samples will be collected just above the confluence with Hot Creek.

# HOT CREEK HATCHERY SAMPLE SITE MAP

ATTACHMENT A: HOT CREEK HATCHERY FACILITY PLAN

Revised 10/09/2009

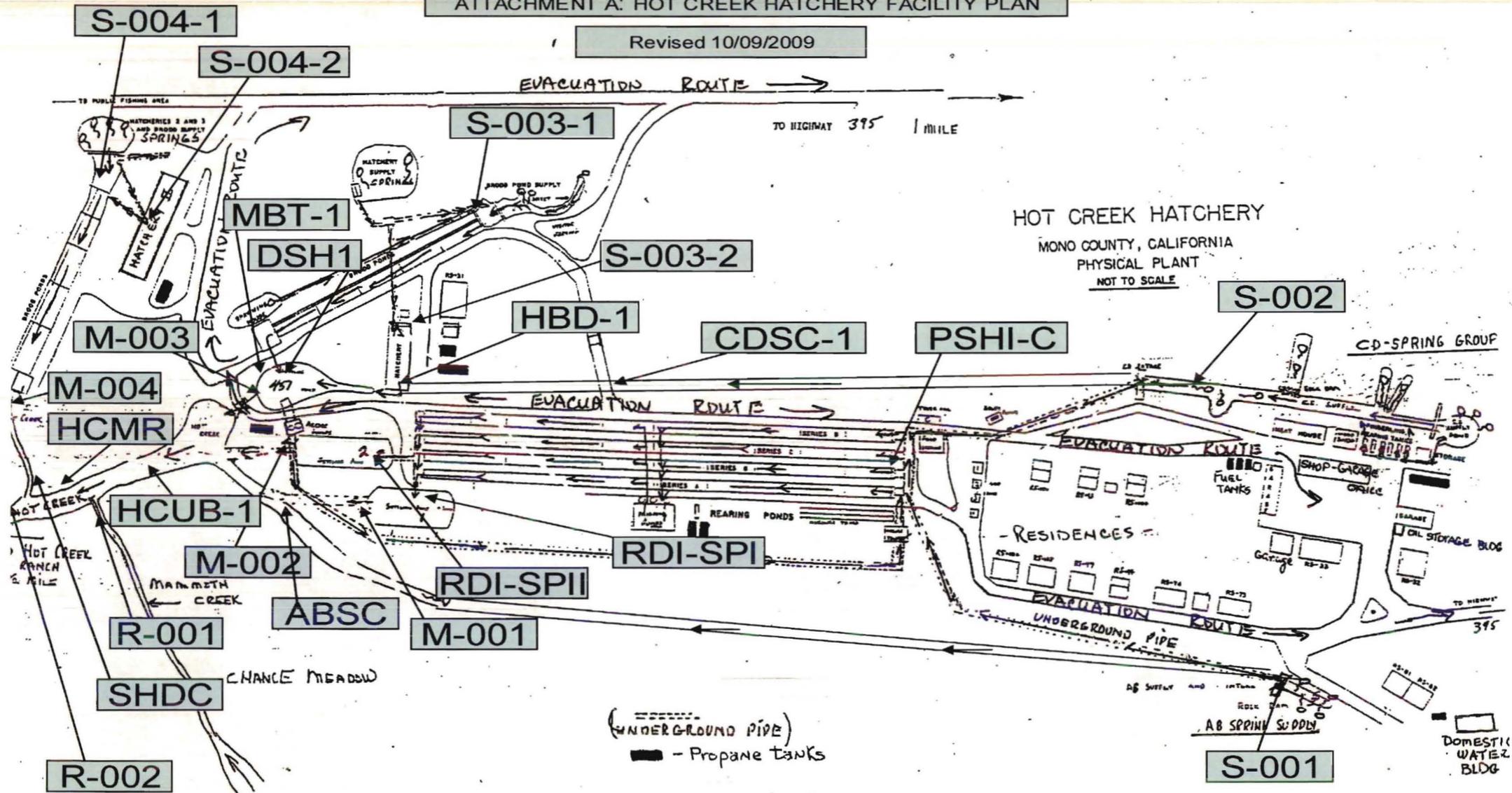


Exhibit 1f

The Board standard for discharge flow during the period that the violations were accrued was: a Maximum Daily level M001 = 6.9 mgd; M002 = 6.5 mgd; M003 = 3.8 mgd; and M004 = 2.5 mgd.

Red numbers represent water supply Nitrate + Nitrite levels that were higher than the Board standard for discharge.

| Month/Year    | Influent (Water Supply) |      | Effluent (Discharge) |      |
|---------------|-------------------------|------|----------------------|------|
|               | Sample Site             | MG/D | Sample Site          | MG/D |
| December 2008 | S001                    | 2.3  | M001                 | 5.8  |
|               | S002                    | 4.4  | M002                 | 2.1  |
|               | S003                    | 4.0  | M003                 | 4.0  |
|               | S004                    | 6.94 | M004                 | 2.1  |
| January 2009  | S001                    |      | M001                 | 5.01 |
|               | S002                    |      | M002                 | 1.96 |
|               | S003                    |      | M003                 | 3.90 |
|               | S004                    |      | M004                 | 1.91 |
| February 2009 | S001                    |      | M001                 | 3.57 |
|               | S002                    |      | M002                 | 3.82 |
|               | S003                    |      | M003                 | 3.88 |
|               | S004                    |      | M004                 | 2.14 |
| March 2009    | S001                    |      | M001                 | 3.6  |
|               | S002                    |      | M002                 | 3.1  |
|               | S003                    |      | M003                 | 3.6  |
|               | S004                    |      | M004                 | 1.9  |
| April 2009    | S001                    |      | M001                 | 3.66 |
|               | S002                    |      | M002                 | 2.94 |
|               | S003                    |      | M003                 | 3.64 |
|               | S004                    |      | M004                 | 1.96 |
| May 2009      | S001                    |      | M001                 | 3.6  |
|               | S002                    |      | M002                 | 2.5  |
|               | S003                    |      | M003                 | 3.3  |
|               | S004                    |      | M004                 | 1.3  |
| June 2009     | S001                    |      | M001                 | 6.24 |
|               | S002                    |      | M002                 | 5.06 |
|               | S003                    |      | M003                 | 3.85 |
|               | S004                    |      | M004                 | 1.55 |
| July 2009     | S001                    |      | M001                 | 8.25 |
|               | S002                    |      | M002                 | 2.93 |
|               | S003                    |      | M003                 | 4.61 |

| Month/Year     | Influent (Water Supply) |                                    | Effluent (Discharge) |      |
|----------------|-------------------------|------------------------------------|----------------------|------|
|                | Sample Site             | MG/D                               | Sample Site          | MG/D |
|                | S004                    |                                    | M004                 | 2.07 |
| August 2009    | S001                    |                                    | M001                 | 5.69 |
|                | S002                    |                                    | M002                 | 3.73 |
|                | S003                    |                                    | M003                 | 4.88 |
|                | S004                    |                                    | M004                 | 2.38 |
| September 2009 | S001                    |                                    | M001                 | 3.83 |
|                | S002                    |                                    | M002                 | 3.84 |
|                | S003                    |                                    | M003                 | 4.66 |
|                | S004                    |                                    | M004                 | 1.82 |
| October 2009   | S001                    |                                    | M001                 | 5.48 |
|                | S002                    |                                    | M002                 | 3.18 |
|                | S003                    |                                    | M003                 | 3.7  |
|                | S004                    |                                    | M004                 | 2.0  |
| November 2009  | S001                    |                                    | M001                 | 4.81 |
|                | S002                    |                                    | M002                 | 3.09 |
|                | S003                    |                                    | M003                 | 2.86 |
|                | S004                    |                                    | M004                 | 2.03 |
| December 2009  | S001                    | 2.04                               | M001                 | 3.11 |
|                | S002                    | 4.61                               | M002                 | 3.06 |
|                | S003                    | 1.86<br>(range of 3.5<br>to 0.132) | M003                 | 2.78 |
|                | S004                    | 1.84                               | M004                 | 1.85 |
| January 2010   | S001                    |                                    | M001                 | 3.66 |
|                | S002                    |                                    | M002                 | 3.46 |
|                | S003                    |                                    | M003                 | 3.57 |
|                | S004                    |                                    | M004                 | 1.91 |
|                |                         |                                    |                      |      |

Exhibit 1g

The Board standard for Nitrate + Nitrite levels during the period that the violations were accrued was: Average Monthly 0.23 mg/L with a Maximum Daily 0.31 mg/L. Red numbers represent Nitrate + Nitrite levels that were higher than the Board standard for discharge. May 1999 to January 2010. Reporting Limit = 0.23

| Month/Year    | Naturally Occurring Spring Influent (Water Supply) |                        | Effluent (Discharge) |                        |
|---------------|--|------------------------|----------------------|------------------------|
|               | Sample Site  | Average Monthly (mg/L) | Sample Site          | Average Monthly (mg/L) |
| May 1999      | S001   | 0.24                   | M001                 | <RL                    |
|               | S002   | <RL                    | M002                 | <RL                    |
|               | S003   | <RL                    | M003                 | <RL                    |
|               | S004   | <RL                    | M004                 | <RL                    |
| July 1999     | S001   | 0.30                   | M001                 | 0.25                   |
|               | S002   | 0.27                   | M002                 | 0.24                   |
|               | S003   | 0.30                   | M003                 | 0.20                   |
|               | S004   | 0.28                   | M004                 | 0.22                   |
| February 2000 | S001   | 0.32                   | M001                 | 0.27                   |
|               | S002   | 0.26                   | M002                 | 0.265                  |
|               | S003   | 0.30                   | M003                 | 0.25                   |
|               | S004   | 0.23                   | M004                 | 0.115                  |
| June 2000     | S001   | 0.28                   | M001                 | 0.235                  |
|               | S002   | 0.32                   | M002                 | 0.115                  |
|               | S003   | 0.31                   | M003                 | 0.115                  |
|               | S004   | 0.27                   | M004                 | 0.23                   |
| February 2001 | S001   | 0.31                   | M001                 | 0.265                  |
|               | S002   | 0.31                   | M002                 | 0.275                  |
|               | S003   | 0.36                   | M003                 | 0.285                  |
|               | S004   | 0.25                   | M004                 | 0.24                   |
| June 2001     | S001   | 0.29                   | M001                 | 0.265                  |
|               | S002   | 0.32                   | M002                 | 0.285                  |
|               | S003   | 0.44                   | M003                 | 0.285                  |
|               | S004   | 0.52                   | M004                 | 0.37                   |
| February 2002 | S001   | 0.29                   | M001                 | 0.25                   |
|               | S002   | 0.29                   | M002                 | 0.255                  |
|               | S003   | 0.62                   | M003                 | 0.395                  |
|               | S004   | 0.42                   | M004                 | 0.39                   |
| June 2002     | S001   | 0.27                   | M001                 | 0.29                   |
|               | S002   | 0.26                   | M002                 | 0.255                  |
|               | S003   | 0.36                   | M003                 | 0.12                   |
|               | S004   | 0.37                   | M004                 | 0.315                  |

| Month/Year    | Naturally Occurring Spring Influent (Water Supply) |                        | Effluent (Discharge) |                        |
|---------------|--|------------------------|----------------------|------------------------|
|               | Sample Site  | Average Monthly (mg/L) | Sample Site          | Average Monthly (mg/L) |
| February 2002 | S001   | 0.32                   | M001                 | 0.28                   |
|               | S002   | 0.27                   | M002                 | 0.28                   |
|               | S003   | 0.62                   | M003                 | 0.68                   |
|               | S004   | 0.49                   | M004                 | 0.465                  |
| June 2003     | S001   | 0.48                   | M001                 | 0.355                  |
|               | S002   | 0.31                   | M002                 | 0.365                  |
|               | S003   | 0.34                   | M003                 | 0.39                   |
|               | S004   | 0.58                   | M004                 | 0.55                   |
| February 2004 | S001   | 0.276                  | M001                 | 0.2495                 |
|               | S002   | 0.316                  | M002                 | 0.251                  |
|               | S003   | 0.682                  | M003                 | 0.448                  |
|               | S004   | 0.548                  | M004                 | 0.4515                 |
| June 2004     | S001   | 0.335                  | M001                 | 0.2625                 |
|               | S002   | 0.319                  | M002                 | 0.298                  |
|               | S003   | 0.504                  | M003                 | 0.303                  |
|               | S004   | 0.562                  | M004                 | 0.5025                 |
| February 2005 | S001   | 0.238                  | M001                 | 0.2255                 |
|               | S002   | 0.231                  | M002                 | 0.2305                 |
|               | S003   | 1.220                  | M003                 | 0.803                  |
|               | S004   | 0.838                  | M004                 | 0.917                  |
| June 2005     | S001   | 0.390                  | M001                 | 0.338                  |
|               | S002   | 0.321                  | M002                 | 0.3395                 |
|               | S003   | 0.507                  | M003                 | 0.386                  |
|               | S004   | 0.850                  | M004                 | 0.808                  |
| February 2006 | S001   | 0.280                  | M001                 | 0.2575                 |
|               | S002   | 0.250                  | M002                 | 0.252                  |
|               | S003   | 0.328                  | M003                 | 0.397                  |
|               | S004   | 0.446                  | M004                 | 0.4105                 |
| June 2006     | S001   | 0.322                  | M001                 | 0.260                  |
|               | S002   | 0.280                  | M002                 | 0.265                  |
|               | S003   | 0.432                  | M003                 | 0.3745                 |
|               | S004   | 0.449                  | M004                 | 0.414                  |
| December 2008 | S001   | 0.298                  | M001                 | 0.2575                 |
|               | S002   | 0.300                  | M002                 | 0.256                  |
|               | S003   | 0.385                  | M003                 | 0.254                  |
|               | S004   | 0.274                  | M004                 | 0.252                  |

