

RESPONSE TO COMMENTS AND LATE REVISIONS

TSAR NICOULAI CAVIAR, LLC., AND RALPH F. NIX 1995 REVOCABLE TRUST, TSAR NICOULAI STURGEON FARM, TENTATIVE NPDES PERMIT AND NEGATIVE DECLARATION WILTON, SACRAMENTO COUNTY

The Tentative NPDES Permit (Tentative Permit) and Negative Declaration for the Tsar Nicoulai Sturgeon Farm (hereafter TNC) were prepared by Central Valley Regional Water Quality Control Board (RWQCB) staff and were issued for public review on 6 May 2005. Tsar Nicoulai Caviar, LLC. submitted comments by electronic mail on 3 and 6 June 2005, and in a conference call on 15 June 2005. No other comments were received.

TSAR NICOULAI COMMENTS

Comment: TNC questioned the basis for finding reasonable potential for groundwater contamination from unlined ponds and land disposal of solid wastes, claiming that the estimated cost for construction of groundwater monitoring wells and analyses for the five-year term of the permit exceeded the benefits of the data, and claimed that the requirement for groundwater monitoring is not consistent with other comparable facilities. Instead, TNC proposed to study the area geology and to study the fate and transport of constituents to determine if it is appropriate to monitor groundwater.

Response: Waste Discharge Requirements are written based upon the available information. TNC proposed unlined ponds and did not provide a geologic study. Staff proposed *Late Revisions* to include the requirement for TNC to complete a *Groundwater Degradation Assessment* to determine the potential threat to groundwater quality as an alternative to initial design, construction, and operation of a groundwater-monitoring network. Upon review of the draft requirement for the Assessment, TNC decided that they would implement an approved groundwater monitoring program. Some late revisions provided further clarification of appropriate requirements to assess the application of solid wastes to land, and the groundwater monitoring requirements.

Comment: TNC requested the opportunity to provide new Best Management Practices for the handling and land application of solid waste and requests 90 days to complete the proposed study.

Response: If TNC presents an alternative proposal, Regional Board staff can consider the information and modify the Order as appropriate.

Comment: TNC requested modifying task VI.C.2.c.iii to read “**150** days following completion of task c.ii.”

Response: In consultation with TNC, the permit has been modified to read “**Within 60 days** of the Executive Officer’s approval of Task c.ii.”.

Comment: TNC requested increasing the monthly average daily flow from 1.2 mgd to 3.2 mgd to accommodate potential summertime quarter requirements needs.

Response: The 1.2 mgd monthly average daily flow limitation in the tentative permit is based upon the information provided in the Report of Waste Discharge (RWD) and other information. The requested increase from 1.2 mgd to 3.2 mgd constitutes a significant change and would require drafting a new tentative order and would require a further public comment period. Consequently, the increase from 1.2 mgd to 3.2 mgd cannot be included in this NPDES permit. However, Regional Board staff will consider TNC’s request and will evaluate the possibility of a future amendment to the Order.

Comment: TNC requested the opportunity to reduce the monitoring frequency after one year of data. TNC also requested limiting analytical testing to those tests that are part of its normal operation.

Response: If after review of monitoring conducted as part of the permit requirements, we determine that the frequency can be adjusted, the permit can be reopened for that purpose. No change is needed or warranted at this time.

Comment: TNC requested that the 5°F limitation (Receiving Water Limitations V.A.6) to the increase in receiving water temperature only apply when water is present in the receiving stream.

Response: This language, required by the Basin Plan, is consistent with other permits and only applies when there is water in the receiving stream upon which to measure a change.

Comment: TNC requested substituting the results of its daily internal ammonia testing for those of an ELAP certified laboratory.

Response: The ammonia testing frequency has been reduced to weekly, which TNC stated would be acceptable during the 15 June 2005 teleconference,.

LATE REVISIONS

The following is a summary of the late revisions to the NPDES Permit shown in redline/strikeout format. The deleted text is stricken out and the added text is underlined. Changes were made to the Limitations and Discharge Requirements; Attachment E, Monitoring and Reporting Program; and Attachment F, Fact Sheet.

LIMITATIONS AND DISCHARGE REQUIREMENTS

II. FINDINGS

R. Finding for no More Stringent than Federal Law. This Order contains restrictions on individual pollutants that are no more stringent than required by the federal Clean Water Act. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. Technology based effluent limitations consist of best management practices to control BOD₅ and TSS. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the California Toxics Rule, the California Toxics Rule is the applicable standard pursuant to 40 C.F.R. 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on May 1, 2001. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the [Clean Water] Act” pursuant to 40 C.F.R. 131.21(c)(1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the Clean Water Act and the applicable water quality standards for purposes of the Clean Water Act.

