



### **Central Valley Regional Water Quality Control Board**

2 April 2012

Jim Flowers, Owner J.F. Enterprises Worm Farm 4134 Fort Donelson Drive Stockton, CA 95219 CERTIFIED MAIL 7011 2970 0003 5615 9970

# NOTICE OF APPLICABILITY; GENERAL WASTE DISCHARGE REQUIREMENTS FOR COLD WATER CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY DISCHARGES TO SURFACE WATERS, ORDER R5-2010-0018-01 (CAAP GENERAL ORDER); J.F. ENTERPRISES AND BURCHELL NURSERY, J.F. ENTERPRISES WORM FARM, STANISLAUS COUNTY

Our office received a Report of Waste Discharge dated 8 February 2012, and supplemental information dated 6 March 2012, from J.F. Enterprises (Discharger), for the J.F. Enterprises Worm Farm (Facility). California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) staff has determined that the project meets the required conditions for approval under the CAAP General Order. The Discharger has been assigned CAAP General Order R5-2010-0018-018 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG135001. Administrative information for the Facility is provided in Enclosure A, a location map is provided in Enclosure B, and a flow schematic is provided in Enclosure C, which are included as part of this Notice of Applicability (NOA). Please reference your CAAP General Order **R5-2010-0018-018**, in all your correspondence and submitted documents.

The CAAP General Order is enclosed and may also be viewed at the following web address: <u>http://www.waterboards.ca.gov/centralvalley/board\_decisions/adopted\_orders/general\_orders/r5-2010-0018-01.pdf</u>

You are urged to familiarize yourself with the contents of the entire CAAP General Order. The CAAP facility operations and discharge shall be managed in accordance with the requirements contained in the CAAP General Order, this NOA, and with the information submitted by the Discharger. Attachment C of the General Order prescribes mandatory monitoring and reporting requirements.

CAAP General Order R5-2010-0018-018 shall become effective when the existing individual NPDES permit for the Facility, Order R5- 2008-0089 (NPDES No. CA0081949), is rescinded by a separate action of the Central Valley Water Board, which is scheduled for **7 June 2012**.

### FACILITY INFORMATION/DISCHARGE DESCRIPTION

The Facility is located at 10412 North Wamble Road in Oakdale, in Section 5, T2S, R11E, MDB&M, as shown in Enclosure B, a part of this NOA. The Facility cultivates blackworms (Lumbriculus variegatus) for use as live food for tropical fish.

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

The Facility diverts 2 million gallons per day (mgd) of water from the Stanislaus River to 41 shallow ponds on the south bank of the River. 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 45,000 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 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 2 mgd to the Stanislaus River, a water of the United States at point latitude 37° 47' 11.75" N and longitude 120° 47' 3.95" W (west of the Orange Blossom Road).

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 pond is ready to be harvested, the influent water and aerators are shut off. As oxygen levels in the 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 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 pond sediments to the edge of the bath where they are easily 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, 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 berms along the edges of the ponds.

### **EFFLUENT LIMITATIONS**

Effluent limitations are specified in Section V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS of the CAAP General Order. **Effective 7 June 2012**, the following effluent limitations are applicable to this discharge and are contained in Section V. A and B of the CAAP General Order:

- 1. **Total Suspended Solids, Settleable Solids, Formaldehyde, and Chlorine** The Discharger shall comply with the effluent limitations required in Section V.A.1 (Table 1) for total suspended solids, settleable solids, formaldehyde, and chlorine.
- 2. *pH* The Discharger shall comply with the effluent limitations required in Section V.B.1 for pH.
- 3. **Total Recoverable Copper** The Discharger shall comply with the effluent limitations required in Section V.B.3 (Table 3) for total recoverable copper.

#### MONITORING REQUIREMENTS

The CAAP General Order requires that dischargers comply with the Monitoring and Reporting Program that is incorporated as Attachment C to the CAAP General Order. Influent, effluent, and receiving water monitoring requirements are based on the pounds of aquatic animals produced. This Facility is in the category of production less than 100.000 pounds produced per year.