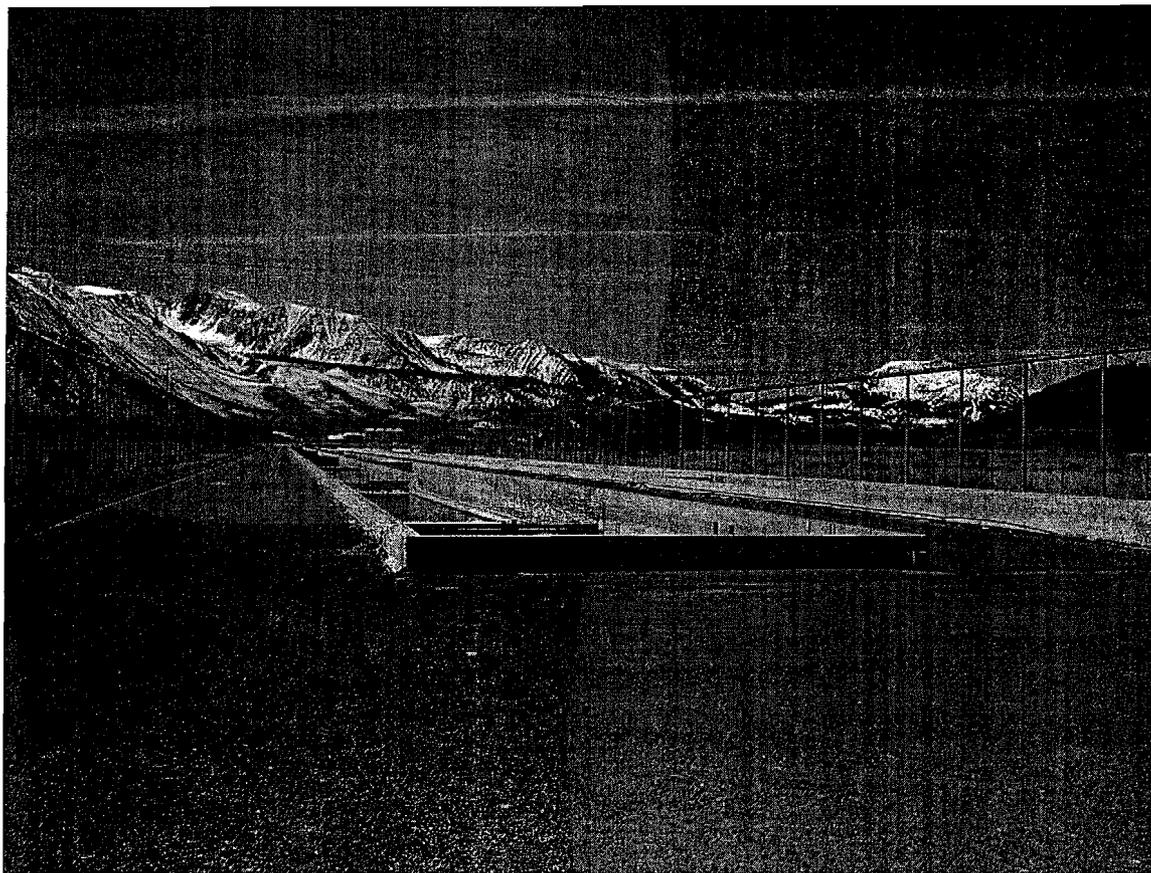
| Month/Year     | Naturally Occurring Spring Influent (Water Supply) |                        | Effluent (Discharge) |                        |
|----------------|--|------------------------|----------------------|------------------------|
|                | Sample Site  | Average Monthly (mg/L) | Sample Site          | Average Monthly (mg/L) |
| January 2009   | S001   | No Data                | M001                 | No Data                |
|                | S002   | No Data                | M002                 | No Data                |
|                | S003   | No Data                | M003                 | No Data                |
|                | S004   | No Data                | M004                 | No Data                |
| February 2009  | S001   | 0.295                  | M001                 | 0.298                  |
|                | S002   | 0.302                  | M002                 | 0.2975                 |
|                | S003   | 1.27                   | M003                 | 1.32                   |
|                | S004   | 0.475                  | M004                 | 0.436                  |
| March 2009     | S001   | 0.298                  | M001                 | 0.272                  |
|                | S002   | 0.314                  | M002                 | 0.266                  |
|                | S003   | 1.56                   | M003                 | 1.07                   |
|                | S004   | 0.845                  | M004                 | 0.720                  |
| April 2009     | S001   | 0.306                  | M001                 | 0.252                  |
|                | S002   | 0.330                  | M002                 | 0.243                  |
|                | S003   | 1.68                   | M003                 | 0.973                  |
|                | S004   | 0.922                  | M004                 | 0.849                  |
| May 2009       | S001   | 0.322                  | M001                 | 0.247                  |
|                | S002   | 0.322                  | M002                 | 0.2295                 |
|                | S003   | 0.418                  | M003                 | 0.613                  |
|                | S004   | 0.868                  | M004                 | 0.624                  |
| June 2009      | S001   | 0.357                  | M001                 | 0.2915                 |
|                | S002   | 0.345                  | M002                 | 0.2855                 |
|                | S003   | 0.638                  | M003                 | 0.3965                 |
|                | S004   | 0.654                  | M004                 | 0.632                  |
| July 2009      | S001   | 0.302                  | M001                 | 0.250                  |
|                | S002   | 0.267                  | M002                 | 0.2395                 |
|                | S003   | 0.309                  | M003                 | 0.373                  |
|                | S004   | 0.508                  | M004                 | 0.489                  |
| August 2009    | S001   | 0.269                  | M001                 | 0.2175                 |
|                | S002   | 0.250                  | M002                 | 0.2125                 |
|                | S003   | 0.366                  | M003                 | 0.301                  |
|                | S004   | 0.442                  | M004                 | 0.4225                 |
| September 2009 | S001   | 0.256                  | M001                 | 0.232                  |
|                | S002   | 0.250                  | M002                 | 0.232                  |
|                | S003   | 0.269                  | M003                 | 0.270                  |
|                | S004   | 0.371                  | M004                 | 0.3325                 |

| Month/Year    | Naturally Occurring Spring Influent (Water Supply) |                        | Effluent (Discharge) |                        |
|---------------|--|------------------------|----------------------|------------------------|
|               | Sample Site  | Average Monthly (mg/L) | Sample Site          | Average Monthly (mg/L) |
| October 2009  | S001   | 0.282                  | M001                 | 0.232                  |
|               | S002   | 0.279                  | M002                 | 0.232                  |
|               | S003   | 0.265                  | M003                 | 0.270                  |
|               | S004   | 0.344                  | M004                 | 0.317                  |
| November 2009 | S001   | 0.339                  | M001                 | 0.276                  |
|               | S002   | 0.305                  | M002                 | 0.273                  |
|               | S003   | 0.280                  | M003                 | 0.296                  |
|               | S004   | 0.308                  | M004                 | 0.289                  |
| December 2009 | S001   | 0.290                  | M001                 | 0.267                  |
|               | S002   | 0.302                  | M002                 | 0.262                  |
|               | S003   | 0.3095                 | M003                 | 0.292                  |
|               | S004   | 0.343                  | M004                 | 0.267                  |
| January 2010  | S001   | 0.290                  | M001                 | 0.267                  |
|               | S002   | 0.302                  | M002                 | 0.262                  |
|               | S003   | 0.3095                 | M003                 | 0.292                  |
|               | S004   | 0.343                  | M004                 | 0.267                  |

Exhibit 1h

# **Final Report**

## **Hot Creek Fish Hatchery Stressor Identification**



**Robert Jellison & David Herbst**  
**UC Sierra Nevada Aquatic Research Laboratory**

**Steve Parmenter & James Harrington**  
**California Department of Fish and Game**

**Victor de Vlaming, Aquatic Toxicology Laboratory, UC Davis**

**Matthew Kondolf, UC Berkeley**

**Matthew Smeltzer, Stetson Engineers, San Rafael, CA**

**6 August 2007**

### 4.2.2 Nitrogen

#### Nitrate

Nitrate concentrations are also relatively high in springbrook waters, but in contrast to SRP generally decreased across the hatchery. As with SRP a less sensitive analytical protocol was used for NPDES-monitoring during 2000-2003. However, all of the springbrook nitrate concentrations were above the reporting limit for the entire period from 2000-2006. The mean nitrate concentrations of springbrook AB & CD source waters collected on 14 dates from 2000-2006 was 0.31 and 0.29 mg/L, respectively (Table 4.3). The mean nitrate values below Hatchery I and II on the same dates were significantly higher; 0.50 and 0.49 mg/L respectively. Nitrate concentrations were 7 to 24 % lower in Hot Creek.

Nitrate in Mammoth Creek was lower than in Hot Creek, and only exceeded the reporting limit on 3 of the 14 dates. Jellison & Dawson (2003) found an average nitrate concentration in Mammoth Creek of 0.05 mg/L for three dates in 2001. As expected, Hot Creek nitrate concentrations below the hatchery II confluence were intermediate to Mammoth and springbrook concentrations (mean, 0.25 mg/L, range 0.05-0.45 mg/L).

**Table 4.3 Mean nitrate concentration at NPDES monitoring sites (2001-2006) (mg/L)**

| Source             |                     | Discharge                 |                     | % Increase across hatchery |       |
|--------------------|---------------------|---------------------------|---------------------|----------------------------|-------|
| Site               | Mean (Range)        | Site                      | Mean                | Absolute                   | %     |
| AB springbrook     | 0.31<br>(0.24-0.48) | Outfall Pond #1           | 0.27<br>(0.21-0.36) | -0.02                      | -7 %  |
| CD springbrook     | 0.29<br>(0.23-0.32) | Outfall Pond #2           | 0.29<br>(0.22-0.42) |                            |       |
| Hatchery I Spring  | 0.50<br>(0.3-1.2)   | Outfall McBurney Pond     | 0.38<br>(0.22-0.81) | -0.12                      | -24 % |
| Hatchery II Spring | 0.49<br>(0.23-0.85) | Outfall Spawning House II | 0.44<br>(0.22-0.94) | -0.05                      | -10 % |

#### Total Kjeldahl Nitrogen

Total Kjeldahl nitrogen (TKN) was less than the 2000-2003 reporting limit of 0.5 mg/L on all dates in all four source springs, and exceeded the reporting limit of 0.25 mg/L for 2004-2006 in only a single replicate taken from the Hatchery I source spring on one date. TKN in discharge from settling ponds 1 & 2 was generally below the higher reporting limit used in 2000-2003, but always exceeded the RL of the more sensitive protocol in 2004-2006 when it averaged 0.65 mg/L in both discharges. TKN in McBurney and Spawning House II discharges were near or below the reporting limit of 0.25 mg/L. TKN averaged 0.27 and 0.44 mg/L in Mammoth Creek and Hot Creek below Hatchery II inputs during the same period. Although the exact increase across the settling ponds cannot be calculated, an increase of 0.4 to 0.65 mg/L occurs between springbrook AB & CD and settling ponds #1 & #2 discharges.

Exhibit 1i



DEPARTMENT OF FISH AND GAME

Eastern Sierra and Inland Desert Region

Hot Creek Hatchery

HCR 79 Box 208

Mammoth Lakes, CA 93546

(760) 934-2664

(760) 934-5123 Fax



September 25, 2006

Mary Dellavalle  
California Regional Water Quality Control Board  
Lahontan Region  
14440 Civic Drive, Suite 200  
Victorville, CA 92392

Dear Mary:

Please find enclosed the monthly Self Monitoring Report (SMR) for August, 2006 in accordance with Board Order No. R6V-2006-0027 Waste Discharge Requirements for Hot Creek Hatchery, NPDES No. CA102776. The SMR example forms included with the Order were utilized to summarize the collected data. Also included, is a copy of the report with the results of testing for Total Suspended Solids from the Department of Fish and Game Water Pollution Control Laboratory. If a copy of this report is not necessary to submit with every SMR, please advise. Original copies of these reports are kept on record at the facility.

Data collection did reveal a violation of the Order, specifically Section IV – Effluent Limitations, Final Effluent Limitations. The maximum flow limitations for Discharge Point 4 (below the Spawning House II) were exceeded. The flows exiting the facility are subject to the flows coming from the natural springs supplying the hatchery. There is no current method of diverting these flows. In above average hydrologic years, it can be expected that spring flow levels will also accordingly be above average.

It is my sentiment that as we are not able to control the amount of rain and snowfall received in a given year, nor can we be held accountable for the high levels of water flowing from the springs. A request of either increasing the flow

limits for all Discharge Points, or the elimination of these limits all together is hereby submitted.

As you are probably aware, the SMR for July, 2006 has not been submitted. Through an oversight within the Department, the facility was not forwarded a copy of the Order until early August. Thus, we were unaware of the obligation to conduct the required data collection and subsequent reporting. The noncompliance with the Order was in no way intentional, and all subsequent reports will be submitted in a timely manner.

Please contact me if you have any questions or require additional information.

Sincerely,

Vern Carr  
Fish Hatchery Manager I  
Hot Creek Hatchery

cc: Dennis Redfern, SHS  
California Dept of Fish and Game  
407 West Line Street  
Bishop, CA 93514

Exhibit 1j

## Memorandum

To: Mr. Mike Plaziak  
Lahontan Region Water quality  
Control Board – Victorville  
14440 Civic Drive, Suite 220  
Victorville, CA 92392

Date : October 1, 2007

From: Jim Starr   
DFG Hatchery NPDES Coordinator  
Fisheries Branch  
**Department of Fish and Game**

subject: Hot Creek Hatchery Issues, NPDES Permit NO. CA0102776

The Department of Fish and Game (DFG), in writing this letter, is opening up formal communications with your office to discuss several issues related to the operation of our Hot Creek Hatchery located in Mono County, California. These issues (listed below) are not in any order, however we realize that some of these issues will require more effort to resolve and as a result we are willing to work with the Lahontan Regional Water Quality Control Board (Board) to prioritize the following list of Hot Creek Hatchery issues:

1) **Control of New Zealand mud snails at the hatchery:**

*Issue: New Zealand mud snail presence in Hot Creek and the hatchery has impacted our ability to operate in the capacity that the hatchery was designed. The DFG is currently investigating options (in laboratory) to control the mud snail during the different phases of our spawning and rearing process.*

2) **Modify NPDES Permit Conditions for:**

Nitrogen

*Issue: Hatchery influent water level for nitrogen higher than standard set in NPDES Permit*

Flow

*Issue: Hatchery is spring fed and not under our control, this results in the hatchery sometimes exceeding our effluent discharge limit set in NPDES Permit.*

Reporting Frequency

*Issue: Modify current reporting level from monthly to quarterly.*

Mr. Mike Plaziak  
October 1, 2007  
Page Two

Modification of Sampling Point

*Issue: Board staff is concerned that Total Suspended Solids levels may be under reported. To correct this we are proposing moving the sampling point from the outfall (SAMPLING POINT NUMBER) to the other side of the road after it has passed through a culvert.*

**3) Hot Creek Hatchery Settling Ponds:**

*Issue: Hot Creek Hatchery Stressor Identification Study has recommended that DFG needs to take action to reduce the degradation of the aquatic environment that is occurring downstream of the hatchery as a result of Hot Creek Hatchery operations. As a result of this study DFG has been directed to investigating options and is preparing a Best Management Practice.*

I look forward to working with you and your assigned staff to discuss the issues that I have outlined above. Upon receipt of this memorandum please feel free to contact me at 916-327-0713 or email me at [jstarr@dfg.ca.gov](mailto:jstarr@dfg.ca.gov) to coordinate a meeting with you or your assigned staff. I believe initially that a phone conversation could help us prioritize and possibly resolve some of the issues listed above and direct a future face-to-face meeting at your office in Victorville.

I also want to add that, DFG has and continues to have a successful working relationship with the Board and its staff, specifically Ms. Cindi Mitton and Ms. Mary Dellavalle.

cc:

Lahontan Regional Water Quality Control Board – Victorville  
Ms. Cindi Mitton  
Ms. Mary Dellavalle

Hot Creek Hatchery  
Mr. Vern Carr  
Mr. Matt Norris

Inland Deserts Region – Bishop  
Mr. Bruce Kenny, Assistant Regional Manager  
Mr. Dennis Redfern

Fisheries Branch – Scaramento  
Mr. Neil Manji, Chief  
Dr. Bill Cox

Exhibit 1k

**From:** "Mary Dellavalle" <MDellavalle@waterboards.ca.gov>  
**To:** <JSTARR@dfg.ca.gov>  
**CC:** <bkinney@dfg.ca.gov>, "Cindi Mitton" <cmittton@waterboards.ca.gov>, "Scot...  
**Date:** 12/19/2007 8:35 AM  
**Subject:** Re: Quick Question about 11/29/07 violations 697072 and 697073

Hi Jim,

The violations were flagged by Hot Creek staff in their routine reports. We are short handed. The letter for the violations is on my to do list. I put in a request for a meeting between Lahontan and DFG to discuss Hot Creek Hatchery Issues. It will most likely occur after the Feb Board Mtg.