VI. PROVISIONS

A. Standard Provisions

2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions:
 - n. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. In the event a certified laboratory is not available to the Discharger, analyses performed by a noncertified laboratory will be accepted provided a Quality Assurance-Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program must be kept in the laboratory and shall be available for inspection by Regional Water Board staff. The Quality Assurance-Quality

Control Program must conform to USEPA guidelines or to procedures approved by the Regional Water Board.

i. Unless otherwise specified, all metals shall be reported as Total Metals.

~~ii. Unless otherwise specified, all metals shall be reported as Total Metals.~~

ii.1) Acute bioassays shall be performed in accordance with guidelines approved by the Regional Water Board and the Department of Fish and Game or in accordance with methods described in USEPA's manual for measuring acute toxicity of effluents (EPA-821-R-02-012 and subsequent amendments).

iii.2) Short-term chronic bioassays shall be performed in accordance with USEPA guidelines (EPA-821-R-02-013 and subsequent amendments).

C. Special Provisions

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- c. To determine compliance with the Groundwater Limitations, the discharger shall implement a groundwater monitoring program. The groundwater monitoring network shall include one or more background monitoring wells and a sufficient number of designated monitoring wells to evaluate performance of best practicable control technology (BPTC) measures, and determine if the discharge has degraded groundwater. These include monitoring wells downgradient of every treatment, storage, and disposal unit, including solids disposal, drying or staging areas, which do or may release waste constituents to groundwater.

A groundwater monitoring well installation report shall be prepared by, or under the direction of, and signed by, a registered Geologist, Certified Engineering Geologist, or a Civil Engineer registered by the State of California, and shall contain the information as listed in Attachment I, *Items to be Included in a Monitoring Well Installation Workplan and a Monitoring Well Installation Report of Results*.

Prior to installing any groundwater monitoring wells, the Discharger shall submit a *Groundwater Monitoring Well Installation Workplan* and a *Groundwater Monitoring Well Installation Report* containing the information as listed in Attachment I, *Items to be Included in a Monitoring Well Installation Workplan and a Monitoring Well Installation Report of Results*.

All monitoring wells shall comply with the appropriate standards as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981), and any more stringent standards adopted by the Discharger or County pursuant to CWC Section 13801. ~~The Discharger shall characterize natural background quality of monitored constituents in a technical report, to be submitted in accordance with the time schedule provided below. For each groundwater monitoring parameter/constituent identified in the Monitoring and Reporting Program, the report shall present a summary of monitoring data, calculation of the concentration in background monitoring wells, and a comparison of background groundwater quality to that in wells used to monitor the facility. Determination of background quality shall be made using the methods described in Title 27, Section 20415(e)(10), and shall be based on data from at least four consecutive quarterly (or more frequent) groundwater monitoring events. For each monitoring parameter/constituent, the report shall compare measured concentrations for compliance monitoring wells with the calculated background concentration.~~

Following the completion of at least eight monthly groundwater sampling events, the Discharger shall submit a background groundwater quality study report. For each groundwater monitoring parameter/constituent identified in the Monitoring and Reporting Program, the report shall present a summary of monitoring data, calculation of the concentration in background monitoring wells, and a comparison of background groundwater quality to that in wells used to monitor the facility. Determination of background quality shall be made using the methods described in Title 27, Section 20415(e)(10).

If the monitoring shows that any constituent concentrations are increased above background water quality, the Discharger shall submit a technical report describing the evaluation's results and critiquing each evaluated component with respect to BPTC and minimizing the discharge's impact on groundwater quality. In no case shall the discharge be allowed to exceed a water quality objective. This Order may be reopened and additional groundwater limitations added.

The Discharger shall comply with the following schedule in implementing the work required by this Provision. Work plans and technical reports submitted pursuant to this Provision shall be subject to the requirements of Provision VI.A.2.t and are subject to Executive Officer approval.

<u>Task</u>	<u>Compliance Date</u>
i. Submit a <i>Monitoring Well Installation Work Plan</i> that meets the requirements specified in Attachment I.	Within 60 <u>90</u> days of the effective date of this Order
ii. Implement monitoring well installation work plan with technical report on sampling procedures and proposed Data Analysis Methods as described in Section VIII.A.3 of Attachment E, MRP.	<u>Within 30-60 days</u> following Executive Officer <u>approval</u> of work plan submitted in accordance with task c.i
iii. <u>Submit a <i>Groundwater Monitoring Well Installation Report</i>.</u> Complete monitoring well installation and well destruction and commence groundwater monitoring from newly installed wells	<u>Within 120 days of the Executive Officer's approval of Task c.i.</u> 60 days following completion of task c.ii
iv. Submit a <u><i>Background Groundwater Quality Study</i></u> Monitoring Well Installation Report	30 days following completion of task c.iii <u>Within 300 days of submittal of the report required in Task c.iii.</u>
v. <u>Submit a BPTC Implementation Plan.</u>	<u>Within 90 days of the Executive Officer's written request.</u>
vi. <u>Certify full BPTC Implementation.</u>	<u>Within 270 days of the Executive Officer's approval of Task c.v.</u>
d. <u>The Discharger shall obtain representative samples of solids in the wastewater treatment pond system and shall submit a <i>Waste Characterization Report</i> that shows whether accumulated solids in the ponds pose a threat to water quality. The report shall thoroughly document all site-specific information used in any modeling, all analytical results, background groundwater quality, all assumptions (with justification), all model inputs, and calculations performed. The Discharger shall comply with the following time schedule:</u>	