Site-specific monitoring locations for influent, effluent and receiving water monitoring are shown in Enclosure C to this NOA (Facility Flow Schematic), and as described in the following table:

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
	INF-001	<b>Stanislaus River Intake.</b> Location where influent sample can be collected prior to entering the Facility.
	INF-002	<b>Groundwater Supply Well.</b> Location where influent sample can be collected prior to entering the Facility.
001	EFF-001	Effluent wastewater flow from the settling ponds prior to discharge to the Stanislaus River
	RSW-001	100 feet upstream from Discharge Point No. 001 in the Stanislaus River
	RSW-002	100 feet downstream from Discharge Point No. 001 in the Stanislaus River

Effective 7 June 2012, the Discharger is required to comply with all the Monitoring and Reporting Requirements contained in Attachment C to the CAAP General Order for facilities with production less than 100.000 pounds per year. A summary of the monitoring requirements is provided below:

- 1. Influent Monitoring The Discharger shall monitor the influent in accordance with Table C-3 of the CAAP General Order for settleable solids, pH, electrical conductivity @25°C, copper (total recoverable), hardness, and total suspended solids.
- 2. Effluent Monitoring The Discharger shall monitor the effluent in accordance with Table C-5 of the CAAP General Order for settleable solids, net settleable solids, turbidity, pH, electrical conductivity @25°C, copper (total recoverable), hardness, formaldehyde, chlorine, total suspended solids, and net total suspended solids.
- 3. **Receiving Water Monitoring** The Discharger shall monitor the receiving water in accordance with Section VIII. B (receiving water observations) and Table C-7of the CAAP General Order for dissolved oxygen, temperature, turbidity, pH, electrical conductivity @25°C, and hardness.
- 4. Other Monitoring Requirements The Discharger shall submit a Monthly Drug and Chemical Use Report (Section IX.A) and conduct Priority Pollutant Metals Monitoring (Section IX.B) in accordance with the CAAP General Order.

The first self-monitoring report (SMR) required under the CAAP General Order is the June 2012 SMR, which shall be submitted by 1 August 2012. Until then, the Discharger shall continue submitting SMRs required by Order R5-2008-0089.

## SATISFACTION OF ANTI-BACKSLIDING REQUIREMENTS

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the previous individual NPDES permit, Order R5-2008-0089, with the exception of effluent limitations for BOD<sub>5</sub>. The previous Order included an effluent limit for BOD<sub>5</sub> of 5 mg/L and 10 mg/L, as monthly average and daily maximum, respectively. Based on the Discharger's last three years of monthly effluent monitoring data for BOD<sub>5</sub>, the discharge does not demonstrate reasonable potential. All samples were well below the effluent limitations. Therefore, the effluent limits for BOD<sub>5</sub> have not been included in this NOA. This is consistent with the federal antibacksliding regulations, because the new data represents new information that was not available at the time the previous Order was adopted. The removal of BOD<sub>5</sub> effluent limits for the discharge is consistent with state and federal antibacksliding requirements. The removal of the BOD<sub>5</sub> effluent limitations is also consistent with the antidegradation provisions of 40 CFR 131.12. Any impact on existing water quality will be insignificant.

The previous Order also contained twice a month monitoring requirements for total suspended solids and settleable solids. The monitoring has been reduced to once a month monitoring. Based on reported effluent data for the last three years, the effluent settleable solids and total suspended solids were consistently below effluent limitations. Therefore, reduced monitoring requirements for these constituents is appropriate. This change in monitoring requirements is less stringent. This is consistent with the federal antibacksliding regulations, because the new data represents new information that was not available at the time the previous Order was adopted. The reduction in monitoring frequency for total suspended solids and settleable solids is consistent with state and federal antibacksliding requirements. These changes are also consistent with the antidegradation provisions of 40 CFR 131.12. Any impact on existing water quality will be insignificant.