Mary

Exhibit 11

**From:** "Mary Dellavalle" <MDellavalle@waterboards.ca.gov>  
**To:** <JSTARR@dfg.ca.gov>  
**CC:** "Cindi Mitton" <cmitton@waterboards.ca.gov>  
**Date:** 1/17/2008 12:08 PM  
**Subject:** Re: Happy New Year

Hi Jim,

Thanks. I'll forward the request.

Mary

>>> "Jim Starr" <JSTARR@dfg.ca.gov> 1/17/2008 12:05 PM >>>

Mary,

I hope that 2008 is treating you well? I am writing to ask if you have set the date for the meeting between the Lahontan Board and Hot Creek Hatchery? I believe that you wanted to talk about the Nitrogen and water flow issue at the hatchery.

I hope to hear from you soon,  
Jim

Jim Starr  
916-327-0713 (Office#)  
916-708-7236 (Cellular#)  
jstarr@dfg.ca.gov

Exhibit 1m

**From:** "Mary Dellavalle" <MDellavalle@waterboards.ca.gov>  
**To:** JSTARR@dfg.ca.gov  
**CC:** TZentner@waterboards.ca.gov; rphillip@waterboards.ca.gov; cmitton@waterb...  
**Date:** 6/11/2008 11:51 AM  
**Subject:** Fwd: Re: California Integrated Water Quality System (CIWQS3.3.2) -Build Number: 04.04.2008.07.00.00  
**Attachments:** 744975.pdf; 746631.pdf; 746630.pdf

Hi Jim,

I looked into these violations for you.

Violation 744975: The monthly self monitoring report for November 2006 was received late. It was due on January 1, 2007. We received it on January 8, 2007. We determine if a report is submitted on time by the date that we receive it, not the post mark on the envelope. Please plan sufficient time for delivery on future monitoring reports.

Violation 746631: This violation should be deleted. I flagged this before you showed me the fine print in your permit. Please accept my apologies for any inconvenience.

Violation 746630: Discharge limits for flow and nitrate were exceeded. Concerns about quantity and quality on influent are noted. This concern has been elevated to upper management for review.

Thanks,  
Mary

Mary Dellavalle  
Environmental Scientist  
California Regional Water Quality Control Board, Lahontan Region  
14440 Civic Center Dr. Suite 200  
Victorville, CA 92392

Phone: (760) 241-6583  
Fax: (760) 241-7308

Email: mdellavalle@waterboards.ca.gov  
Web: <http://www.waterboards.ca.gov/lahontan/>

\*\*\*\*\*

Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

\*\*\*\*\*

>>> Mary Dellavalle 5/30/2008 11:33 AM >>>  
Hi Jim,

I am in a time crunch. I'll follow up on these next week.

Mary

Mary Dellavalle  
Environmental Scientist  
California Regional Water Quality Control Board, Lahontan Region

14440 Civic Center Dr. Suite 200  
Victorville, CA 92392

Phone: (760) 241-6583  
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\*\*\*\*\*

>>> "Jim Starr" <JSTARR@dfg.ca.gov> 5/6/2008 12:48 PM >>>  
Hello Mary,

I have a quick question for you. Please click on the link below and here is the question:

What does the violation "Late Monitoring" mean? In addition, what was the violation? What time period does this violation apply too? March, April report?

<http://ciwqs.waterboards.ca.gov/ciwqs/readOnly/ciwqsReportViolation.jsp?reportID=3&place=6V&facility=HOT+CREEK+HATCHERY+NPDES>

Thank you in advance,

Jim

Jim Starr  
916-327-0713 (Office#)  
916-708-7236 (Cellular#)  
jstarr@dfg.ca.gov

**From:** "Mary Dellavalle" <MDellavalle@waterboards.ca.gov>  
**To:** JSTARR@dfg.ca.gov  
**CC:** TZentner@waterboards.ca.gov; rphillip@waterboards.ca.gov  
**Date:** 6/11/2008 10:55 AM  
**Subject:** Re: Follow-up question to recent Hot Creek NPDES Permit violation

Hi Jim,

Thank you for pointing this out. I missed the footnotes. I will ask to have the violations deleted.

Mary

Mary Dellavalle  
Environmental Scientist  
California Regional Water Quality Control Board, Lahontan Region  
14440 Civic Center Dr. Suite 200  
Victorville, CA 92392

Phone: (760) 241-6583  
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\*\*\*\*\*

>>> "Jim Starr" <JSTARR@dfg.ca.gov> 6/9/2008 9:07 AM >>>

Good Morning Mary,

I hope that things have slowed down a bit for you?

In reviewing the information that you provided I noted a potential error in one of the violations (Number 746631) that we received (see below) at Hot Creek Hatchery. The violation states that we did not monitor for Terramycin, which is also known as Oxytetracycline. We are authorized to use Oxytetracycline in either a bath treatment or in feed. As noted in the Hot Creek NPDES Permit (CA0102776) on page E-5 of the MRP, foot note "h" we are only required to monitor for Oxytetracycline (Terramycin) when it is used in a bath.

746631 - Deficient monitoring: Terramycin not monitored. 2/1 to 2/14 2007 - Point M4 - Terramycin not sampled; 2/22 to 3/6, 2007 - Point M4 - Terramycin not sampled.

Hot Creek's usage of Oxytetracycline (Terramycin) is as a treatment that is milled into the feed at the manufacturer, which requires no sampling when used in this manner.

What steps do I need to take to assist you in correcting this reported violation?

Thank you in advance,

Jim

Jim Starr  
916-327-0713 (Office#)  
916-708-7236 (Cellular#)  
jstarr@dfg.ca.gov

Exhibit 1n

**From:** "Mary Dellavalle" <MDellavalle@waterboards.ca.gov>  
**To:** JSTARR@dfg.ca.gov  
**CC:** TZentner@waterboards.ca.gov  
**Date:** 11/24/2008 2:26 PM  
**Subject:** Re: Question about April Board Meeting

Hi Jim,

Taylor Zentner handles enforcement for Hot Creek. It would be better if he answers your questions regarding enforcement actions. We will be revising the discharge permit. Call me if you can't reach Taylor.

Mary

Mary Dellavalle  
Environmental Scientist  
California Regional Water Quality Control Board, Lahontan Region  
14440 Civic Center Dr. Suite 200  
Victorville, CA 92392

Phone: (760) 241-6583  
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\*\*\*\*\*

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\*\*\*\*\*

>>> "Jim Starr" <jstarr@dfg.ca.gov> 11/20/2008 10:12 AM >>>  
Mary,

How are you? I got a call from the DFG Lawyer stating that she received a letter stating that we need to comply with some sort of "Abatement Order" for Hot Creek Hatchery. Is this the same thing that we talked about earlier this month? I thought we were going to be modifying the existing NPDES Permit to cover our flow and nitrate issues? Is this something different?

Any clarification you can give me on this issue would be appreciated.

Jim

PS>I still have not received a letter from your office discussing the Hot Creek Hatchery issue we talked about earlier this month.

JS

Jim Starr  
916-327-0713 (Office#)  
916-708-7236 (Cellular#)  
jstarr@dfg.ca.gov

Exhibit 1o

**From:** "Mary Dellavalle" <MDellavalle@waterboards.ca.gov>  
**To:** JSTARR@dfg.ca.gov  
**Date:** 12/9/2008 5:10 PM  
**Subject:** Re: Question about April Board Meeting

Hi Jim,

To be on the safe side that would be a good idea. Use your last forms as a template and update anything that is new.

Mary

Mary Dellavalle  
Environmental Scientist  
California Regional Water Quality Control Board, Lahontan Region  
14440 Civic Center Dr. Suite 200  
Victorville, CA 92392

Phone: (760) 241-6583  
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\*\*\*\*\*

>>> "Jim Starr" <jstarr@dfg.ca.gov> 12/8/2008 3:13 PM >>>  
Mary,

Do I need to fill out the other forms associated with this process of renewing an NPDES Permit? FOrM B and Form 1?

Jim

>>> "Mary Dellavalle" <MDellavalle@waterboards.ca.gov> 11/24/2008 2:25 PM >>>  
Hi Jim,

Taylor Zentner handles enforcement for Hot Creek. It would be better if he answers your questions regarding enforcement actions. We will be revising the discharge permit. Call me if you can't reach Taylor.

Mary

Mary Dellavalle  
Environmental Scientist  
California Regional Water Quality Control Board, Lahontan Region  
14440 Civic Center Dr. Suite 200  
Victorville, CA 92392

Phone: (760) 241-6583  
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\*\*\*\*\*

>>> "Jim Starr" <jstarr@dfg.ca.gov> 11/20/2008 10:12 AM >>>  
Mary,

How are you? I got a call from the DFG Lawyer stating that she received a letter stating that we need to comply with some sort of "Abatement Order" for Hot Creek Hatchery. Is this the same thing that we talked about earlier this month? I thought we were going to be modifying the existing NPDES Permit to cover our flow and nitrate issues? Is this something different?

Any clarification you can give me on this issue would be appreciated.

Jim

PS>I still have not received a letter from your office discussing the Hot Creek Hatchery issue we talked about earlier this month.

JS

Jim Starr  
916-327-0713 (Office#)  
916-708-7236 (Cellular#)  
jstarr@dfg.ca.gov

Exhibit 1p



# California Regional Water Quality Control Board Lahontan Region



Linda S. Adams  
Secretary for  
Environmental Protection

2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150  
(530) 542-5400 • Fax (530) 544-2271  
www.waterboards.ca.gov/lahontan

Arnold Schwarzenegger  
Governor

RECEIVED

December 5, 2008

DEC 10 2008

Vern Carr, Fish Hatchery Manager II  
California Department of Fish and Game  
HCR 79, Box 208  
Mammoth Lakes, CA 93546

Priority Branch  
Dept. of Fish and Game  
CERTIFIED MAIL: 7006 2760 0003 9496 7004

Jim Upchurch, Forest Supervisor  
Inyo National Forest  
351 Pacu Lane, Suite 200  
Bishop, CA 93514

CERTIFIED MAIL: 7006 2760 0003 9496 7011

IN THE MATTER OF VIOLATION OF WASTE )  
DISCHARGE REQUIREMENTS PRESCRIBED BY )  
BOARD ORDER NO. R6V-2006-0027, ISSUED TO )  
THE STATE OF CALIFORNIA DEPARTMENT OF FISH )  
AND GAME AND THE UNITED STATES FOREST )  
SERVICE, HOT CREEK FISH HATCHERY, MAMMOTH )  
LAKES, MONO COUNTY, WDID NO. 6B260801001 )

NOTICE OF  
VIOLATION

The purpose of this Notice of Violation (NOV) is to address violations of the State of California Department of Fish and Game's (DFG) and the United States Forest Service's National Pollutant Discharge Elimination System (NPDES) Permit for Hot Creek Fish Hatchery. DFG staff has previously brought it to Water Board staff's attention that DFG believes many of the violations cited in this Notice are related to/caused by the quality and quantity of the hatchery's water source. Water Board staff wants to meet with you and/or your staff after you have had a chance to review the violations and discuss them with your staff. The purpose of the meeting would be for the agency staffs to discuss in more detail the basis for the violations cited in this Notice, the conditions creating the violations, and options for addressing these conditions from a facilities operations and regulatory perspective. Water Board staff will also be prepared to discuss the role of mandatory minimum penalties with respect to the violations cited in this Notice.

Additionally, Water Board staff has started the process of revising/reissuing the hatchery's NPDES permit, which may provide an opportunity to address some or all of the conditions causing the majority of the violations cited in this Notice. Separate correspondence will be sent regarding this matter.

## **Background**

The Dischargers submitted a Report of Waste Discharge, dated October 26, 2004 and applied for a NPDES permit renewal to discharge up to 19.6 million gallons per day of wastewater from the hatchery. The Permit was adopted by the California Regional Water Quality Control Board, Lahontan Region (Water Board) on June 14, 2006 and became effective on June 15, 2006. The Permit in part, contains monitoring and reporting requirements which require the Dischargers to collect water quality samples and submit Self Monitoring Reports (SMRs) on a monthly, quarterly, semi-annual, and annual basis. Attachment E of the Permit contains details of the monitoring and reporting program. The information/data provided in the SMRs are used to evaluate compliance with the Permit.

## **Permit Requirements**

Section IV. of the Permit lists effluent limitations and discharge specifications and states the following in pertinent part:

"The discharge of Hot Creek Fish Hatchery wastewater shall maintain compliance with the following effluent limitations at Discharge Points 001, 002, 003, and 004, with compliance measured at Monitoring Locations M-001, M-002, M-003, and M-004 as described in the attached Monitoring and Reporting Program."

The Permit includes the following discharge specifications:

- a. Section IV.A.1.b requires all discharges from the Hatchery not to exceed the following effluent limits for Flow in Millions of Gallons per Day (MGD):
  - i. Maximum Daily flow of 6.9 MGD at Discharge Point 001
  - ii. Maximum Daily flow of 6.5 MGD at Discharge Point 002
  - iii. Maximum Daily flow of 3.8 MGD at Discharge Point 003
  - iv. Maximum Daily flow of 2.5 MGD at Discharge Point 004
- b. Section IV.A.1.b requires all discharges from the Hatchery not to exceed the following effluent limits for Nitrate + Nitrite (as N):
  - i. Average monthly effluent limit of 0.23 mg/L
  - ii. Maximum daily effluent limit of 0.31 mg/L
- c. Section IV.A.1.b requires all discharges from the Hatchery not to exceed the following effluent limits for potassium permanganate:
  - i. Average monthly effluent limit of 0.12 mg/L
  - ii. Maximum daily effluent limit of 0.25 mg/L

Attachment E of the Permit, contains requirements regarding the monitoring and reporting program. Section X.B.3 of Attachment E lists monitoring periods and the respective SMR due dates. The following table, in pertinent part, lists the monitoring periods and the associated SMR due dates:

| Sampling Frequency     | Monitoring Period   | SMR Due Date   |
|------------------------|---|--|
| 1 / month              | 1 <sup>st</sup> day of calendar month through last day of calendar month  | First day of second calendar month following month of sampling |
| 1 / quarter            | January 1 through March 31<br>April 1 through June 30<br>July 1 through September 30<br>October 1 through December 31 | May 1<br>August 1<br>November 1<br>February 1                  |
| 1 / semi-annual period | January 1 through June 30<br>July 1 through December 31   | August 1<br>February 1   |
| 1 / year               | January 1 through December 31   | February 1   |
| 1 / discharge event    | Calendar day<br>(Midnight through 11:59PM)  | May 1<br>August 1<br>November 1<br>February 1                  |

**Violations**

Water Board staff have evaluated SMRs required by the Permit for the period of July 2006 through June 2008. The data provided in the SMRs indicate that the hatchery discharge violated the Permit effluent limitations as listed in the Hot Creek Hatchery Violations Table (enclosed). Additionally, Water Board staff has also determined that the Dischargers violated the Permit monitoring and reporting requirements as listed in the Hot Creek Hatchery Violations Table. Water Board staff have identified a total of **46 violations**.

