CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION  

CEASE AND DESIST ORDER R5-2015-0042  

REQUIRING STERLING CAVIAR LLC.  
ELVERTA FACILITY  
SACRAMENTO COUNTY  
TO CEASE AND DESIST  
FROM DISCHARGING CONTRARY TO REQUIREMENTS PRESCRIBED  
IN ORDER R5-2007-0012 (NPDES NO. CA0085197)  

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) finds that:  

1. On 15 March 2007 the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2007-0012 (NPDES Permit No. CA0085197), prescribing waste discharge requirements for the Sterling Caviar LLC (hereafter Discharger) at Sterling Caviar LLC, Elverta (hereafter Facility), Sacramento County. Cease and Desist Order (CDO) R5-2007-0013 was also issued to allow compliance schedules for meeting the final effluent limitations for arsenic, manganese, and nitrate, with a final compliance date of 1 March 2012.  

2. On 2 February 2012 the Central Valley Water Board adopted Order R5-2012-0007, amending CDO R5-2007-0013, to extend the compliance schedules for the arsenic, manganese, and nitrate an additional 3 years, until 1 March 2015.  

3. WDR Order R5-2007-0012 contains Final Effluent Limitations IV.A.1.a. which reads, in part, as follows:  

Table 6. Effluent Limitations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Average Monthly</th>
<th>Average Weekly</th>
<th>Maximum Daily</th>
<th>Instantaneous Minimum</th>
<th>Instantaneous Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>µg/L</td>
<td>10</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Manganese</td>
<td>µg/L</td>
<td>50</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>mg/L</td>
<td>10</td>
<td>--</td>
<td>--</td>
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</tr>
</tbody>
</table>

Need for Time Schedule Extension and Legal Basis  

3. The Discharger has completed several operational changes and facility upgrades that have resulted in compliance with the final nitrate limits (Figure 1). However, these changes and upgrades have not resulted in compliance with the final effluent limits for arsenic and manganese and it was determined to not be economically feasible to treat for these trace metals. Therefore, the Discharger implemented an alternative project, which is to reuse the fish hatchery wastewater for irrigation of an agricultural operation.
4. The Discharger provided a preliminary plan to reuse the treated wastewater as irrigation supply for an agricultural crop and may cease the point source discharge to surface waters. Therefore, the NPDES Permit and CDO could potentially be rescinded.

5. On 20 July 2011, the Discharger submitted a letter requesting an extension of the compliance schedule from 1 March 2012 until 1 March 2015 for the final effluent limitations for arsenic and manganese. The Discharger evaluated project alternatives to either change its ground water supply source for the Facility, which is the source of the arsenic and manganese, or construct facilities to remove the constituents. The Discharger conducted water quality monitoring and evaluated project alternatives and concluded that treatment for removal of arsenic and manganese at or below effluent limitations is not economically feasible. The Discharger also evaluated the option of reusing the treated wastewater for reuse on an agricultural crop. At the time, this was determined to be the cost effective project. Additional time was needed to pursue outside parties for development of an agricultural operation to be located near the Facility that would use treated effluent from the Facility as its irrigation source. Additional time was also necessary to establish contracts with an outside party, secure necessary permits, and develop the agricultural operation.

6. On 1 July 2013, the Discharger submitted a letter informing the Central Valley Water Board of a proposed project consisting of the construction of an onsite aquaponics agricultural operation (Aquaponics Farm) that would reuse treated effluent from the Facility for irrigation of food crops. In September 2013 the Aquaponics Farm obtained regulatory coverage under the Irrigated Lands Regulatory Program and joined the Sacramento Valley Water Quality Coalition. By December 2013 the Discharger had ceased discharging to surface water, and the entire flow from the Facility was being reused by the Aquaponics Farm as a flow-through system. However, by August 2014 the Discharger determined that the Aquaponics Farm was not an alternative project that feasibly will help achieve compliance by the required final date of 1 March 2015. Therefore, in August 2014 the Discharger subcontracted with an Environmental Engineering company to evaluate additional compliance alternatives.

7. On 29 October 2014 the Discharger submitted a Method of Compliance Work Plan (Work Plan) to comply with the final limits for arsenic and manganese. The Work Plan includes the following compliance alternatives:

   a. **Operational.** This could include: 1) a modification of the current pumping schedule and flow rates to reduce the arsenic and manganese; 2) Installation of test wells to identify less-contaminated water-bearing intervals; and 3) Active treatment to remove the arsenic and manganese prior to use or discharge.

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**Figure 1. Monthly Monitoring Results for Nitrate as Nitrogen**

- Monthly Monitoring Results for Nitrate as Nitrogen
- Current AMEL = 10 mg/L

![Monthly Monitoring Results for Nitrate as Nitrogen](image-url)
b. **Regulatory.** This could include: 1) the development of site specific objectives or 2) a modification of the beneficial uses of the receiving water, point of discharge, or seasonal permit requirements.

c. **Point-of-Use.** This includes alternatives where the use is excluded from coverage under the Clean Water Act, such as: 1) an agricultural use onsite or offsite, or 2) sale of the water to an agricultural entity.