# NOTICE OF APPLICABILITY REQUIREMENTS

The Discharger is hereby authorized to discharge to the Stanislaus River under the terms and conditions of the CAAP General Order. In addition to the requirements contained in the CAAP General Order, the following shall also apply:

- 1. The discharge from the Facility shall not exceed a daily average flow of 2 mgd during the effective period of the CAAP General Order.
- If directed by Central Valley Water Board staff, the Discharger shall 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. Until directed to submit electronic SMRs, the Discharger shall submit paper SMRs.
- 3. The State Water Resources Control Board (State Water Board) has determined that individual or general permits for aquaculture activities defined in 40 CFR 122.25(b) will be subject to the same annual fee, which currently is \$1,000 (State Water Board Resolution 2002-0150), but may be subject to change.
- 4. The CAAP General Order expires on 1 January 2015, and enrollees will continue to be authorized to discharge until coverage becomes effective under a reissued Order or until Central Valley Water Board staff formally terminates your coverage. Only those CAAP facilities authorized to discharge and who submit a Notice of Intent at least 180 days prior to the expiration date of Order R5-2010-0018-01 will remain authorized to discharge under administratively continued permit conditions.

#### ENFORCEMENT

Failure to comply with the CAAP General Order and/or this NOA may result in enforcement actions, which could include administrative civil liability. Effluent limitation violations and some late reporting violations are subject to Mandatory Minimum Penalties (MMPs) of \$3,000 per violation [California Water Code Sections 13385(h) and (i)]. If you have no discharge during a monitoring period, you must submit a monthly self-monitoring report indicating that no discharge occurred. You must notify the Central Valley Water Board staff within 24 hours of noncompliance or anticipated noncompliance.

#### COMMUNICATION

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

Questions regarding the permitting aspects of your CAAP General Order, and written notification for termination of coverage under the Order, shall be directed to Anand Mamidi at (916) 464-4583 or at amamidi@waterboards.ca.gov.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this 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 or will be provided upon request. The Internet address is: http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality.

Original Signed By Kenneth D. Landau for

Pamela C. Creedon Executive Officer

Enclosures (4): 1) Enclosure A – Facility Administrative Information

- 2) Enclosure B Location Map
- 3) Enclosure C Facility Schematic
- 4) CAAP General Order R5-2010-0018-01 (Discharger only)
- cc: David Smith, U.S. EPA, Region IX, San Francisco Phil Isorena, State Water Resources Control Board, Sacramento

Name of Facility	J.F. Enterprises Worm Farm
Type of Facility	Cold Water Aquaculture Facility, SIC Code 0921
WDID	5B34NP00013
General Order NOA Enrollee Number	R5-2010-0018-018
Discharger	J.F. Enterprises (Facility Owner/Operator) and Burchell Nursery (Site Owner)
Facility Address	4134 Fort Donelson Dr. Stockton, CA 95219
Land Owner (Address)	Burchell Nursery 1200 State Route 120 Oakdale, CA 95361(Contact Person: Bruce Harms (209-825-6331)
Facility Contact, Title and Phone	Jim Flowers, Owner 209-474-6995
Authorized Person to Sign and Submit Reports	Jim Flowers
Mailing Address	4134 Fort Donelson Dr. Stockton, CA 95219
Billing Address	4134 Fort Donelson Dr. Stockton, CA 95219
Total Weight Produced (Annual)	45,000 lbs
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	В
Facility Permitted Flow	2.0 million gallons per day (mgd)
Watershed	San Joaquin River Basin
Receiving Water	Stanislaus River
Receiving Water Type	Inland surface water

**ENCLOSURE B – LOCATION MAP** 



Drawing Reference: OAKDALE QUADRANGLE U.S.G.S TOPOGRAPHIC MAP 7.5 MINUTE QUADRANGLE Photorevised 1987 Not to scale SITE LOCATION MAP

J.F. ENTERPRISES WORM FARM STANISLAUS COUNTY



# ENCLOSURE C – FACILITY FLOW SCHEMATIC