**Potential Administrative Civil Liability**

Violations listed in the Hot Creek Hatchery Violations Table are subject to administrative civil liability pursuant to California Water Code sections 13385 (h) and (i). California Water Code sections 13385 (h)(1) requires the Water Board to assess a mandatory minimum penalty of three thousand dollars (\$3,000) for each serious violation.

California Water Code section 13385(h)(2) describes a "serious violation" as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant, as specified in Appendix A to Section

123.45 of Title 40 of the Code of Federal Regulations, by 20 percent or more or for a Group I pollutant, as specified in Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations, by 40 percent or more. The Hot Creek Fish Hatchery experienced several violations involving Group I pollutants (Flow and Nitrate + Nitrite as Nitrogen) whose effluent limits were exceeded by 40 percent or more.

Additionally, California Water Code section 13385.1 further defines a "serious violation" as a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, for reports designed to ensure compliance with NPDES permit effluent limitations. The SMRs you are required to submit pursuant to Attachment E of the Permit are subject to this California Water Code section.

California Water Code section 13385(i)(1) requires the Water Board to assess a mandatory minimum penalty of three thousand dollars (\$3,000) for each violation whenever any of the following occur four or more times in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations:

- a. Violates a waste discharge requirement effluent limitation.
- b. Fails to file a report pursuant to Section 13260.
- c. Files an incomplete report pursuant to Section 13260.
- d. Violates a toxicity effluent limitation contained in the applicable waste discharge requirements where the waste discharge requirements do not contain pollutant-specific effluent limitations for toxic pollutants.

California Water Code section 13385(i)(2) defines a "period of six consecutive months" as the period commencing on the date that one of the violations described in section 13385(i) occurs and ends 180 days after that date.

According to the definition of serious violations above, the Dischargers have committed 5 serious violations. According to the definition of chronic violations, the Dischargers have committed 35 chronic violations not counting the first three violations. As such, Water Board staff has identified a total of **40 violations**, which may be subject to mandatory minimum penalties as identified in the Hot Creek Hatchery MMP Violations Table (enclosed).

### **Recommended Actions**

Water Board staff recommends that the Dischargers review this Notice and the enclosed tables. Following your review, Water Board staff requests a meeting with the Dischargers at the hatchery during the first two weeks of January 2009.



Vern Carr,  
Jim Upchurch

- 5 -

Please contact Taylor Zentner at (530) 542-5469, or me at (530) 542-5432, if you have any questions regarding this matter and to schedule a meeting at the Hatchery.



Scott C. Ferguson, Chief  
Enforcement and Special Projects Unit

Enclosures:

1. Hot Creek Hatchery Violations Table
2. Hot Creek Hatchery MMP Violations Table

cc: Jim Starr/Department of Fish and Game, Fisheries Branch  
Bruce Kinney/Department of Fish and Game, Deputy Regional Manager  
Mike Plaziak/Lahontan Regional Water Quality Control Board, Victorville Office  
Cindi Mitton/Lahontan Regional Water Quality Control Board, Victorville Office  
Mary Dellavalle/Lahontan Regional Water Quality Control Board, Victorville Office  
Mark Bradley, State Water Resources Control Board, Office of Enforcement  
Taryn Stokell, State Water Resources Control Board, Office of Enforcement

SCF/clhT: Hot Creek NOV 11-26-08.doc  
[SLT File Room, Hot Creek Hatchery, WDID No. 6B260801001/VVL File Room, Hot Creek Hatchery, WDID No. 6B260801001]



# **ENCLOSURE 1**

## **Hot Creek Hatchery Violations Table**

### Hot Creek Hatchery 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                                   |
| 9/2/2006   | Reporting | Reporting              | July 2006 monthly SMR due on September 1, 2006, July 2006 monthly SMR never received.                  |
| 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 0.322 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                                    |
| 11/2/2006  | Reporting | Reporting              | September 2006 monthly SMR due on November 1, 2006, submitted one day late on November 2, 2006         |
| 11/2/2006  | Reporting | Reporting              | Third quarter 2006 SMR due on November 1, 2006, submitted one day late on November 2, 2006             |
| 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 0.238 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       |
| 11/29/2006 | M-001     | Potassium Permanganate | 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-002     | Potassium Permanganate | Analytical result of 0.743 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.12 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 |
| 1/2/2007   | Reporting | Reporting              | November 2006 monthly SMR due on January 1, 2007, submitted 7 days late on January 8, 2007             |
| 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                                    |
| 6/2/2007   | Reporting | Reporting              | April 2007 monthly SMR due on June 1, 2007, submitted 7 days late on June 8, 2007                      |
| 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-003     | 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       |
| 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                                   |

# **ENCLOSURE 2**

## **Hot Creek Hatchery MMP Violations Table**

### Hot Creek Hatchery MMP Violations Table - Serious Violations

| Date                            | Violation Type | Location  | Parameter         | Description   | MMP      |
|---------------------------------|----------------|-----------|-------------------|---|----------|
| 9/2/2006                        | Serious        | Reporting | Reporting         | July 2006 monthly SMR due on September 1, 2006, July 2006 monthly SMR never received                              | 1        |
| 9/18/2006                       | Serious        | 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 by more than 40% | 1        |
| 3/3/2008                        | Serious        | 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 by more than 40% | 1        |
| 3/3/2008                        | Serious        | 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 by more than 40% | 1        |
| 4/7/2008                        | Serious        | M-003     | Flow              | Flow rate of 5.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD by more than 40%                              | 1        |
| <b>Total Serious Violations</b> |                |           |                   |   | <b>5</b> |

**Hot Creek Hatchery MMP Violations Table Continued - Chronic Violations**

| Date       | Violation Type   | Location  | Parameter              | Description   | MMP |
|------------|------------------|-----------|------------------------|---|-----|
| 8/14/2006  | Chronic          | M-004     | Flow                   | Flow rate of 3.16 MGD at M-004 exceeds the Effluent Limit of 2.5 MGD  | 0   |
| 9/2/2006   | Serious*/Chronic | Reporting | Reporting              | July 2006 monthly SMR (0.6) on September 1, 2006 July 2006 monthly SMR never received                             | 0   |
| Sep-06     | Chronic          | M-002     | Flow                   | Flow rate of 7.0 MGD at M-002 exceeds the Effluent Limit of 6.5 MGD   | 0   |
| Sep-06     | Chronic          | M-001     | Flow                   | Flow rate of 7.0 MGD at M-001 exceeds the Effluent Limit of 6.9 MGD   | 1   |
| Sep-06     | Chronic          | M-004     | Flow                   | Flow rate of 2.7 MGD at M-004 exceeds the Effluent Limit of 2.5 MGD   | 1   |
| 9/18/2006  | Chronic          | 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                  | 1   |
| 9/18/2006  | Serious*/Chronic | 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 by more than 40% | 0   |
| 9/18/2006  | Chronic          | M-004     | Nitrate + Nitrite      | Analytical result of 0.322 mg/L at M-004 exceeds the Instantaneous Maximum Effluent Limit of 0.31 mg/L            | 1   |
| 10/23/2006 | Chronic          | M-002     | Flow                   | Flow rate of 6.7 MGD at M-002 exceeds the Effluent Limit of 6.5 MGD   | 1   |
| 11/13/2006 | Chronic          | 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                  | 1   |
| 11/13/2006 | Chronic          | M-002     | Nitrate + Nitrite      | Analytical result of 0.238 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.23 mg/L                  | 1   |
| 11/13/2006 | Chronic          | 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                  | 1   |
| 11/13/2006 | Chronic          | 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                  | 1   |
| 11/29/2006 | Chronic          | M-001     | Potassium Permanganate | Analytical result of 0.674 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.12 mg/L                  | 1   |
| 11/29/2006 | Chronic          | 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            | 1   |
| 11/29/2006 | Chronic          | M-002     | Potassium Permanganate | Analytical result of 0.743 mg/L at M-002 exceeds the Average Monthly Effluent Limit of 0.12 mg/L                  | 1   |
| 11/29/2006 | Chronic          | 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            | 1   |
| 3/26/2007  | Chronic          | M-003     | Flow                   | Flow rate of 4.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 3/26/2007  | Chronic          | 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                  | 1   |
| 3/26/2007  | Chronic          | 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                  | 1   |
| 3/26/2007  | Chronic          | 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                  | 1   |
| 3/26/2007  | Chronic          | 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                  | 1   |
| 5/7/2007   | Chronic          | M-003     | Flow                   | Flow rate of 4.1 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 6/4/2007   | Chronic          | M-003     | Flow                   | Flow rate of 4.94 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD  | 1   |
| 6/4/2007   | Chronic          | 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                  | 1   |
| 6/4/2007   | Chronic          | 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                  | 1   |
| 7/9/2007   | Chronic          | M-003     | Flow                   | Flow rate of 4.6 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 8/6/2007   | Chronic          | M-003     | Flow                   | Flow rate of 4.18 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD  | 1   |
| 9/10/2007  | Chronic          | M-003     | Flow                   | Flow rate of 4.2 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 9/10/2007  | Chronic          | 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                  | 1   |
| 9/10/2007  | Chronic          | 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                  | 1   |
| 12/10/2007 | Chronic          | 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                  | 1   |
| 2/4/2008   | Chronic          | M-003     | Flow                   | Flow rate of 4.30 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD  | 1   |
| 3/3/2008   | Chronic          | M-003     | Flow                   | Flow rate of 4.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD   | 1   |
| 3/3/2008   | Chronic          | 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                  | 1   |
| 3/3/2008   | Chronic          | 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                  | 1   |
| 3/3/2008   | Serious*/Chronic | 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 by more than 40% | 0   |
| 3/3/2008   | Serious*/Chronic | 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 by more than 40% | 0   |
| 3/3/2008   | Chronic          | 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            | 1   |
| 3/3/2008   | Chronic          | 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            | 1   |
| 4/7/2008   | Serious*/Chronic | M-003     | Flow                   | Flow rate of 5.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD by more than 40%                              | 0   |
| 5/5/2008   | Chronic          | M-003     | Flow                   | Flow rate of 5.30 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD  | 1   |

Total Chronic Violations 35

Mandatory Minimum Penalties are not applicable to the first three chronic violations of each six month period.

\* - Serious violations count towards the first three chronic violations, but are not included as a MMP violations thereafter in the chronic calculations.

Total MMP Violations 40  
 Potential Civil Liability Associated With MMP Violations \$120,000

Exhibit 1q

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

2501 Lake Tahoe Boulevard, South Lake Tahoe, CA 96150

**NOTICE OF PROPOSED TIME SCHEDULE ORDER  
CALIFORNIA DEPARTMENT OF FISH AND GAME  
HOT CREEK FISH HATCHERY, MONO COUNTY**

**NOTICE IS HEREBY GIVEN** that the California Regional Water Quality Control Board, Lahontan Region (Water Board) is soliciting comments on a proposed Time Schedule Order addressing violations associated with the California Department of Fish and Game (DFG), Hot Creek Fish Hatchery located near Mammoth Lakes in Mono County. Written comments must be received at the address above, attention Robert Dodds or via email to [rdodds@waterboards.ca.gov](mailto:rdodds@waterboards.ca.gov), **by 5:00 p.m. on April 27, 2009.**

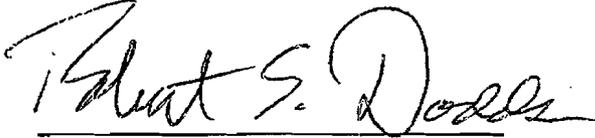
The Time Schedule Order addresses chronic violations of nitrogen (Nitrate + Nitrite as Nitrogen) and flow-related effluent limits set forth in the Hot Creek Fish Hatchery NPDES Permit. The violations started in August 2006 and are ongoing.

The Time Schedule Order will require DFG to comply with interim effluent limitations for Nitrate + Nitrite (as Nitrogen) and flow. The DFG will also be required to submit: (1) Compliance Work Plan which must include a proposed facilities assessment to evaluate the impacts of the hatchery's discharge on the receiving water (Hot Creek), a proposal of corrective actions, and a compliance schedule; (2) Pollution Prevention Plan which must meet the requirements specified in Water code section 13263.3(d)(2); and (3) quarterly assessment reports providing the results of monitoring identified in the Facilities Assessment. Full compliance with final effluent limits must be achieved by April 28, 2014.

The proposed Time Schedule Order and related documents pertaining to this issue may be inspected and copied at the Water Board office at the address above during regular business hours. These documents can also be viewed on the Water Board's web site: [www.waterboards.ca.gov/lahontan](http://www.waterboards.ca.gov/lahontan).

Following the 30-day public comment period, Water Board staff will review any comments it receives. If no new information is received, the Water Board will issue the Time Schedule to DFG. If new information is received requiring staff to revise the proposed Time Schedule Order, all necessary revisions will be incorporated and the Time Schedule Order will be issued, provided the revisions do not constitute substantive changes requiring an additional 30-day public comment period.

Please bring the above information to the attention of anyone you know who would be interested in the matter. Any questions concerning the details of the Time Schedule Order should be directed to Scott Ferguson at (530) 542-5432 ([sferguson@waterboards.ca.gov](mailto:sferguson@waterboards.ca.gov)) or Taylor Zentner at (530) 542-5469 ([tzentner@waterboards.ca.gov](mailto:tzentner@waterboards.ca.gov)).



Robert S. Dodds  
Assistant Executive Officer

Dated: March 23, 2009

cc: Hot Creek Hatchery Mailing List

TBZ/chT: Hot Creek Hatchery /Hot Creek Hatchery Notice of Public Comment (3-23-09).doc  
[File Under: SLT File Room, Hot Creek, WDID 6B260801001 VVL File Room, Creek, WDID 6B260801001]



# California Regional Water Quality Control Board



## Lahontan Region

Linda S Adams  
Secretary for  
Environmental Protection

Arnold Schwarzenegger  
Governor

2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150  
(530) 542-5400 • Fax (530) 544-2271  
<http://www.waterboards.ca.gov/lahontan>

March 26, 2009

### TO ALL INTERESTED PERSONS AND AGENCIES:

The enclosed proposed time schedule order is being provided for your review and comment. The enclosed public notice soliciting comments on the proposed time schedule order was published in the Mammoth Times on March 26, 2009. Comments on the proposed time schedule order must be received no later than 5:00 p.m., April 27, 2009. Please send your comments to the Water Board's South Lake Tahoe office at 2501 Lake Tahoe Blvd., South Lake Tahoe, CA 96150 to the attention of Robert Dodds.

Contact Taylor Zentner at (530) 542-5469 or Scott Ferguson at (530) 542-5432 if you have any questions regarding this matter.

Carrie Hackler  
Office Technician

Enclosures

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

**TIME SCHEDULE ORDER NO. R6V-2009-(PROPOSED)**

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

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, CD Spring Group, Hatchery I Spring, and Hatchery II Spring. 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 to 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. 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)
  
4. 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.
  