The Discharger’s next steps to achieve compliance are to submit: 1) an evaluation and ranking of alternatives described above (1 May 2015); 2) an implementation schedule and process and begin implementation for the selected project alternative(s) (1 October 2015); and 3) annual progress reports describing the steps that have been implemented and status towards achieving compliance with waste discharge requirements (1 April 2016 and 1 December 2016).

8. The Work Plan provided information supporting the infeasibility to comply with final effluent limitations for arsenic and manganese by 1 March 2015 (final limits are described in Finding 3 above). The Central Valley Water Board finds that the Discharger is demonstrating continued due diligence to comply with the final effluent limits to develop and implement a compliance alternative.

**Mandatory Minimum Penalties**

9. Water Code sections 13385(h) and (i) require the Central Valley Water Board to impose mandatory minimum penalties (MMPs) upon dischargers that violate certain effluent limitations. Water Code section 13385(j) exempts certain violations from the MMPs. Water Code section 13385(j)(3) exempts the discharge from MMPs “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 or 13308, if all the [specified] requirements are met...for the purposes of this subdivision, the time schedule may not exceed five years in length...”

10. Per the requirements of Water Code section 13385, subdivision (j)(3), the Central Valley Water Board finds that:

   a. This Order specifies the actions that the Discharger is required to take in order to correct the violations that would otherwise be subject to Water Code sections 13385(h) and (i).

   b. To comply with final effluent limitations for arsenic and manganese the Discharger has determined that an extension of the compliance schedule in Cease and Desist Order (CDO) R5-2007-0013-01 is necessary to: (1) further investigate the feasibility of alternatives and provide an evaluation and ranking of these alternatives; (2) submit a schedule for implementation of the selected project alternative(s); and (3) submit an evaluation of the final implemented alternative demonstrating final compliance.

   c. The Discharger has demonstrated that an extension of the compliance schedule for arsenic and manganese in CDO R5-2007-0013-01 is needed to complete the tasks described above and achieve compliance.

   d. This Order establishes a time schedule to bring the waste discharge into compliance with the effluent limitations that is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitations.
11. The final effluent limitations for arsenic and manganese became applicable to the waste discharge on the effective date of WDR Order R5-2007-0012 (4 May 2007). CDO Order R5-2007-0013 provided protection from MMPs for violations of effluent limitations for arsenic and manganese from 4 May 2007 until 1 March 2012 and CDO Order R5-2007-0013-01 extended the protection from MMPs until 1 March 2015. The issuance of this Order R5-2015-0042 on 17 April 2015 will provide protection from MMPs for violations of effluent limitations for arsenic and manganese from 17 April 2015 until 1 March 2017. The Discharger is subject to MMPs for violations of effluent limitations for arsenic and manganese from 1 March 2015 to 17 April 2015.

12. By statute, a CDO may provide protection from MMPs for no more than five years, except as provided in Water Code section 13385, subdivision (j)(3)(C)(ii)(II).

13. Per the requirements of Water Code section 13385(j)(3)(C)(i), the time schedule shall not exceed five years. However, per the requirements of 13385(j)(3)(C)(ii)(II), following a public hearing, and upon a showing that the Discharger is making diligent progress toward bringing the waste discharge into compliance with the effluent limitation, the Central Valley Water Board may extend the time schedule for up to an additional five years, if the Discharger demonstrates that the additional time is necessary to comply with the effluent limitation. The Central Valley Water Board finds, as described in previous findings in this Order, that the Discharger is making diligent progress to bring the waste discharge into compliance with final effluent limitations for arsenic and manganese contained in WDR Order R5-2007-0012, and has demonstrated that the additional time is necessary.

14. Compliance with this Order exempts the Discharger from MMPs for violations of the final effluent limitations for arsenic and manganese contained in WDR Order R5-2007-0012 from 17 April 2015 to 1 March 2017.

15. In accordance with Water Code section 13385, subdivision (j)(3)(C), the total length of protection from mandatory minimum penalties for the final effluent limitations for arsenic and manganese does not exceed ten years.

16. Water Code section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to section 13263.3 of the Water Code. Therefore, a pollution prevention plan will be necessary for arsenic and manganese to effectively reduce the effluent concentrations by source control measures.

17. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for arsenic and manganese contained in WDR Order R5-2007-0012. Since the time schedule for completion of actions necessary to bring the waste discharge into compliance exceeds one year, this Order includes interim effluent limitations and interim requirements and dates for compliance with the final limits.

