

## Central Valley Regional Water Quality Control Board

14 January 2015

CERTIFIED MAIL  
7011 2970 0003 5615 9864

Jim Flowers, Owner  
J.F. Enterprises Worm Farm  
21269 E Rose Clover Ln  
Linden, CA 95236

CERTIFIED MAIL  
7011 2970 0003 5615 9178

Bruce Harms  
Burchell Nursery  
1200 State Route 120  
Oakdale, CA 95361

### **NOTICE OF APPLICABILITY; GENERAL WASTE DISCHARGE REQUIREMENTS FOR COLD WATER CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY DISCHARGES TO SURFACE WATERS, ORDER R5-2014-0161 (CAAP GENERAL ORDER); J.F. ENTERPRISES AND BURCHELL NURSERY, J.F. ENTERPRISES WORM FARM, STANISLAUS COUNTY**

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) issued a Notice of Applicability (NOA) to the J.F. Enterprises and Burchell Nursery (hereinafter "Discharger") on 2 April 2012, for coverage under the CAAP General Order for the J.F. Enterprises Worm Farm (hereinafter "Facility").

On 5 December 2014, the Central Valley Water Board adopted Order R5-2014-0161 renewing the CAAP General Order. The Discharger submitted a Notice of Intent on 30 June 2014, to continue coverage for the Facility under the CAAP General Order. Effective **14 January 2015**, this NOA provides continued coverage for the Facility under the CAAP General Order to discharge to the Stanislaus River, superseding the previous NOA issued 2 April 2012. CAAP General Order **R5-2014-0161-018** and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG135001 are assigned for this Facility. The following enclosures are included as part of this NOA:

- 1) Enclosure A - Administrative Information
- 2) Enclosure B - Location Map
- 3) Enclosure C - Flow Schematic
- 4) Enclosure D - Monitoring and Reporting Program

The CAAP General Order is enclosed and may also be viewed at the following web address: [http://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/](http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/). You are urged to familiarize yourself with the contents of the entire CAAP General Order. The Facility operations and discharges shall be managed in accordance with the requirements contained in the CAAP General Order, this NOA, and with the information submitted by the Discharger.

### **FACILITY INFORMATION/DISCHARGE DESCRIPTION**

The Facility is located on the south bank of the Stanislaus River, at 10412 North Wamble Road in Oakdale in Stanislaus County (T2S, R11E, MDB&M, latitude N 37° 47' 12.60"/longitude W 120° 47' 00.71"), as shown in Enclosure B. The Facility is located on property owned by the Burchell Nursery. The Facility is owned and operated by J.F. Enterprises.

The Facility produces blackworms (*Lumbriculus variegatus*) for use as live food for tropical fish. The Facility diverts up to 4.0 million gallons per day (mgd) of water from the Stanislaus River to 30 shallow ponds for rearing the worms on the south bank of the River. The rearing ponds have dimensions of about 90 ft. long by 50 ft. wide and 4 ft. deep. The ponds are arranged in groups of two to four ponds operating in series. Each pond contains several sprayer aerators. After passing through the ponds, the wastewater is delivered to a 112,500 cubic foot settling basin. From the settling basin, process water is discharged at a flow rate of up to 4.0 mgd to the Stanislaus River. The Facility also includes 28 fiberglass circular tanks (6.5 ft. in diameter by 2 ft. deep) for the process of harvesting, cleaning, and preparing the worms for shipping. Prepared food, consisting primarily of grains, is added to the ponds at a ratio of approximately 3 pounds of food per pound of worms harvested. Approximately 50,000 to 60,000 pounds of worms are harvested annually. The Discharger uses approximately one-half pint of chlorine bleach per week to clean storage tanks and buckets. The cleaning water is not discharged to surface waters, so no chlorine enters the receiving water. No aquaculture drugs are used at the Facility.

The Facility maintains the ability to add up to 1.44 mgd of groundwater to the ponds to control turbidity in the event that the Stanislaus River is excessively turbid (e.g., during periods of high run-off). However, under normal operating conditions the Facility does not use groundwater.