5. Prior to Board Order No. R6V-2006-0027, the Facility was regulated under Board Order No. 6-99-55. Board Order No. 6-99-55 contained effluent limitations for settleable solids, total suspended solids, pH, and a narrative effluent limit stating:

*"The discharge shall not contain trace elements, pollutants, contaminants, or combinations thereof, in concentrations which are toxic or harmful to human, aquatic, terrestrial plant, or animal life."*

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

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<br>+Nitrite<br>(as N) | mg/L | All locations<br>(M-001 thru<br>M-004) | 0.23 | 0.31 |

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 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 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.

The 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-[PROPOSED] is being issued to set forth actions that the Discharger shall take to correct or prevent discharges of waste that violates 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 Toxic 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:

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

Total Facility Effluent Flow shall not be greater than:

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

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 this Time Schedule Order. 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.

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, 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](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 this Time Schedule Order) and shall remain effective until **April 28, 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)<br>mg/L | 0.30                                | 0.417                             |
| M-002               | Nitrate + Nitrite (as N)<br>mg/L | 0.30                                | 0.429                             |
| M-003               | Nitrate + Nitrite (as N)<br>mg/L | 0.45                                | 0.806                             |
| M-004               | Nitrate + Nitrite (as N)<br>mg/L | 0.54                                | 0.956                             |

If monitoring data indicates the concentration of Nitrate + Nitrite (as N) in any of the influent springs exceeds the above listed interim effluent limits for the corresponding effluent monitoring location, then the interim effluent limitation for Nitrate + Nitrite (as N) shall not exceed the corresponding influent

concentration by more than 20 percent. Because AB Spring and CD Spring are mixed and discharged at two locations (M-001 and M-002), compliance shall be measured as follows if influent concentrations of Nitrate + Nitrite (as N) from either AB Spring or CD Spring exceed the above interim effluent limits: a flow-weighted average Nitrate + Nitrite (as N) concentration shall be calculated for AB Spring and CD Spring, and the calculated flow-weighted average Nitrate + Nitrite (as N) concentration, for M-001 and M-002, shall not exceed the AB Spring and CD Spring flow-weighted average by more than 20 percent.

2. The following interim effluent limitation for flow shall become effective immediately (issuance date of this Time Schedule Order) and shall remain effective until **April 28, 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**

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   | April 28, 2014     |
| a. Task A - The <b>Method of Compliance Work Plan/Schedule</b> (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:

- ENTERING  
& EXITING
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.

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 within six months of submitting the Compliance Work Plan.

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 <sup>st</sup>                         |
| April – June             | August 1 <sup>st</sup>                      |
| July – September         | November 1 <sup>st</sup>                    |
| October – December       | February 1 <sup>st</sup>                    |

- d. Task D - **Full compliance with all final effluent limits** must be achieved by **April 28, 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, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement. 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, the Executive Officer may amend this Order 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.

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Robert S. Dodds  
Assistant Executive Officer

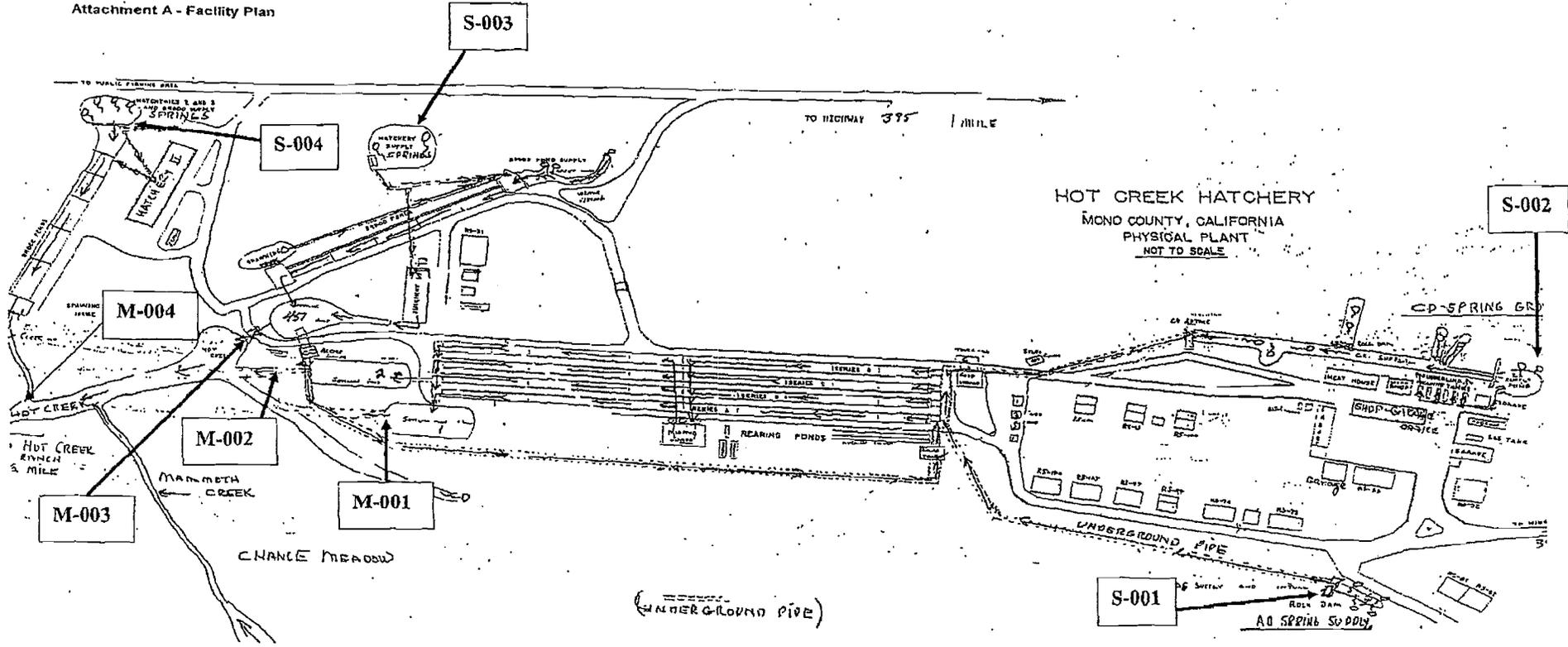
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Date

Attachment A – Facility Plan  
Attachment B – Violation Summary

TBZ/clhT: Hot Creek Fish Hatchery, 3-17-09, TBZ,scf,clc,(MeO)\_1.doc  
[File Under: SLT File Room, WDID No. 6B260801001  
VVL File Room, WDID No. 6B260801001]

# **ATTACHMENT A**

Attachment A - Facility Plan



HOT CREEK HATCHERY  
MONO COUNTY, CALIFORNIA  
PHYSICAL PLANT  
NOT TO SCALE

S-002

S-003

S-004

M-004

M-002

M-003

M-001

S-001

# **ATTACHMENT B**

## 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 0.322 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       |
| 11/29/2006 | M-001    | Potassium Permanganate | 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-002    | Potassium Permanganate | Analytical result of 0.743 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.12 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-003    | 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-00 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       |

Exhibit 1r



California Regional Water Quality Control Board  
Lahontan Region



Linda S. Adams  
Secretary for  
Environmental Protection

2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150  
(530) 542-5400 • Fax (530) 544-2271  
www.waterboards.ca.gov/lahontan

Arnold Schwarzenegger  
Governor

MEMORANDUM

TO: Bruce Kinney, Deputy Regional Manager  
California Dept. of Fish & Game  
407 West Line Street  
Bishop Ca 93514

James Starr, Fisheries Branch  
California Dept of Fish And Game  
830 S Street  
Sacramento Ca 95814

FROM: ROBERT S. DODDS  
ASSISTANT EXECUTIVE OFFICER

DATE: MAY 11 2009

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

Enclosed is Time Schedule Order (TSO) No. R6V-2009-0016. This TSO establishes a schedule for the California Department of Fish and Game (Department) to develop and implement an acceptable compliance plan for the Hot Creek Hatchery (Facility). The Facility's discharge has been and continues to violate Nitrite+Nitrate as Nitrogen and flow effluent limitations specified by Board Order No. R6V-2006-0027 (NPDES Permit). The TSO requires the Department to achieve compliance with all requirements of its NPDES Permit by April 28, 2014. Since the TSO compliance period extends beyond one year, the TSO also establishes interim, performance-based effluent limitations for Nitrite+Nitrate as Nitrogen and flow. The TSO also contains quarterly assessment reporting to track the Department's compliance with the TSO, and progress towards returning the Facility to compliance with its NPDES permit effluent limitations.

Pursuant to Water Code section 13385(j)(3), compliance with this TSO exempts the Department from additional mandatory minimum penalties for violating effluent limitations for Nitrite+Nitrate as Nitrogen and flow, only. Violations of other effluent limitations are still subject to mandatory minimum penalties pursuant to Water Code sections 13385(h) and 13385(i).

California Environmental Protection Agency

Bruce Kinney  
James Starr

- 2 -

If you have any questions regarding this matter, please contact Taylor Zentner at (530) 542-5469, or Scott C. Ferguson at ((530) 542-5432.

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

Cc: Hot Creek Hatchery Mailing List

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

TIME SCHEDULE ORDER NO. R6V-2009-0016

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

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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 to 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. 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)
4. 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.
5. 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).

6. 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.
7. 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."*

8. 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 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.

The 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.

9. 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.

10. 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.
11. Pursuant to Water Code section 13300, Time Schedule Order No. R6V-2009-0016 is being issued to set forth actions that the Discharger shall take to correct or prevent discharges of waste that violates Board Order No. R6V-2006-0027.
12. 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).
13. Since the time schedules for completing actions necessary to bring the waste discharge into compliance exceed one year, this Time Schedule Order includes the following 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 Toxic 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 ensure 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:

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

Total Facility Effluent Flow shall not be greater than:

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

14. 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.
15. 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.
16. 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 this Time Schedule Order. 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.
17. 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, 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](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 this Time Schedule Order) 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                             |

*TO CALCULATE?*

*way*

If monitoring data indicates the concentration of Nitrate + Nitrite (as N) in any of the influent springs exceeds the above listed interim effluent limits for the corresponding effluent monitoring location, the interim effluent limitation for

- Nitrate + Nitrite (as N) shall not exceed the corresponding influent concentration by more than 20 percent. Because AB Spring and CD Spring are mixed and discharged at two locations (M-001 and M-002), compliance shall be measured as follows if influent concentrations of Nitrate + Nitrite (as N) from either AB Spring or CD Spring exceed the above interim effluent limits: a flow-weighted average Nitrate + Nitrite (as N) concentration shall be calculated for AB Spring and CD Spring, and the calculated flow-weighted average Nitrate + Nitrite (as N) concentration, for M-001 and M-002, shall not exceed the AB Spring and CD Spring flow-weighted average by more than 20 percent.

- The following interim effluent limitation for flow shall become effective immediately (issuance date of this Time Schedule Order) and shall remain in effect 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**

- 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 revisions are 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. Achieve Full Compliance with Final  
Effluent Limits

May 11, 2014

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 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.

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).

Task C - The **Quarterly Assessment Reports** must, at a minimum, include the following information:

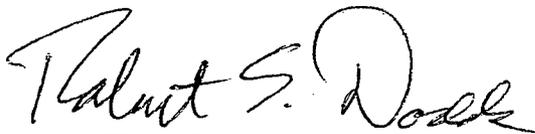
- i. Analytical data from monitoring identified in the Facilities Assessment. The results will be provided in tabulated and graphical format, and include the analytical data collected **each month** for that quarter, in addition to the analytical data provided in all previous quarterly reports.
- ii. 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 <sup>st</sup>                         |
| April – June             | August 1 <sup>st</sup>                      |
| July – September         | November 1 <sup>st</sup>                    |
| October – December       | February 1 <sup>st</sup>                    |

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, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement. 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, the Executive Officer may amend this Order 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.



Robert S. Dodds  
Assistant Executive Officer

May 11, 2009

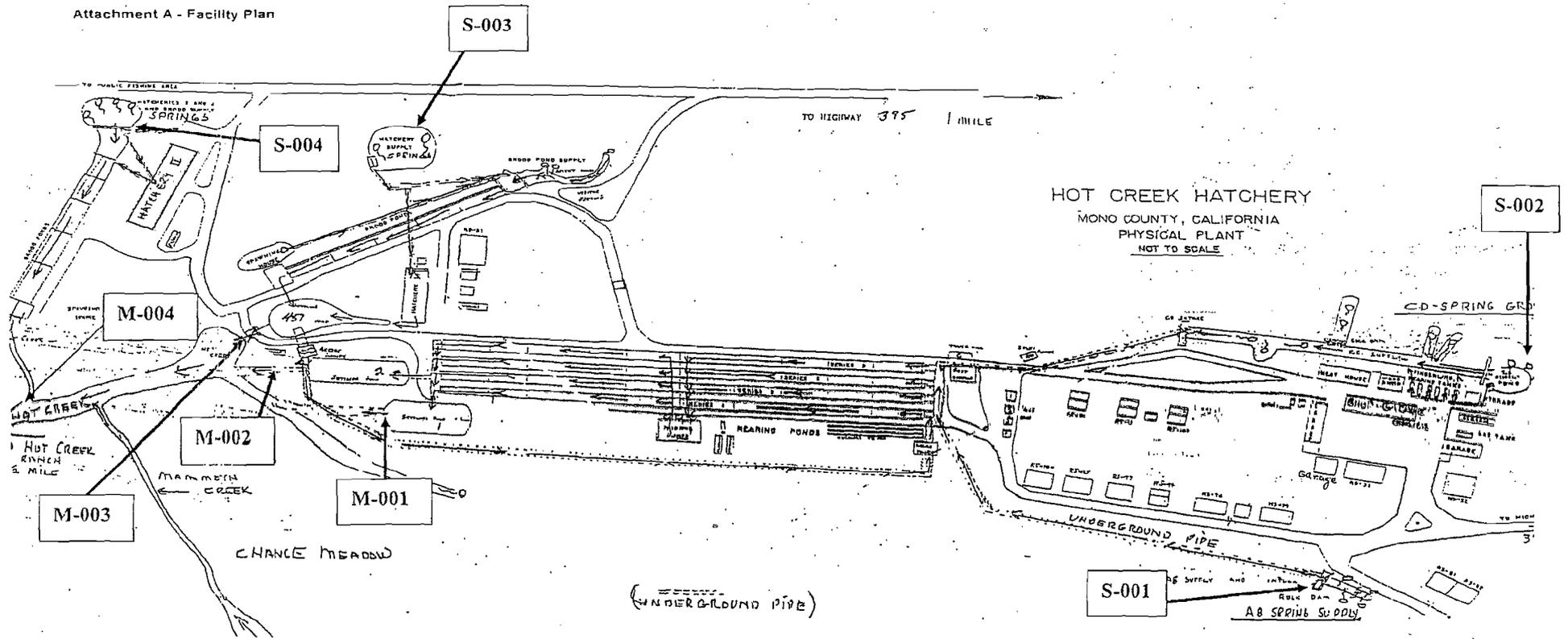
Date

Attachment A – Facility Plan  
Attachment B – Violation Summary

# **ATTACHMENT A**

## **Facility Plan**

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 0.322 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       |
| 11/29/2006 | M-001    | Potassium Permanganate | 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-002    | Potassium Permanganate | Analytical result of 0.743 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.12 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-003    | 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-00 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       |

Exhibit 1s



**California Regional Water Quality Control Board  
Lahontan Region**



Linda S. Adams  
Secretary for  
Environmental Protection

2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150  
(530) 542-5400 • Fax (530) 544-2271  
www.waterboards.ca.gov/lahontan

Arnold Schwarzenegger  
Governor

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**M E M O R A N D U M**

JAN 19 2009  
2010

**TO:** Bruce Kinney, Deputy Regional Manager  
California Dept. of Fish & Game  
407 West Line Street  
Bishop, CA 93514

James Starr, Fisheries Branch  
California Dept. of Fish & Game  
830 S Street  
Sacramento, CA 95814

**FROM:**   
CHUCK CURTIS  
SUPERVISING WATER RESOURCE CONTROL ENGINEER

**DATE:** JAN 12 2009 2010?

**SUBJECT:** TIME SCHEDULE ORDER NO. R6V-2009-0016-A1, ISSUED TO CALIFORNIA DEPARTMENT OF FISH AND GAME FOR HOT CREEK HATCHERY, MAMMOTH LAKES, MONO COUNTY, W DID NO. 6B260801001

Enclosed is Time Schedule Order (TSO) No. R6V-2009-0016-A1, which clarifies TSO No. R6V-2009-0016. Based upon a review of TSO No. R6V-2009-0016, Water Board staff has determined it is appropriate to modify the TSO in order to clarify interim effluent limitations for Nitrate + Nitrite (as N) and flow. TSO R6V-2009-0016-A1 does not substantively change effluent or flow limitations or other requirements of TSO No. R6V-2009-0016.