18. The compliance time schedules in this Order include interim performance-based effluent limitations for arsenic and manganese. The interim effluent limitations consist of an average monthly effluent concentration derived using sample data provided by the Discharger. In developing the interim limitations, when there are less than 10 sampling data points available, the Technical Support Document for Water Quality-Based Toxics Control (EPA/505/2-90-001, TSD) recommends a coefficient of variation of 0.6 be utilized as representative of wastewater effluent sampling. The TSD recognizes that a minimum of 10 data points is necessary to conduct a valid statistical analysis. The multipliers contained in Table 5-2 of the TSD are used to determine an average monthly limitation based on a long-term average objective. In this case, the long-term average objective is to maintain, at a minimum, the current plant performance level. Therefore, when there are less than ten sampling points for a constituent, interim limitations are based on
3.11 times the maximum observed effluent concentration to obtain the average monthly interim limitation (TSD, Table 5-2).

19. The Central Valley Water Board finds that the Discharger can maintain compliance with the interim effluent limitations included in this Order. Interim effluent limitations are established when compliance with the final effluent limitations cannot be achieved by the existing Facility. Discharge of constituents in concentrations in excess of the final effluent limitations, but in compliance with the interim effluent limitations, can significantly degrade water quality and adversely affect the beneficial uses of the receiving stream on a long-term basis. The interim limitations, however, establish an enforceable ceiling concentration until compliance with the effluent limitation can be achieved.

20. If an interim effluent limit contained in this Order is exceeded, the Discharger is subject to MMPs for that particular exceedance as it will no longer meet the exemption in Water Code section 13385(j)(3). It is the intent of the Central Valley Water Board that a violation of an interim monthly effluent limitation subjects the Discharger to only one MMP for that monthly averaging period.

Other Regulatory Requirements

21. Water Code section 13301 states: “When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. In the event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to that system by dischargers who did not discharge into the system prior to the issuance of the cease and desist order. Cease and desist orders may be issued directly by a board, after notice and hearing.”

22. Water Code section 13267 states in part: “In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

The Discharger owns and operates the aquaculture facility named in this Order.

23. The technical and monitoring reports required by this Order are necessary to determine compliance with the WDRs and with this Order.
24. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) (“CEQA”) pursuant to Water Code section 13389, since the adoption or modification of a NPDES permit for an existing source is statutorily exempt and this Order only serves to implement a NPDES permit. (Pacific Water Conditioning Ass’n, Inc. v. City Council of City of Riverside (1977) 73 Cal.App.3d 546, 555-556). Issuance of this Order is also exempt from CEQA pursuant to California Code of Regulations, title 14, section 15321, subdivision (a)(2).

IT IS HEREBY ORDERED THAT:

1. Cease and Desist Order R5-2007-0013-01 is rescinded upon the effective date of this Order, except for enforcement purposes.

2. Pursuant to California Water Code sections 13301 and 13267, the Discharger shall comply with the following time schedule to ensure compliance with the arsenic and manganese effluent limitations contained in WDR Order R5-2007-0012 as described in the above Findings:

<table>
<thead>
<tr>
<th>Task</th>
<th>Date Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit Method of Compliance Workplan/Schedule</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>Submit Compliance Alternative Investigation/Evaluation and Selection of Preferred Compliance Alternative.</strong> Submit a report that includes: 1) a compliance options investigations analysis that includes: overall feasibility, effectiveness, cost, regulatory acceptance, timing, likelihood of compliance, and ease of implementation for the alternatives listed in Finding 7 of this Order. 2) a rationale for selection of preferred compliance option(s), and 3) a discussion of cost and funding sources. The report must also describe the selected preferred compliance alternative(s) and include a preliminary milestone schedule for implementing the alternative(s) for compliance with the final effluent limits for arsenic and manganese.</td>
<td>1 May 2015</td>
</tr>
<tr>
<td>Submit Pollution Prevention Plan (PPP) for arsenic and manganese pursuant to CWC section 13263.3</td>
<td>1 July 2015</td>
</tr>
<tr>
<td><strong>Begin Implementation of Selected Project Alternative.</strong> Submit a report that includes a schedule and detailed process for implementing the selected alternative(s).**</td>
<td>1 October 2015</td>
</tr>
<tr>
<td><strong>Progress Reports.</strong> Submit progress reports that shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including studies, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final date.</td>
<td>1 April 2016, 1 December 2016</td>
</tr>
<tr>
<td><strong>Full compliance.</strong> Submit report demonstrating compliance with the final effluent limitations for arsenic and manganese.</td>
<td>1 March 2017</td>
</tr>
</tbody>
</table>
3. The following interim effluent limitations shall be effective immediately. The interim effluent limitations for arsenic and manganese shall be effective until 1 March 2017, or when the Discharger is able to come into compliance, whichever is sooner.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Average Monthly Effluent Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic (µg/L)</td>
<td>37</td>
</tr>
<tr>
<td>Manganese (µg/L)</td>
<td>172</td>
</tr>
</tbody>
</table>

4. Any person signing a document submitted under this Order shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

5. In accordance with Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain work plans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain the professional's signature and/or stamp of the seal.

If, in the opinion of the Executive Officer, Sterling Caviar, LLC fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or with the WDRs may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

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 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

or will be provided upon request.

This Order is effective upon the date of adoption.
I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 17 April 2015.

Original Signed by Pamela C.Creedon

PAMELA C CREEDON, Executive Officer