When a rearing pond is ready to be harvested, the influent water and aerators are shut off. As oxygen levels in the rearing ponds decrease, the worms move to the surface of the pond sediments in search of oxygen, which allows them to be collected manually with nets. The harvested worms are placed in a series of aerated cleaning baths (fiberglass circular tanks) to separate the worms from residual sediments. The cleaning process consists of reducing the oxygen levels in a bath by minimizing aeration. This causes the worms to crawl out of the residual rearing pond sediments to the edge of the bath where they are collected. The worms are passed through two cleaning baths before they are ready for shipping.

The Facility removes solids from the ponds approximately every 1 to 2 years, on a rotating basis. Organisms in the pond solids slowly build up and begin competing with the worms for food. Eventually, the ponds begin to experience reduced worm production as a result of the competition. When a noticeable reduction in worm production occurs in a group of ponds, the Discharger empties the group of ponds, allows the ponds to dry, then removes the upper solids layer. The dried solids are placed on the Facility property.

In the Notice of Intent the Discharger reported the 5-year maximum annual harvestable blackworm production and the maximum monthly feed use for the Facility (Table 1):

**Table 1. Aquatic Animal Production and Feed Use**

| <b>Specie</b>                 | <b>Maximum Annual Harvestable Aquatic Animal Production (lbs)<sup>1</sup></b> | <b>Maximum Monthly Feed Use (lbs)<sup>1</sup></b> |
|-------------------------------|---|---|
| <i>Lumbriculus variegatus</i> | 50,000 to 60,000  | 25,000  |

<sup>1</sup>Maximum production and feed use within the last 5 years

Wastewater is discharged from the Facility to the Stanislaus River through Outfall 001 as shown in Enclosure C.

All domestic wastewater from a portable restroom trailer is pumped and hauled off site once per week.

### **EFFLUENT LIMITATIONS**

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

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

### **RECEIVING WATER LIMITATIONS**

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

### **OTHER REQUIREMENTS**

1. The discharge from the Facility shall not exceed a daily average flow of 4.0 mgd.
2. No aquaculture drugs may be used at the Facility. No chlorine may enter surface waters.
3. The Discharger shall continue to electronically submit Self-Monitoring Reports (SMRs) using the State Water Resources Control Board's California Integrated Water Quality System (CIWQS) Program website (<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS website will provide directions for SMR submittal in the event there will be service interruption for electronic submittal.
4. Aquaculture activities defined in the Code of Federal Regulations (40 C.F.R. 122.25(b)) will be subject to the annual fee for general NPDES permits and de minimus discharges that are regulated by individual or general NPDES permits, as described in Title 23 of the California Code of Regulations, Division 3, Chapter 9, Article 1, Section 2200(b)(9) for Category 3 discharges.
5. The CAAP General Order expires on **31 December 2019**. Only those enrolled CAAP facilities authorized to discharge and who submit a Notice of Intent at least 180 days prior to the expiration date of the CAAP General Order will remain authorized to discharge under administratively continued permit conditions.
6. In accordance with section VII.C.3.a of the CAAP General Order, the Discharger shall certify within 90 days from the issuance of this NOA that a Best Management Practices (BMP) Plan has been developed and is being implemented. To satisfy this requirement the Discharger shall submit a letter to the Central Valley Water Board certifying compliance with the BMP Plan requirements by **14 April 2015**. The Discharger can develop a new BMP Plan or an existing BMP Plan may be modified for use under this requirement. The Discharger shall develop and

implement the BMP Plan to prevent or minimize the generation and discharge of wastes and pollutants to waters of the United States and waters of the State and ensure disposal or land application of wastes is in compliance with applicable solid waste disposal regulations. The BMP Plan shall include a salinity evaluation and minimization plan to address salt treatments at the Facility. The Discharger shall review the BMP Plan annually and must amend the BMP Plan whenever there is a change in the Facility or in the operation of the Facility which materially increases the generation of pollutants or their release or potential release to surface waters.

## **ENFORCEMENT**

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

## **COMMUNICATION**

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

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

Please note that we have transitioned to a paperless office. Therefore, all documents other than monitoring reports shall be converted to a searchable Portable Document Format (PDF) and submitted by email to [centralvalleysacramento@waterboards.ca.gov](mailto:centralvalleysacramento@waterboards.ca.gov). Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to our office, attention "ECM Mailroom."