The modifications are summarized below in ~~strikeout~~ and underline format. A complete copy of TSO No. R6V-2009-0016-A1 is attached to this memorandum.

A new Finding No. 3 is added and the following Finding numbers are adjusted as necessary.

- "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.<sup>1</sup> None of the interim effluent or flow limits or other requirements specified in Time Schedule Order No. R6V-2009-0016 are substantively modified.

The following modifications are made to Order Nos. 1 and 2 in order to further clarify the interim effluent limitations.

- "1. The following interim effluent limitations for Nitrate + Nitrite (as N) shall become effective immediately (issuance date of this 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)<br>mg/L | 0.30                                | 0.417                             |
| M-002               | Nitrate + Nitrite (as N)<br>mg/L | 0.30                                | 0.429                             |
| M-003               | Nitrate + Nitrite (as N)<br>mg/L | 0.45                                | 0.806                             |
| M-004               | Nitrate + Nitrite (as N)<br>mg/L | 0.54                                | 0.956                             |

If monitoring data indicates the concentration of Nitrate + Nitrite (as N) in any of the influent springs exceeds the above listed interim effluent limits for the corresponding effluent monitoring location, the interim effluent limitation for Nitrate + Nitrite (as N) shall not exceed the corresponding influent concentration by more than 20 percent. The effluent concentration of Nitrate + Nitrite (as N) shall be compared to the interim effluent limits above or to the corresponding influent<sup>2</sup> concentration plus 20 percent, whichever is greater. Because AB Spring and CD Spring are mixed and discharged at two locations (M-001 and M-002), compliance shall be measured as follows if influent concentrations of Nitrate + Nitrite (as N) from either AB Spring or CD Spring exceed the above interim effluent limits: a flow-weighted average Nitrate + Nitrite (as N) concentration shall be calculated for AB Spring and CD Spring, and the calculated flow-weighted average Nitrate + Nitrite (as N) concentration, for M-001

<sup>1</sup> 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.

<sup>2</sup> 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.

and M-002, shall not exceed the AB Spring and CD Spring flow-weighted average by more than 20 percent."

- "2. The following interim effluent limitation for flow shall become effective immediately (issuance date of this 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."

If you have any questions regarding this matter, please contact Taylor Zentner at (530) 542-5469, or Scott C. Ferguson at (530) 542-5432.

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

cc: Hot Creek Hatchery Mailing List

TBZ/clhT: Cover Letter, Clarify TSO R6V-2009-0016 A1, 01-06-2010, TBZ,SCF,M.doc  
File Under: SLT File Room, Hot Creek Hatchery, Mono County, 6B260801001/VVL File Room, Hot Creek Hatchery, Mono County, 6B260801001

**HOT CREEK FISH HATCHERY  
MAILING LIST**

|  |  |   |
|--|--|---|
| <p>BRUCE KINNEY<br/>DEPUTY REGIONAL MANAGER<br/>DEPT OF FISH &amp; GAME REGION 6<br/>407 WEST LINE STREET<br/>BISHOP CA 93514<br/>bkinney@dfg.ca.gov</p>     | <p>GENE COUFAL, MANAGER<br/>DEPT OF WATER &amp; POWER<br/>CITY OF LOS ANGELES<br/>300 MANDICH STREET<br/>BISHOP CA 93514-3449</p>  | <p>ALAN MILLER<br/>LAHONTAN REGIONAL WATER<br/>QUALITY CONTROL BOARD<br/>ELECTRONIC COPY ONLY</p>                           |
| <p>VERNON CARR<br/>FISH HATCHERY MANAGER II<br/>CALIFORNIA DEPT OF FISH AND<br/>GAME<br/>HCR 79, BOX 208<br/>MAMMOTH LAKES CA 93546<br/>vcarr@dfg.ca.gov</p> | <p>GARY WILLIAMS<br/>SENIOR HATCHERY SUPERVISOR<br/>CALIFORNIA DEPT OF FISH AND GAME<br/>12550 JACARANDA AVE<br/>VICTORVILLE CA 92395-5138<br/>glwilliams@dfg.ca.gov</p> | <p>CINDI MITTON<br/>LAHONTAN REGIONAL WATER<br/>QUALITY CONTROL BOARD<br/>ELECTRONIC COPY ONLY</p>                          |
| <p>BOB PIEROTTI<br/>STATE DEPT OF WATER<br/>RESOURCES<br/>770 FAIRMONT AVENUE<br/>GLENDALE CA 91203-1035</p>   | <p>ERIN LUTRICK<br/>UNITED STATES FOREST SERVICE<br/>351 PACU LANE SUITE 200<br/>BISHOP CA 93514<br/>elutrick@fs.fed.us</p>  | <p>MIKE PLAZIAK<br/>LAHONTAN REGIONAL WATER<br/>QUALITY CONTROL BOARD<br/>ELECTRONIC COPY ONLY</p>                          |
| <p>JAMES STARR<br/>FISHERIES BRANCH<br/>CALIFORNIA DEPT OF FISH AND<br/>GAME<br/>830 S STREET<br/>SACRAMENTO CA 95814<br/>jstarr@dfg.ca.gov</p>              | <p>WILLIAM J. THOMAS<br/>CHANCE RANCH<br/>1201 K STREET SUITE 1100<br/>SACRAMENTO CA 95814</p>   | <p>PHIL ISORENA<br/>NPDES PROGRAM MANAGER<br/>STATE WATER RESOURCES<br/>CONTROL BOARD<br/>pisorena@waterboards.ca.gov</p>   |
| <p>DISTRICT ENGINEER<br/>CDPH OFFICE OF DRINKING WATER<br/>464 W 4TH STREET STE 437<br/>SAN BERNARDINO CA 92401</p>  | <p>ROB LUSARDI<br/>CALTROUT<br/>EASTERN SIERRA CONSERVATION<br/>MGR<br/>870 MARKET STREET SUITE 528<br/>SAN FRANCISCO CA 94102</p>                                       | <p>MARK BRADLEY<br/>STATE WATER RESOURCES<br/>CONTROL BOARD, OFFICE OF<br/>ENFORCEMENT<br/>mbradley@waterboards.ca.gov</p>  |
| <p>DOUGLAS EBERHARDT<br/>USEPA REGION 9<br/>75 HAWTHORNE STREET<br/>MAIL CODE: WTR-5<br/>SAN FRANCISCO, CA 94105<br/>eberhardt.doug@epa.gov</p>              | <p>MAYUMI OKAMOTO<br/>STATE WATER RESOURCES CONTROL<br/>BOARD<br/>1001 I STREET 16<sup>TH</sup> FLOOR<br/>SACRAMENTO CA 95814<br/>mokamoto@waterboards.ca.gov</p>        | <p>TARYN STOKELL<br/>STATE WATER RESOURCES<br/>CONTROL BOARD, OFFICE OF<br/>ENFORCEMENT<br/>tstokell@waterboards.ca.gov</p> |
| <p>MONO COUNTY HEALTH DEPT<br/>DENNIS LAMPSON CO SANITARIAN<br/>PO BOX 476<br/>BRIDGEPORT CA 93517</p>   | <p>KEN GREENBERG<br/>WATER DIVISION (WTR-7)<br/>USEPA REGION 9<br/>75 HAWTHORNE STREET<br/>SAN FRANCISCO CA 94105<br/>greenbeg.ken@epa.gov</p>                           |   |
| <p>BILL NICHOLS<br/>HOT CREEK RANCH<br/>ROUTE 1 BOX 206<br/>MAMMOTH LAKES CA 93546</p>   | <p>FATIMA TY<br/>WATER DIVISION (WTR-7)<br/>USEPA REGION 9<br/>75 HAWTHORNE STREET<br/>SAN FRANCISCO CA 94105<br/>ty.fatima@epa.gov</p>                                  |   |
|  |  |   |

**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.<sup>1</sup> 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.

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<sup>1</sup> 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.

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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](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)<br>mg/L | 0.30                                | 0.417                             |
| M-002               | Nitrate + Nitrite (as N)<br>mg/L | 0.30                                | 0.429                             |
| M-003               | Nitrate + Nitrite (as N)<br>mg/L | 0.45                                | 0.806                             |
| M-004               | Nitrate + Nitrite (as N)<br>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 influent<sup>2</sup> 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.

<sup>2</sup> 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.

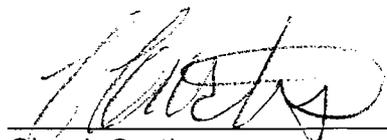
- ii. **Initial Corrective Actions Proposal.** This proposal must identify measures that may reduce concentrations of the above-referenced nitrogen species, and that will be implemented by **January 31, 2010**.
  - iii. **Compliance Schedule.** This schedule must identify the activities (e.g., assessments, 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 <sup>st</sup>                         |
| April – June             | August 1 <sup>st</sup>                      |
| July – September         | November 1 <sup>st</sup>                    |
| October – December       | February 1 <sup>st</sup>                    |

- 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

January 11, 2010

Date

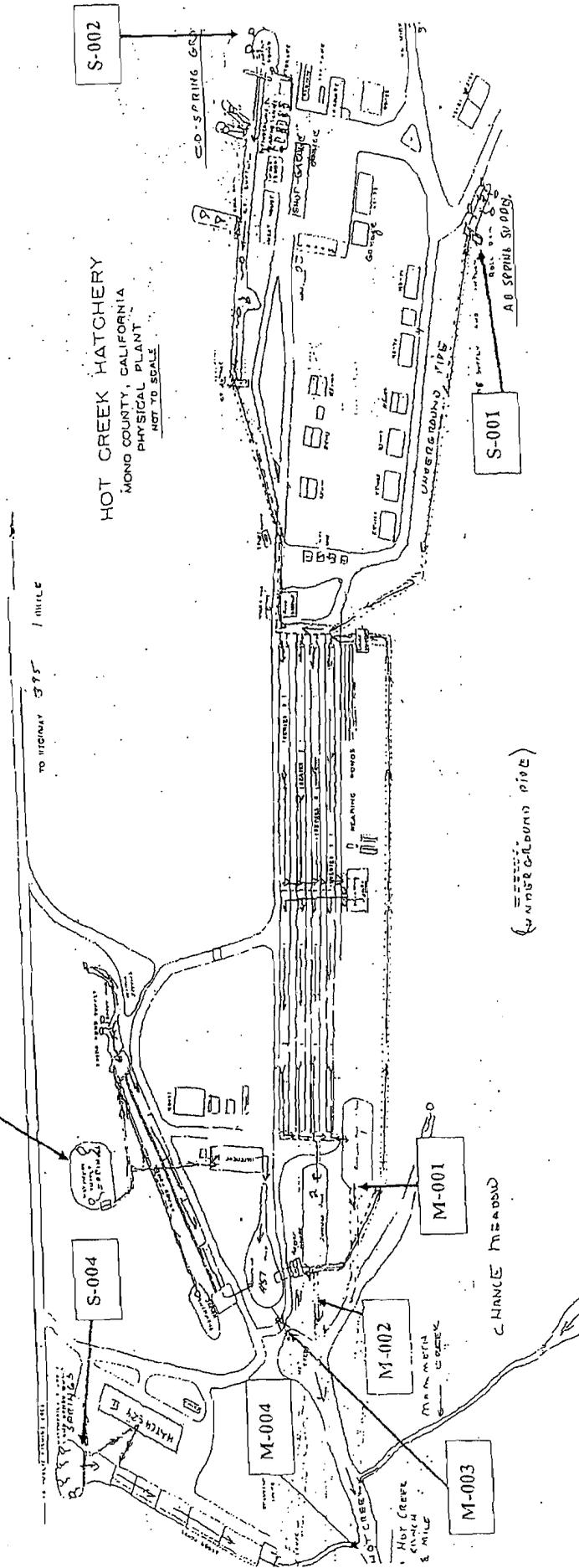
Attachment A – Facility Plan  
Attachment B – Violation Summary

TBZ:chlT: 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 A - Facility Plan





Attachment B

Hot Creek Hatchery Effluent Limit Violations Table

| Date       | Location | Parameter              | Description  |
|------------|----------|------------------------|--|
| 8/24/2006  | M-004    | Flow                   | Flow rate of 3.16 MGD at M-004 exceeds the Effluent Limit of 2.5 MGD                                   |
| 8/24/2006  | M-002    | Flow                   | Flow rate of 7.0 MGD at M-002 exceeds the Effluent Limit of 6.5 MGD                                    |
| 8/26/2006  | M-001    | Flow                   | Flow rate of 7.0 MGD at M-001 exceeds the Effluent Limit of 6.9 MGD                                    |
| 8/26/2006  | 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 0.322 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       |
| 11/29/2006 | M-001    | Potassium Permanganate | 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-002    | Potassium Permanganate | Analytical result of 0.743 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.12 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 |
| 1/26/2007  | 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                                    |
| 5/20/2007  | 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       |
| 7/6/2007   | M-003    | Flow                   | Flow rate of 4.6 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD                                    |
| 7/6/2007   | 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-003    | 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 |
| 5/7/2008  | M-003    | Flow              | Flow rate of 5.4 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD                                    |
| 5/7/2008  | 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-001    | 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 |
| 6/2/2008  | M-001    | Flow              | Flow rate of 7.0 MGD at M-001 exceeds the Effluent Limit of 6.9 MGD                                    |
| 6/2/2008  | M-003    | Flow              | Flow rate of 6.0 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD                                    |
| 6/2/2008  | M-001    | Flow              | Flow rate of 7.3 MGD at M-001 exceeds the Effluent Limit of 6.9 MGD                                    |
| 6/2/2008  | 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 |
| 10/5/2008 | M-003    | Flow              | Flow rate of 4.0 MGD at M-003 exceeds the Effluent Limit of 3.8 MGD                                    |
| 11/7/2008 | 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       |

24 Flow  
 35 NITRATE + NITRITE  
 4 PP

**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.<sup>1</sup> 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.