<u>Task</u>	<u>Compliance Date</u>
i. <u>Submit Waste Characterization Report</u>	<u>Within 120 days of the effective date of this Order.</u>

e. The Discharger shall develop and implement a *Solids Management Plan* for solids removed from the wastewater and applied to land as a soil amendment. The plan shall describe in detail the frequency, loading rate, and procedures for application of solids to the landscaped area described in the WDRS. Loading rates shall be commensurate with the needs of the landscape materials and supporting calculations shall be provided for the following:

- Nitrogen loading (lbs/acre/year) using actual acreage and solids mass applied on each day of discharge, and including the use of any commercial fertilizers.
- Total dissolved solids (TDS) loading (lbs/acre/year) using actual acreage and solids mass applied on each day of discharge.

The plan shall also describe in detail how the land application area will be managed to prevent: 1) nuisance odors, and 2) the discharge of tail water or storm water containing solids constituents to surface waters.

If additional land application area is required to ensure agronomic loading rates and compliance with Construction, Operation and Maintenance Specification 5.a, the report shall specify the additional area required, the location of the new application area, the type(s) of vegetation to be grown, planned irrigation systems and practices, and calculations demonstrating that all available nitrogen will be removed by the vegetation. The Discharger shall comply with the following time schedule:

<u>Task</u>	<u>Compliance Date</u>
i. <u>Submit <i>Solids Management Plan</i></u>	<u>Within 60 days of the effective date of this Order</u>
ii. <u>Certify completion of additional land application area</u>	<u>Within 120 days of the Executive Officer's written request</u>

df. The Discharger shall submit a technical report to demonstrate compliance with Provisions VI.C.5.b and VI.C.5.c of this Order:

eg. The Discharger shall conduct the following study to demonstrate compliance with Provision VI.C.3.a.i, requiring the minimization of salt discharged to surface waters. The study shall adequately characterize the

concentrations of salt in the effluent and source water to determine whether effluent limitations for electrical conductivity (EC) are needed.

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location M-001

1. The Discharger shall monitor wastewater discharged at M-001 as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	Measure	Continuous	-
Total Ammonia as N	mg /L	Grab	1 / day week	[1]

VIII. RECEIVING WATER MONITORING REQUIREMENTS

B. Groundwater Reporting Requirements

The groundwater monitoring frequency shall be monthly until eight sampling events have been completed, and quarterly thereafter. ~~Quarterly groundwater~~ Groundwater monitoring reports shall be submitted quarterly under separate cover to the Regional Water Board. The Quarterly Report shall include the following:

ATTACHMENT F – FACT SHEET

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

C. State and Federal Regulations, Policies, and Plans

~~2. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan)* on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.~~

32. National Toxics Rule (NTR) and California Toxics Rule (CTR).

43. State Implementation Policy.

54. Compliance Schedules and Interim Requirements.

[65](#). **Antidegradation Policy.**

[76](#). **Anti-Backsliding Requirements.**

[87](#). **Monitoring and Reporting Requirements.**

[98](#). **Storm Water Requirements.**

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

D. Receiving Water Monitoring

2. Groundwater

Groundwater monitoring must be conducted to determine if the Facility's groundwater discharge is causing wastewater constituent concentrations in groundwater to exceed WQO(s) or otherwise not comply with Regional Water Board plans and policies, including Resolution 68-16. This Order requires the Discharger to begin groundwater monitoring and includes a regular schedule of groundwater monitoring in the Monitoring and Reporting Program, Attachment E.

The analysis shall consider all land discharges (e.g., wastewater ponds, solids drying beds, landscaped solids application areas).

Following the completion of at least eight monthly groundwater sampling events, the Discharger shall submit a background groundwater quality study report. For each groundwater monitoring parameter/constituent identified in the Monitoring and Reporting Program, the report shall present a summary of monitoring data, calculation of the concentration in background monitoring wells, and a comparison of background groundwater quality to that in wells used to monitor the facility. Determination of background quality shall be made using the methods described in Title 27, Section 20415(e)(10).