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this NOA falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day.

Copies of the law and regulations applicable to filing petitions may be found on the Internet at: [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

*Original signed by Adam Laputz*  
Pamela C. Creedon  
Executive Officer

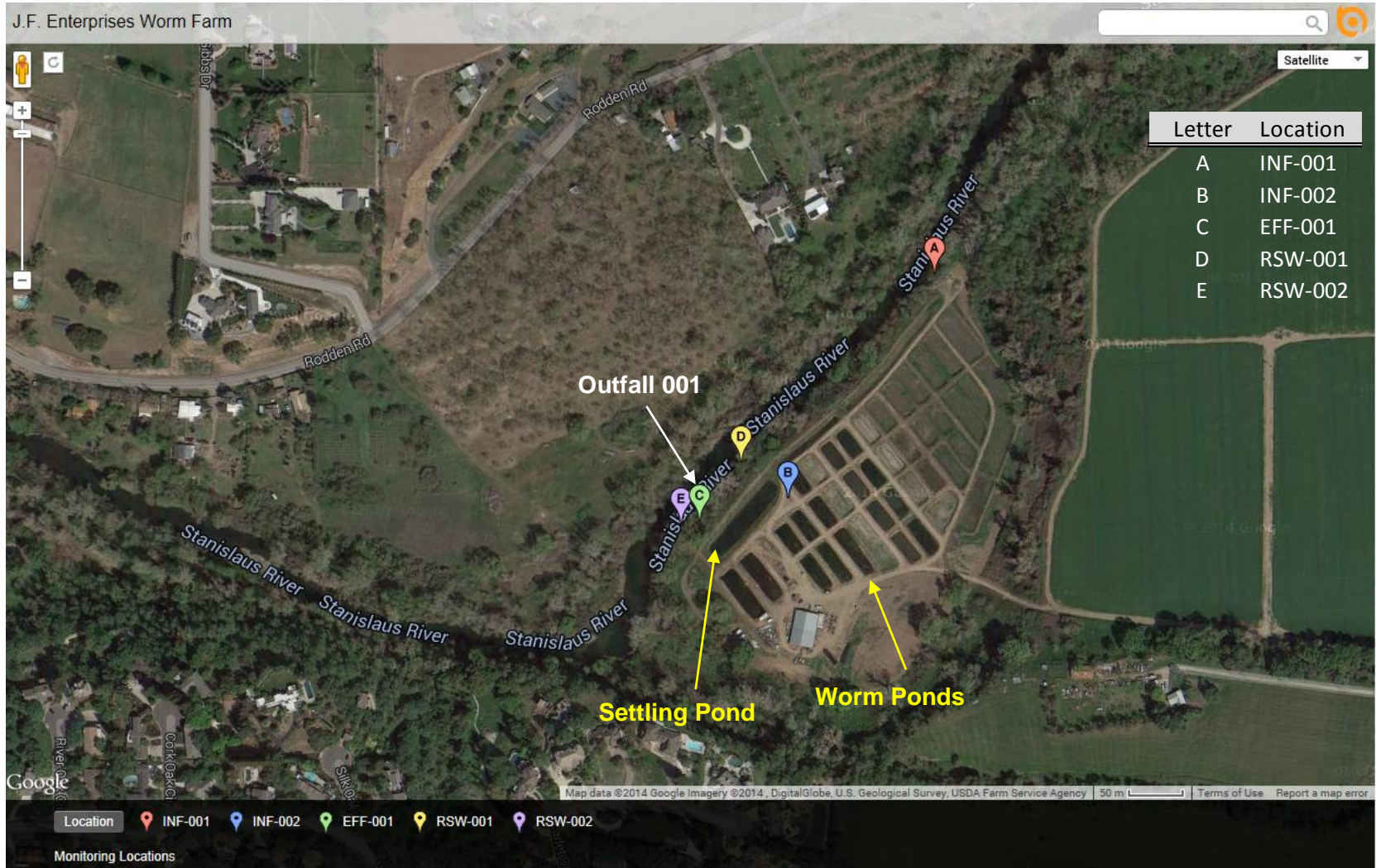
- Enclosures (5):
- 1) Enclosure A – Administrative Information
  - 2) Enclosure B – Location Map
  - 3) Enclosure C – Flow Schematic
  - 4) Enclosure D – Monitoring and Reporting Program
  - 5) CAAP General Order R5-2014-0161 (Discharger only)