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<sup>1</sup> 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](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)<br>mg/L | 0.30                                | 0.417                             |
| M-002               | Nitrate + Nitrite (as N)<br>mg/L | 0.30                                | 0.429                             |
| M-003               | Nitrate + Nitrite (as N)<br>mg/L | 0.45                                | 0.806                             |
| M-004               | Nitrate + Nitrite (as N)<br>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 influent<sup>2</sup> 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.

<sup>2</sup> 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 <sup>st</sup>                         |
| April – June             | August 1 <sup>st</sup>                      |
| July – September         | November 1 <sup>st</sup>                    |
| October – December       | February 1 <sup>st</sup>                    |

- 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

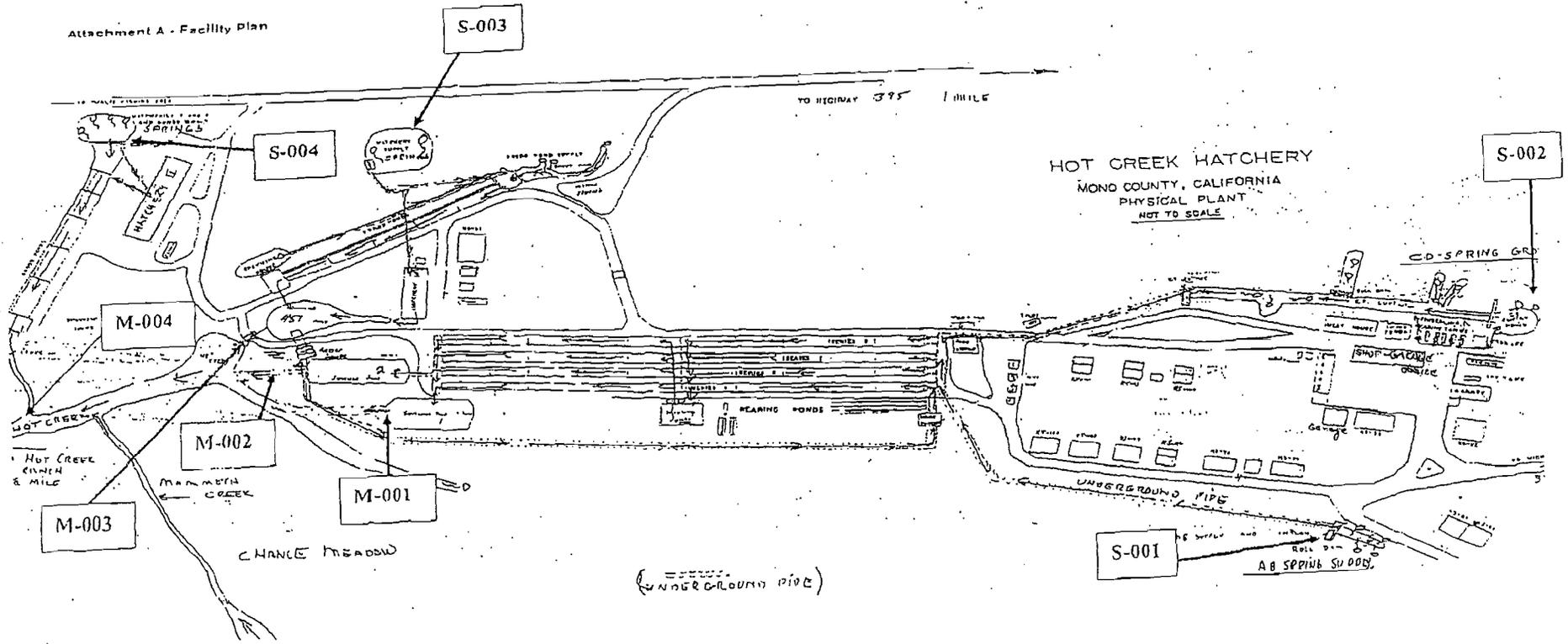
Attachment A – Facility Plan  
Attachment B – Violation Summary

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 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 0.322 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       |
| 11/29/2006 | M-001    | Potassium Permanganate | 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-002    | Potassium Permanganate | Analytical result of 0.743 mg/L at M-001 exceeds the Average Monthly Effluent Limit of 0.12 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-003    | 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-00 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       |

## **SECTION II**

### **OPENING BRIEF OF NANCEE MURRAY**

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

**In the Matter of:**

**Hearing Regarding Administrative Civil  
Liability Complaint for Mandatory Minimum  
Penalty No. R6V-2010-0004, Issued to the  
California Department of Fish and Game  
For Hot Creek Fish Hatchery, Mammoth  
Lakes, Mono County**

**CALIFORNIA DEPARTMENT  
OF FISH AND GAME  
  
OPENING BRIEF**

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**I. INTRODUCTION**

**A. Procedural Background**

The California Department of Fish and Game (DFG) owns and operates the Hot Creek Hatchery. DFG does not own the land on which the Hot Creek Hatchery is located. DFG operates the Hot Creek Hatchery in part pursuant to a lease from the Los Angeles Department of Water and Power (LADWP) and in part pursuant to a Special Use Permit issued by the United States Forest Service (USFS).

In June, 2006 the Lahontan Regional Water Quality Control Board (Regional Board) issued a new NPDES Permit for the Hot Creek Hatchery to DFG and the USFS (2006 Permit). The 2006 Permit has flow discharge limitations and a numerical limit for nitrate + nitrite that the previous NPDES permits that had been issued for Hot Creek Hatchery did not contain. DFG staff notified the private company doing much of the drafting of the 2006 Permit, that there was a problem with flow volume limit and requested a change to that limit prior to the issuance of the 2006 Permit. (DFG Exhibit 1 at p. 4.) DFG staff notified the Regional Board in a letter dated September 25, 2006 that DFG was not in compliance with the flow discharge limit that had been imposed in the 2006 Permit and requested a modification to the 2006 Permit. (See DFG Exhibit 1i.) DFG staff requested several more times that the 2006 Permit be modified regarding the flow discharge limit and the nitrate + nitrite effluent limit during the period October 2007 to

December 2008. On December 19, 2007, DFG was told, in an email from Regional Board staff, that the Regional Board staff were aware of the problem with the 2006 Permit, that staff was "short handed", a request for a meeting between the Regional Board and DFG had been made, and such a meeting would most likely occur after the February, 2008, Regional Board meeting. (See DFG Exhibit 1k.)

Instead of a meeting to discuss modifications to the 2006 Permit, on December, 5, 2008, the Regional Board issued a Notice of Violation regarding the 2006 Permit alleging: (1) exceedence of flow discharge limits; (2) exceedence of the nitrate + nitrite effluent limits; (3) one missing monthly report for July, 2006; and (4) exceedence of the potassium permanganate effluent limit at four discharge locations on November 29, 2006. (DFG Exhibit 1p.) DFG staff met with Regional Board staff on January 30 2009, to review the Notice of Violation and to develop a plan to address concerns regarding the flow discharge limits and the nitrate and nitrite effluent limits in the 2006 Permit. DFG staff and Regional Board staff worked together to address the flow limit and nitrate + nitrite problems with the 2006 Permit. In May, 2009, the Regional Board adopted a Time Schedule Order to address the problems with the 2006 Permit regarding flow volume and nitrate + nitrite effluent limits. (DFG Exhibit 1r.) That Time Schedule Order was further amended in January 2010 to better address natural fluctuations in flow and nitrate and nitrite levels. (DFG Exhibit 1s.) The Time Schedule Order contains a modified sampling protocol that now includes 22 sampling sites at the Hot Creek Hatchery with expanded parameters for that sampling.

On February 1, 2010, the Regional Board used an Administrative Civil Liability Complaint for Mandatory Minimum Penalty No. R6V-2010-004 (Complaint). The Complaint covers the time period of August 14, 2006 through May 4, 2009 and proposes that DFG be assessed a mandatory minimum penalty in the amount of \$225,000.00. The Complaint included the previous allegations in the December 5, 2008, Notice of Violation and included further alleged flow discharge and nitrate + nitrite effluent limit violations for the year 2009.

## **B. Factual Background**

The springs and seeps at Hot Creek Hatchery occur naturally in nature and were present before Hot Creek Hatchery was constructed. The area is a montaine marsh with many naturally occurring springs and seeps that eventually flow into the Hot Creek Hatchery. (DFG Exhibit 1 at p. 2.) DFG does not artificially limit the volume of flow that arises from the springs, nor does DFG add to the volume of water used and discharged at Hot Creek Hatchery by using a source of water other than the springs and seeps that naturally occur in the area. (DFG Exhibit 1 at p.6). The Hot Creek Hatchery is located in a large mountain meadow that is situated at the base of the Sierra Mountains near the edge of a large table. (See DFG Exhibit 1, Figure 1.) The topography of the area limits the options for using gravity to shunt water around the discharge point specified in the NPDES permit. (DFG Exhibit 1 at p.2.)

The Owens tui chub, a fish listed as endangered under both the Endangered Species Act (ESA) (16 U.S.C. section 1531 et seq.) and the California Endangered Species Act (CESA) (Fish and Game Code section 2050 et seq.) is present in the AB spring and CD spring area just upstream of the hatchery. (DFG Exhibit 1 at p. 4.) These two areas are federally designated critical habitat for the Owens tui chub. Critical habitat has been designated at two sites for Owens tui chub: (1) 13 km (8 mi) of Owens River and 15 m (50 ft) of riparian vegetation on either side of the river, encompassing a total of approximately 39 ha (97 ac) in the Owens Gorge; and (2) two spring provinces and 15 m (50 ft) of riparian vegetation on either side of spring brooks, encompassing approximately 2 ha (5 ac) at Hot Creek Hatchery. (DFG Exhibit 1 at p. 4.) The Lahontan tui chub was illegally introduced into the watershed in the 1950s and has aggressively invaded all historic Owens tui chub habitat range-wide except for the AB spring, the CD spring, and a similarly isolated site. Only these, and four small transplanted populations, exist in the world. A historic and potential flow path exists between the AB Spring and Hot Creek below the settling ponds. When the Mammoth Creek flood plain is inundated by high flows, routes for fish movement occur between mammoth Creek and the potential flow path to Hot Creek. No barrier would exist to prevent upstream movement of hybridized tui chubs from Hot Creek into the potential flow path. Any potential for structures to safely barricade the proposed flow path from potentially invading fish would be highly speculative and experimental due to the absence of sufficient channel gradient. Any immigration of hybridized tui chubs into the critical habitat would result in hybridization and the loss of that population for recovery purposes. Given the species requirements and site characteristics, release of surface water down the historic channel between the AB Spring and Hot Creek would be reasonably expected to directly eliminate the Owens tui chub population from AB Spring. (DFG Exhibit 1 at p. 4.) Thus, rerouting of spring flow out of the AB spring, into the historic channel and around the discharge point could directly eliminate the Owens tui chub population from the AB Spring, in violation of ESA and CESA. Rerouting spring flow out of the CD spring and around the discharge point using a gravity system would be difficult if not impossible, due to the topography of the area.

Nitrate + nitrite levels naturally occurring in the springs that are the sole water source for the hatchery, are often higher than the allowable effluent limits in the 2006 Permit. (See DFG Exhibit 1g.)

## **II. WATER CODE SECTION 13385**

Water Code section 13385 provides for civil liability for a person or entity that violates an NPDES permit. Water Code section 13385(h)(1) specifically provides a mandatory minimum penalty of three thousand dollars for each serious violation of an NPDES permit. Water Code section 13385(i)(1) specifically provides a mandatory minimum penalty of three thousand dollars for specified violations of an NPDES permit such as exceeding an effluent limitation, failing to file a report required by an NPDES permit or filing an incomplete report. Water Code section 13385(j)(1)(B) provides, in part, that

the mandatory minimum penalty set forth in Water Code section 13385(h) and (i) do not apply to “[a]n unanticipated, grave natural disaster or other **natural phenomenon** of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight.” Water Code section 13385(j)(1)(B)(emphasis added).

### III. BURDEN OF PROOF

Only one reported California court case has interpreted the exceptions to the imposition of the mandatory minimum penalties that are outlined in Water Code section 13385(j)(1)(B). In the *City of Brentwood v. Central Valley Regional Water Quality Control Board*, (2004) 123 Cal. App. 4<sup>th</sup> 714, the Court of Appeal found that the City that operated a wastewater treatment plant bore the burden of proving that the exceptions specified in Water Code section 13385(j)(1) relieved the City of liability for violations that were subject to the mandatory minimum penalties. In effect, the court ruled that the exceptions stated in Water Code section 13385(j)(1) were affirmative defenses for which the City bore the burden of proof. In State Water Resources Control Board Order WQ 2007-0010, the State Water Resources Control Board (SWRCB) considered a petition for review regarding a Settlement Order associated with potential liability by the City of Escondido (City) for alleged violations of its NPDES permit. In that Order, the SWRCB found that there are three affirmative defenses to liability available to the discharger, but the discharger bears the burden of proving that one of these defenses relieves it of liability for mandatory minimum penalties under Water Code section 13385. “Proof of any of the three defenses with respect to a violation suspends the MMP provisions of section 13385 for that violation.” (Order WQ 2007-0010 at p. 4.) In that instance involving the City of Escondido, the Settlement Order did not contain a determination that any of the affirmative defenses were proven. The SWRCB remanded the matter back to the San Diego Regional Water Quality Control Board to make specific findings as to the alleged violations and make factual determinations as to any affirmative defense alleged by the City. (Order WQ 2007-0010 at p. 7.)

DFG as the owner and operator of the Hot Creek Hatchery must demonstrate that the exception stated in Water Code section 13385(j)(1)(B) applies to except DFG from the penalties that would otherwise be imposed under Water Code section 13385(h)(1) or 13385(i)(1). DFG does not dispute that violations of the 2006 Permit occurred. DFG does dispute the need for imposing minimum penalties as set forth in Water Code section 13385(h)(1) for those violations that involve the exceedence of the flow limit and the nitrate + nitrite limit. DFG believes that the Regional Board has sufficient evidence to make a finding that the affirmative defense stated in Water Code section 13385(j)(1)(B) applies.

### IV. PREPONDERANCE OF THE EVIDENCE

Water Code section 13385 was amended in 1999 by Assembly Bill 1104 and Senate Bill 709. The Legislative Counsel’s Digest for SB 709 provides in part that the bill would

require a mandatory minimum penalty of three thousand dollars under prescribed circumstances. The digest also refers to provisions that would recover the economic benefits derived from the acts that constitute a violation and that recent investigations had indicated that the current enforcement of the state and regional boards had indicated that the current enforcement of the state and regional boards may not be achieving full compliance with waste discharge requirements in a timely manner. SB 709 added subsections 13385(h), (i) and (j) to the Water Code. The language for the exception to liability stated in Water Code subsection 13385(j)(1)(B) mirrors exactly the definition of the term "act of God" as set forth in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)(42 U.S.C. section 9601 et seq.). CERCLA defines "act of God" to mean "...an unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight." 42 U.S.C. section 9601(1) (emphasis added). CERCLA then goes on to provide that no liability will be imposed "for a person otherwise liable who can establish by a preponderance of the evidence that the release or threat of release of a hazardous substance and the damages resulting therefrom were caused solely by -- (1) an act of God; ..." 42 U.S.C. section 9607(b)(1) (emphasis added). Similarly, the Oil Pollution Act defines "act of God" to mean "an unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable, or irresistible character the effects of which could not have been prevented or avoided by the exercise of due care or foresight. (OPA)(33 U.S.C. section 2701(1) (emphasis added)). The OPA then goes on to state that a party is not liable for removal costs or damages under the OPA if the responsible party establishes, by a preponderance of the evidence, resulting damages or removal costs were caused solely by an act of God. (33 U.S.C section 2703(a)(1) (emphasis added). Finally, the California Evidence Code provides that except as otherwise provided by law, the burden of proof requires proof by a preponderance of the evidence. (Evid. Code section 115). The Water Code does not specifically provide a different burden of proof for alleged violations of an NPDES permit, therefore the standard that applies here is a preponderance of the evidence.

