



Central Valley Regional Water Quality Control Board

22 May 2018

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NOTICE OF APPLICABILITY (NOA); GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2016-0076 FOR LIMITED THREAT DISCHARGES TO SURFACE WATER; US BUREAU OF RECLAMATION, SACRAMENTO DEEP WATER SHIP CHANNEL NITROGEN ENRICHMENT STUDY, YOLO COUNTY

Our office received a Notice of Intent on 12 March 2018 from the US Bureau of Reclamation (hereinafter Discharger), for discharge of calcium nitrate pellets to surface water to conduct a nitrogen enrichment study. Based on the application packet submitted by the Discharger, staff has determined that the project meets the required conditions for approval under the General Order for Limited Threat Discharges to Surface Water (Limited Threat General Order), Tier 1A. This project is hereby assigned Limited Threat General Order R5-2016-0076-036 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG995002. Please reference your Limited Threat General Order number, **R5-2016-0076-036**, in your correspondence and submitted documents.

The project activities shall be operated in accordance with the requirements contained in the Limited Threat General Order and as specified in this NOA. You are urged to familiarize yourself with the entire contents of the Limited Threat General Order. To conserve resources, the Limited Threat General Order may be viewed at the following web address: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf. A copy of the Limited Threat General Order can also be obtained by contacting or visiting the Central Valley Water Board's office weekdays between 8:00 AM and 5:00 PM.

CALIFORNIA TOXICS RULE / STATE IMPLEMENTATION POLICY MONITORING

The Limited Threat General Order incorporates the requirements of the California Toxics Rule (CTR) and the State Water Resources Control Board's (State Water Board), *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, 2005, also known as the State Implementation Policy (SIP). Screening levels for CTR constituents and other constituents of concern are found in Attachment I of the Limited Threat General Order. However, because only calcium nitrate fertilizer pellets are to be applied to the receiving water, and are of known composition, water quality data was not required to be submitted with the Discharger's application.

PROJECT DESCRIPTION

The Sacramento Deep Water Ship Channel Nitrogen Enrichment Study (Project) is being conducted as a critical proof-of-concept for evaluating the efficacy of using the Sacramento Deep Water Ship Channel to deliver food resources (phytoplankton & zooplankton) to the north Delta in an effort to beneficially affect the entire ecosystem, including endangered native species such as the delta smelt. Nitrogen enrichment of the Sacramento Deep Water Ship Channel will be accomplished through the introduction of calcium nitrate commercial fertilizer pellets via a GPS guided crop duster. The Discharger will monitor the movement of the fertilizer in the water body, calculate whole system metabolism, analyze for nutrients, quantify each phytoplankton species' biovolume, determine phytoplankton doubling rate, determine the dry weight equivalent of each zooplankton species, and attempt to document fish community response to the experiment with special emphasis on delta smelt. A single application of calcium nitrate fertilizer pellets will be applied with the goal to raise the dissolved inorganic nitrogen concentrations in targeted zone of the Sacramento Deep Water Ship Channel by 0.5 mg-N/L. The application is scheduled to occur in June 2018 and monitoring will occur from June 2018 through July 2018.

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. Effluent Limitations and Discharge Specifications of the Limited Threat General Order. Based on the information provided in the NOI, effluent limitations are not applicable to this discharge.

RECEIVING WATER LIMITATIONS

The Limited Threat General Order includes receiving surface water limitations in Section VIII.A. Based on the information provided in the NOI, only the following receiving surface water limitations are applicable to this discharge:

- Bacteria (VIII.A.2);
- Biostimulatory substances (VIII.A.3);
- Chemical constituents (VIII.A.4);
- Color (VIII.A.5);
- Dissolved oxygen (VIII.A.6.b.i);
- Floating material (VIII.A.7);
- Oil and grease (VIII.A.8);
- pH (VIII.A.9.a);
- Pesticides ((VIII.A.10);
- Radioactivity (VIII.A.11);
- Suspended sediments (VIII.A.12);
- Settleable substances (VIII.A.13);
- Suspended material (VIII.A.14);
- Taste and odors (VIII.A.15);
- Temperature (VIII.A.16);
- Toxicity (VIII.A.17); and
- Turbidity (VIII.A.18.a).

MONITORING AND REPORTING

Monitoring and reporting requirements are contained in Attachment C of the Limited Threat General Order. The Discharger is required to comply with the following specific monitoring and reporting requirements for the effluent and receiving water in accordance with Attachment C of the Limited Threat General Order.