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

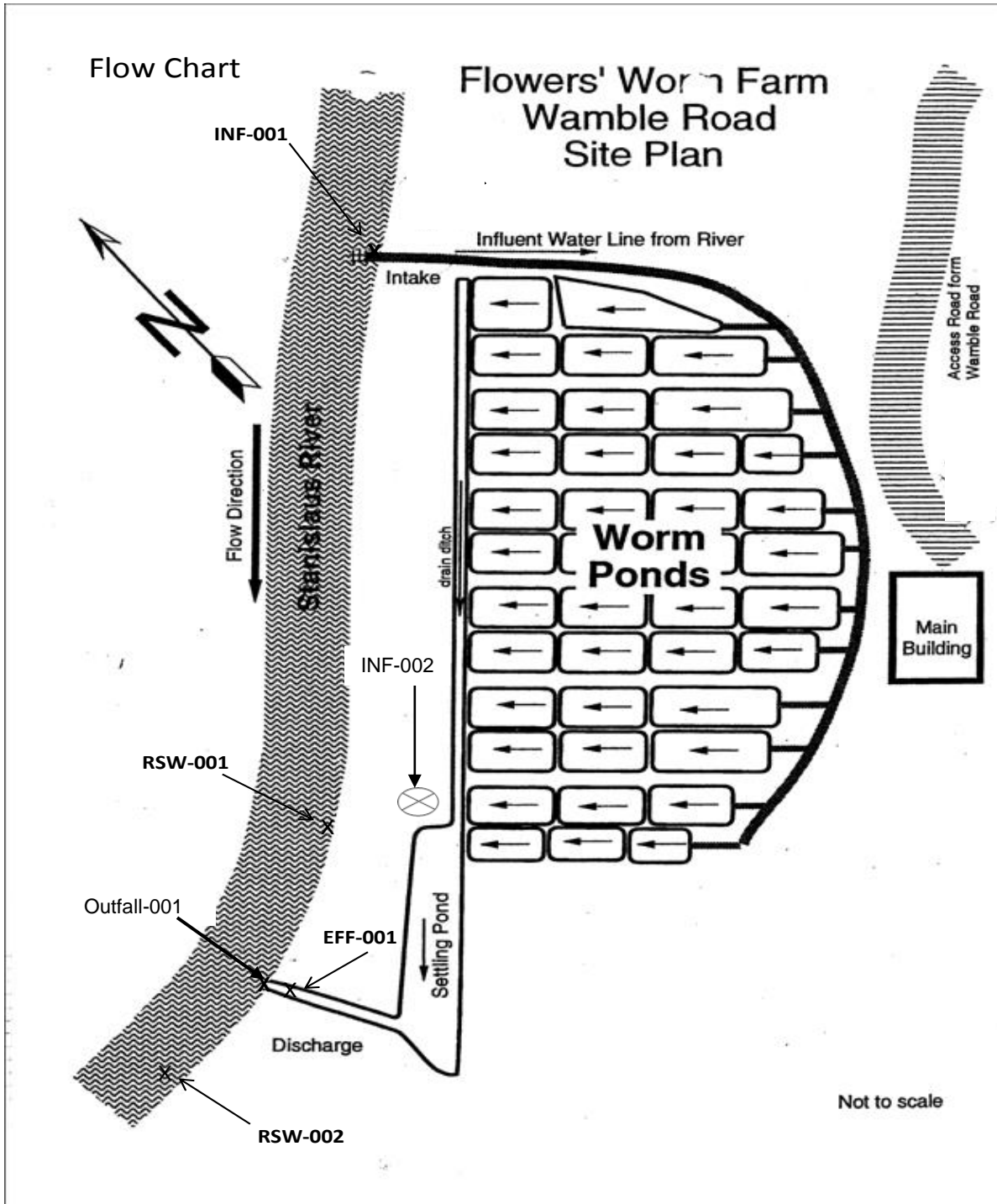
**ENCLOSURE A – ADMINISTRATIVE INFORMATION**

|   |   |
|---|---|
| <b>Name of Facility</b>                             | J.F. Enterprises Worm Farm  |
| <b>Type of Facility</b>                             | Cold Water Concentrated Aquatic Animal Production Facility, SIC Code 0921                                     |
| <b>WDID</b>   | 5B50NP00029   |
| <b>General Order NOA Enrollee Number</b>            | R5-2014-0161-018  |
| <b>Discharger</b>                                   | J.F. Enterprises (Facility Owner/Operator) and Burchell Nursery (Site Owner)                                  |
| <b>Facility Address</b>                             | 10412 N. Wamble Road<br>Oakdale, CA 95361   |
| <b>Land Owner (Address)</b>                         | Burchell Nursery<br>1200 State Route 120<br>Oakdale, CA 95361 (Contact Person: Bruce Harms<br>(209-825-6331)) |
| <b>Facility Contact, Title and Phone</b>            | Jim Flowers, Owner<br>209-469-0590  |
| <b>Authorized Person to Sign and Submit Reports</b> | Jim Flowers   |
| <b>Mailing Address</b>                              | 21269 E. Rose Clover Ln.<br>Linden, CA 95236  |
| <b>Billing Address</b>                              | 21269 E. Rose Clover Ln.<br>Linden, CA 95236  |
| <b>Total Weight Produced (Annual)</b>               | 50,000 lbs to 60,000 lbs/year   |
| <b>Major or Minor Facility</b>                      | Minor   |
| <b>Threat to Water Quality</b>                      | 2   |
| <b>Complexity</b>                                   | B   |
| <b>Facility Permitted Flow</b>                      | 4.0 million gallons per day (mgd)   |
| <b>Watershed</b>                                    | San Joaquin River Basin   |
| <b>Receiving Water</b>                              | Stanislaus River  |
| <b>Receiving Water Type</b>                         | Inland surface water  |

**ENCLOSURE B – LOCATION MAP**



**ENCLOSURE C – FLOW SCHEMATIC**





**ENCLOSURE D – MONITORING AND REPORTING PROGRAM**

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

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