A preponderance of the evidence is merely "...evidence which as a whole shows that the fact sought to be proved is more probable than not." BLACK'S LAW DICTIONARY 1064 (5<sup>th</sup> ed. 1979). Preponderance of the evidence means "evidence that, when weighed with that opposed to it, has the more convincing force and the greater probability of truth. *Leslie G. v. Perry & Assocs.* (1996) 43 Cal App. 4<sup>th</sup> 472, 483. A "preponderance of the evidence" is a much lower standard of proof than "clear and convincing" or "beyond a reasonable doubt" that could have been specifically required by statute. DFG merely needs to prove that it is more probable than not that the volume of flow entering Hot Creek Hatchery from the natural springs that are the only source of water for the hatchery caused the exceedence of the stated discharge limit in the 2006 Permit and that those springs constitute a natural phenomenon of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight. DFG merely needs to prove that it is more probable than not that the levels of nitrate + nitrite in the water entering Hot Creek Hatchery from the natural springs that are the only source of water for the

hatchery often exceeded the effluent limit for that parameter stated in the 2006 Permit and that those springs constitute a natural phenomenon of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight.

**V. The Volume of Flow Being Discharged by the Hot Creek Hatchery is Determined by a Natural Phenomenon of an Exceptional, Inevitable and Irresistible Character , the Effects of Which Could Not Have Been Prevented or Avoided by the Exercise of Due Care or Foresight, in Accordance with Water Code section 13385(j)(1)(B).**

As stated in the testimony of the DFG NPDES Permit Coordinator, James Starr, the springs at Hot Creek Hatchery occur naturally in nature and were present before Hot Creek Hatchery was constructed. (DFG Exhibit 1 at p. 2.) DFG does not artificially limit the volume of flow that arises from the springs. (DFG Exhibit 1 at p. 6.) DFG does not add to the volume of water used and discharged at Hot Creek Hatchery by using a source of water other than the springs and seeps that naturally occur in the area. (DFG Exhibit 1 at p. 6.) DFG cannot easily shunt the water that is discharged from the springs out of the watershed using gravity due to the topography of the area. (See DFG Exhibit 1, Figure 1.) In addition, construction of a drainage channel to manipulate the amount of water entering the hatchery would decrease the amount of fish that the hatchery could produce and could lead to increased concentrations of nitrate and nitrite, as well as other constituents in the effluent.

The Owens tui chub, a fish listed as endangered under both the Endangered Species Act (ESA) (16 U.S.C. section 1531 et seq.) and the California Endangered Species Act (CESA) (Fish and Game Code section 2050 et seq.) is present in the area of the two large springs (AB Supply and the CD Supply Springs) that flow directly into the hatchery. (DFG Exhibit 1 at p. 4.) These two springs are one of only two isolated areas that are designated as critical habitat by the U.S. Fish and Wildlife Service. As stated above, due to the species requirements and site characteristics, a release of surface water down the historic channel between the AB Spring and Hot Creek would be reasonably expected to directly eliminate the Owens tui chub population from AB Spring. *Id.*

As stated above, California courts have only once interpreted Water Code section 13385(j)(1)(B), in the *City of Brentwood v. Central Valley Regional Water Quality Control Board*. In that instance, the City of Brentwood (City) in Contra Costa County operated a wastewater treatment plant that discharged into Marsh Creek, a tributary to the San Joaquin River and Delta. At the end of 1999 and beginning of 2000, the City applied for a revised NPDES permit for its existing facility and a permit for a new facility. In June 2000 the Central Valley Regional Water Quality Control Board (Central Valley Board) issued the City a single permit for both facilities with an effluent limitation stating that the dissolved oxygen concentration of the discharge shall not fall below 5.5 mg/l at all times. The discharge was composed of both groundwater and treated wastewater

from the plant. In its first monthly report under the new permit, the City tables showed that the dissolved oxygen levels in the effluent ranged from 2.0 to 4.6 and averaged 3.0 for the month. On September 6, 2000 the City installed an air blower at the plant and the dissolved oxygen levels improved and the violations ceased. The City challenged the Central Valley Board's imposition of mandatory minimum penalties pursuant to Water Code section 13385. In relevant part, the City contended that the groundwater was most likely the cause of the violations because the City had found no source of the violations in its own plant. It speculated that irrigation, pesticide use and other practices on the agricultural land surrounding the plant could have affected the composition of the groundwater component of the plant's effluent. The City argued that Water Code section 13385(j)(1)(B) applied because the alleged change in groundwater was exceptional, inevitable, and irresistible because it was unforeseen and could not be addressed instantaneously. Central Valley Board staff speculated that the dissolved oxygen violations may have been caused by the construction of the City's new plant and took the position that the City could have prevented the dissolved oxygen violations had they better prepared and planned for it. The court found that the City had the burden of proving that the affirmative defense in Water Code section 13385(j)(1)(B) applied and had failed to meet it.

DFG does not dispute that it has the burden of proving, by a preponderance of the evidence, that Water Code section 13385(j)(1)(B) applies in the instance of this Complaint. Unlike the situation in the *City of Brentwood* case, DFG knows the source of the exceedence of the flow discharge limit. Natural springs and seeps enter and to some extent surround the Hot Creek Hatchery and are discharged without DFG adding water from a different source to the system. Unlike the situation in the *City of Brentwood* case, there is not quick mechanical fix to remedy the exceedence of the flow discharge limit. As stated above, the topography of the area is such that a gravity system to shunt water out of the watershed is problematic. A federally and state endangered fish, the Owens tui chub, is present in the two main source springs for the hatchery and the area is federally designated critical habitat for that species. Similarly, a court ruled against the use of the "act of God" defense in a CERCLA case where the defendant failed to establish that the items that fell in a windstorm contained phenolic caustic where the case was about liability for the spilled phenolic caustic. *U.S. v. Poly-Carb, Inc.*(1996) 951 F. Supp. 1518. Again, unlike in *the City of Brentwood* and *U.S. v. Poly-Carb, Inc.* DFG can prove unequivocally that the source of the exceedence of the flow discharge limit in the 2006 Permit are the springs and seeps that naturally flow into the Hot Creek Hatchery. DFG does not augment the flow that enters the hatchery with a well or any additional water source.

In *U.S. v. Stringfellow*, a court determined that heavy rainfall was not an exceptional natural phenomenon and was not an "act of God" within the meaning of the CERCLA defense where rains at a toxic waste disposal site were foreseeable based on normal climatic conditions and where harm caused by rain on the toxic waste facility could have been prevented through the design of proper drainage channels. *U.S.v.Stringfellow* (1987) 661 F. Supp 1053. Unlike the *Stringfellow* situation, drainage channels to shunt the flow of the springs around the hatchery would be difficult to construct. As stated

above, increased use of an historical bypass channel near the AB spring could lead to further hybridization of the endangered Owens tui chub and would be reasonably expected to directly eliminate the Owens tui chub population from AB Spring. The topography of the area makes construction of a gravity fed drainage channel around the CD Spring difficult if not impossible to construct. In addition, construction of a drainage channel to manipulate the amount of water entering the hatchery could lead to increased concentrations of nitrate and nitrite, as well as other constituents in the effluent.

Webster defines inevitable as “incapable of being avoided or prevented”; irresistible as “impossible to resist” and exceptional as “being an exception: unusual”. (Webster’s II New College Dictionary, 1999). As stated above, the flow entering the Hot Creek Hatchery is inevitable, as it arises naturally from a spring and would be very difficult to prevent from flowing to the hatchery due to the topography of the area and the presence of an endangered species in the spring. The flow volume is irresistible, as it occurs in nature with no addition to the volume by DFG. And, the flow volume is exceptional, as it varies naturally, sometimes by orders of magnitude.

Based on the unique facts of this situation, DFG strongly believes that it is more probable than not that the volume of flow entering Hot Creek Hatchery from the natural springs that are the only source of water for the hatchery caused the exceedence of the stated discharge limit in the 2006 Permit and that those springs constitute a natural phenomenon of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight.

**VI. The Concentrations of Nitrate + Nitrite in the Spring Water Entering Hot Creek Hatchery Often Exceeded the Effluent Limit for that Parameter Stated in the 2006 Permit and Those Springs Constitute a Natural Phenomenon of an Exceptional, Inevitable, and Irresistible Character, the Effects of Which Could Not Have Been Prevented or Avoided by the Exercise of Due Care or Foresight**

Prior to the issuance of the 2006 Permit, DFG did occasionally test the spring water and the discharge water for levels of nitrate + nitrite. DFG did not immediately test the spring water for levels of nitrate + nitrite after issuance of the 2006 Permit, as this was not required in the 2006 Permit.

As shown in DFG Exhibit 1g, DFG did begin consistently testing the nitrate + nitrite levels in the influent water entering the hatchery beginning in December, 2008. DFG Exhibit 1g demonstrates that nitrate + nitrite levels in the springs that flow into Hot Creek Hatchery often exceeded the effluent limit stated in the 2006 Permit in those months that testing was done.

A contractor hired by DFG did collect mean nitrate concentrations of springs AB and CD on fourteen dates from 2000 to 2006. In a report he issued in 2007, the mean nitrate concentrations for those fourteen dates were reported as 0.31 mg/L for AB spring and 0.29 mg/L for CD spring. (See DFG Exhibit 1h.)

Thus, although DFG does not have actual data to demonstrate that the nitrate + nitrite levels in the springs that flow into the hatchery were as high or higher than the effluent limit for each month since the 2006 Permit was issued, DFG has data covering various time periods spanning 1999 to the present. There is a strong probability that the nitrate + nitrite levels in the springs in the months not sampled are similar to the months sampled and depicted in DFG Exhibit 1g because DFG does not control the nature or amount of the water that arises from the springs.

Additionally, the 2006 Permit does not have an allowable increase in nitrate + nitrite over that in the water entering the hatchery. Instead, the 2006 Permit had an absolute effluent limit for nitrate + nitrite. The 2006 Permit does allow DFG to report a "net" value for Total Suspended Solids. Thus, it arguably would have been possible to also have had the nitrate + nitrite limit also be a "net" value.

In *U.S. v. W.R. Grace & Co.*, a court ruled that the presence of asbestos in a town that was near an abandoned asbestos mine was not a natural phenomenon of an exceptional, inevitable, and irresistible character and thus the owner of the mine could not rely on the "act of God" affirmative defense to avoid liability for costs incurred by the United States in cleaning up the asbestos contaminated site. *U.S. v. W.R. Grace & Co.* (2003) 280 F. Supp. 2d, 1149. In the situation described in *W.R. Grace & Co.*, the asbestos contamination in the town was most likely caused by the later human activity of asbestos mining nearby. At the Hot Creek Hatchery, the springs at Hot Creek Hatchery were present before the Hot Creek Hatchery was constructed occur naturally in nature. (DFG Exhibit at p. 2.) Unlike the situation described in *W.R. Grace & Co.*, it is more probable than not that the naturally occurring elevated levels of nitrate + nitrite that now occur in the spring water that flows into the Hot Creek Hatchery were present *before* the Hot Creek Hatchery was constructed and continue unaffected by DFG's construction of the Hot Creek Hatchery.

As defined above, the levels of nitrate + nitrite in the springs that flow into the Hot Creek hatchery are inevitable, irresistible, and unusual. The naturally occurring levels of nitrate + nitrite in the influent water would be difficult if not impossible to prevent as DFG does not treat the influent water and construction of a treatment facility at the AB Springs or CD Springs, the two main sources of water, would require construction within federally designated critical habitat, as discussed above. The naturally occurring levels of nitrate + nitrite in the influent water would be difficult if not impossible to resist as the Hot Creek Hatchery is a flow through facility where the water flows into the hatchery without pre-treatment. The naturally occurring levels of nitrate + nitrite in the influent water is unusual in that it is apparently higher than the Regional Board calculated would occur in the basin, when the 2006 Permit was adopted.

Lastly, the effects of the elevated nitrate + nitrite levels in the springs that flow directly into the hatchery could not have been prevented or avoided by the exercise of due care or foresight because treating the water to decrease the nitrate + nitrite levels would take the construction of some sort of treatment facility at the source of the two main springs designated as one of two areas of critical habitat for the endangered Owens tui chub and where that fish is actually present. Only these two populations of the Owens tui chub, and four small transplanted populations, now exist in the world. Not just construction, but altering the characteristics of the water that is the source of one of those few remaining fish could irreparably injure or eliminate these two extremely rare fish populations.

## VII. CONCLUSION

DFG does not dispute the fact of the missing July 2006 monthly report or the reported exceedence at four discharge locations of potassium permanganate on November 29, 2006. DFG does not dispute that the flow discharge limits and the nitrate + nitrite effluent limits that are stated in the 2006 Permit have been exceeded. DFG *does dispute* that the Regional Board must impose the mandatory minimum penalties set forth in Water Code section 13385(h)(1) and 13385(i)(1) for the exceedence of the flow discharge limits and the nitrate + nitrite effluent limits in the 2006 Permit. DFG has demonstrated that it is more probable than not, that the cause of the flow discharge exceedence is the unregulated flow that originates in the natural springs, flows into the Hot Creek Hatchery, and is then discharged, without DFG adding any volume amount to that natural flow. DFG has demonstrated that it is more probable than not, that the cause of the exceedence of the nitrate + nitrite effluent limit is the naturally high levels of nitrite and nitrate in the natural springs that flow into the Hot Creek Hatchery.

DFG believes that if the Regional Board were to make findings regarding the applicability of this affirmative defense to the imposition of mandatory minimum penalties under Water Code section 13385, such a finding would have limited precedential value, due to the unique facts and circumstances at the Hot Creek Hatchery. DFG operates twenty four hatcheries in California. No other hatchery has the same unique situation as Hot Creek Hatchery regarding a sole source springs that arise naturally from the ground and are not pumped into the hatchery with a controlled inflow amount, a flow through system where DFG does not add water to that system, and a federally and state listed endangered species present in that source spring water.

DFG has met its burden of proof by more than a preponderance of the evidence that the affirmative defense set forth in Water Code section 13385(j)(1)(B) applies to the violations cited in the Complaint and that the Regional Board is not compelled to impose the mandatory minimum penalty of three thousand dollars for each violation of the flow discharge limit and the nitrate + nitrite effluent limit stated in the Complaint.

## **SECTION III**

### **LIST OF DOCUMENTS INCLUDED BY REFERENCE**

LIST OF DOCUMENTS INCLUDED BY REFERENCE

1. Water Quality Control Plan for the Lohontan Region
2. California Water Code
3. Water Board's Files for Hot Creek Hatchery