Monitoring Locations – The Discharger shall monitor the receiving water at the specified location as follows:

Table 1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	RSW-001	Sacramento Deep Water Ship Channel, approximately 400 meters upstream from the point of discharge.
--	RSW-002	Sacramento Deep Water Ship Channel, approximately 400 meters downstream from the point of discharge.

Effluent Monitoring – Not applicable. The Project consists of a one-time application of a known mass and concentration of calcium nitrate to the Sacramento Deep Water Ship Channel, therefore, effluent monitoring is not necessary.

Receiving Water Monitoring - The Discharger shall monitor the receiving water at RSW-001 and RSW-002 after the application of calcium nitrate pellets as described in the Discharger’s NOI. Results of receiving water monitoring shall be submitted with the quarterly monitoring reports.

Monitoring Report Submittals - Monitoring in accordance with the Limited Threat General Order shall begin upon discharge. Monitoring Reports shall be submitted to the Central Valley Water Board on a quarterly basis, beginning with the **Second Quarter 2018**. This report shall be submitted on **1 August 2018**. If the discharge has not occurred there is no need to monitor. However, a certified Monitoring Report must be submitted stating that there has been no discharge. Table 2, below, summarizes the Monitoring Report due dates required under the Limited Threat General Order. Quarterly Monitoring Reports must be submitted until your coverage is formally terminated in accordance with the Limited Threat General Order, even if there is no discharge during the reporting quarter.

Table 2. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Quarterly Report Due Date
1/Day, 1/Week, 1/Month, 1/Quarter	22 May 2018	1 May (1 Jan – 31 Mar) 1 Aug (1 Apr – 30 Jun) 1 Nov (1 Jul – 30 Sep) 1 Feb, of following year (1 Oct – 31 Dec)

GENERAL INFORMATION AND REQUIREMENTS

The Discharger must notify Central Valley Water Board staff at least 24 hours prior to applying the calcium nitrate pellets. Furthermore, the Discharger must notify Central Valley Water Board staff within 24 hours of having knowledge of noncompliance.

Discharge of material other than what is described in the application is prohibited. The required annual fee (as specified in the annual invoice you will receive from the State Water Resources Control Board) shall be submitted until this NOA is officially terminated. You must notify this office in writing when the discharge regulated by the Limited Threat General Order is no longer

necessary by submitting the Request for Termination of Coverage (Attachment E). If a timely written request is not received, the Discharger will be required to pay additional annual fees as determined by the State Water Resources Control Board.

ENFORCEMENT

Failure to comply with the Limited Threat 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. In addition, late Monitoring Reports may be subject to MMPs or discretionary penalties of up to \$1,000 per day late. When discharges do not occur during a quarterly monitoring period, the Discharger must still submit a quarterly certified Monitoring Report indicating that no discharge occurred to avoid being subject to enforcement actions.

COMMUNICATION

All documents, including Monitoring Reports, written notifications, and documents submitted to comply with this NOA and the Limited Threat General Order, should be submitted to the NPDES Compliance Unit, Attention: Ayda Soltani. Ms. Soltani can be reached at (916) 464-4634 or Ayda.Soltani@Waterboards.ca.gov.

We have transitioned to a paperless office, therefore, please convert all documents to a searchable Portable Document Format (pdf) and email them to centralvalleysacramento@waterboards.ca.gov. **Please include the following information in the email:** Attention: NPDES Compliance Unit; Discharger: US Bureau of Reclamation; Facility: Sacramento Deep Water Ship Channel Nitrogen Enrichment Study; County: Yolo; and the CIWQS place ID 845932 in the body of the email. Documents that are 50 megabytes or larger must be transferred to a DVD, or flash drive and mailed to our office, attention "ECM Mailroom-NPDES". Please include the attached Monitoring Report Transmittal Form as the first page of each Monitoring Report.

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 at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

Original Signed by Adam Laputz for

Patrick Pulupa, Incoming Executive Officer for
Pamela C. Creedon, Executive Officer

Enclosures (2): Attachment A - Project Location Map
Monitoring Report Transmittal Form (Discharger only)

cc: David Smith, U.S. EPA, Region IX, San Francisco (email only)
Afrooz Farsimadan, Division of Water Quality, State Water Board, Sacramento (email only)

ATTACHMENT A – PROJECT LOCATION MAP