**Table D-1. Monitoring Locations**

| <b>Discharge Point Name</b> | <b>Monitoring Location Name</b> | <b>Monitoring Location Description</b>  |
|-----------------------------|---------------------------------|---|
| --                          | INF-001                         | <b>Stanislaus River Intake.</b> Location where influent sample can be collected prior to entering the Facility.<br>[Latitude: 37° 47' 18.90" N; Longitude: 120° 46' 55.54" W] |
|                             | INF-002                         | <b>Groundwater Supply Well.</b> Location where influent sample can be collected prior to entering the Facility.<br>[Latitude: 37° 47' 12.60" N; Longitude: 120° 47' 0071" W]  |
| Outfall 001                 | EFF-001                         | Effluent wastewater flow from the <b>Settling Pond</b> prior to discharge to the Stanislaus River.<br>[Latitude: 37° 47' 11.99" N; Longitude: 120° 47' 03.87" W]              |
|                             | RSW-001                         | 100 feet <b>upstream</b> of Outfall 001 discharge to the Stanislaus River.<br>[Latitude: 37° 47' 13.60" N; Longitude: 120° 47' 02.37" W]                                      |
| --                          | RSW-002                         | 100 feet <b>downstream</b> of Outfall 001 discharge to the Stanislaus River.<br>[Latitude: 37° 47' 11.90" N; Longitude: 120° 47' 04.51" W]                                    |

**B. Influent Monitoring Requirements.** When discharging at Outfall 001 the Discharger shall monitor the influent to the Facility at Monitoring Location INF-001 as follows:

**Table D-2. Influent Monitoring**

| Parameter                      | Units    | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|--------------------------------|----------|-------------|----------------------------|---------------------------------|
| pH                             | S.U.     | Grab        | 1/quarter <sup>2</sup>     | 1                               |
| Electrical Conductivity @ 25°C | µmhos/cm | Grab        | 1/quarter <sup>2</sup>     | 1                               |
| Total Suspended Solids         | mg/L     | Grab        | 1/year <sup>2</sup>        | 1                               |

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136.

<sup>2</sup> Samples shall be collected approximately at the same time as effluent samples.

**C. Effluent Monitoring Requirements.** When discharging at Outfall 001 the Discharger shall monitor the effluent at corresponding Monitoring Location EFF-001 as follows:

**Table D-3. Effluent Monitoring**

| Parameter                         | Units    | Sample Type     | Minimum Sampling Frequency | Required Analytical Test Method |
|-----------------------------------|----------|-----------------|----------------------------|---------------------------------|
| Flow                              | cfs      | Meter           | 1/month                    |                                 |
| Total Suspended Solids (TSS)      | mg/L     | Grab            | 1/year <sup>2</sup>        | 1                               |
| Net TSS (effluent minus influent) | mg/L     | Net Calculation | 1/year                     |                                 |
| Turbidity                         | NTU      | Grab            | 1/quarter                  | 1                               |
| pH                                | S.U.     | Grab            | 1/quarter                  | 1                               |
| Electrical Conductivity @ 25°C    | µmhos/cm | Grab            | 1/quarter <sup>2</sup>     | 1                               |

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136.

<sup>2</sup> Samples shall be collected during the expected months of highest feeding.

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

**Table D-4. Receiving Water Monitoring**

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

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. Part 136.

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

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

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

- E. Monthly Drug and Chemical Use Report.** The Discharger shall develop a monthly drug and chemical use report in accordance with Section IX.A of the CAAP General Order, describing all aquaculture drugs or chemicals used at the Facility. The report shall be submitted with the quarterly SMRs.
- F. Annual Feeding and Production Report.** The Discharger shall develop an annual feeding and production report in accordance with Section IX.B of the CAAP General Order. The report shall be submitted **28 February, annually**, and include 1) monthly food usage in pounds for each calendar month for the previous year, and 2) annual production of aquatic animals in pounds per year for the previous year.
- G. Priority Pollutant Metals Monitoring.** When discharging at Outfall 001 the Discharger shall monitor the effluent at corresponding Monitoring Locations EFF-001, and the influent receiving water at INF-001 for the metals listed in Table G-1 of the CAAP General Order, once during the term of Order R5-2014-0161. The monitoring shall occur after **1 January 2018, but no later than 1 July 2019**. The discharger shall electronically submit the priority pollutants metals monitoring results using the State Water Board’s California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>), within 60 days of the final sampling event.

**REPORTING REQUIREMENTS**

Monitoring in accordance with the renewed CAAP General Order is required to begin on the effective date of **1 January 2015**. SMRs are required to be submitted quarterly and annually. The first SMR required under the renewed CAAP General Order is due **1 May 2015**, and shall include monitoring conducted from 1 January through 31 March 2015. Table D-5, below, summarizes the SMR due dates required under the CAAP General Order. Quarterly monitoring reports must be submitted until your coverage is formally terminated in accordance with the CAAP General Order, even if there is no discharge during the reporting quarter.

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

| <b>Sampling Frequency</b> | <b>Monitoring Period Begins On...</b> | <b>Monitoring Period</b>  | <b>SMR Due Date</b>  |
|---------------------------|---------------------------------------|---|--|
| 1/quarter                 | 1 January 2015                        | 1 January through 31 March<br>1 April through 30 June<br>1 July through 30 September<br>1 October through 31 December | 1 May<br>1 Aug<br>1 Nov<br>1 Feb of following year   |
| 1/month                   | 1 January 2015                        | First day of calendar month through last day of calendar month  | 1 May (1 Jan – 31 Mar)<br>1 Aug (1 Apr – 30 Jun)<br>1 Nov (1 Jul – 30 Sep)<br>1 Feb of following year (1 Oct – 31 Dec) |
| 1/year                    | 1 January 2015                        | January 1 through December 31   | 1 Feb of following year  |

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