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## Central Valley Regional Water Quality Control Board

18 October 2023

**CERTIFIED MAIL**  
**7021 1970 0001 5446 5389**

George Morrow, President  
Jim Brisco Enterprises, Inc.  
221 Airport Road, Suite A  
Atwater, CA 95301

**CERTIFIED MAIL**  
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**NOTICE OF APPLICABILITY (NOA); STATE WATER RESOURCES CONTROL BOARD ORDER WQ-2004-0012-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR THE DISCHARGE OF BIOSOLIDS TO LAND FOR USE AS A SOIL AMENDMENT IN AGRICULTURAL, SILVACULTURAL, HORTICULTURAL, AND LAND RECLAMATION ACTIVITIES; BRADFORD E. & KRISTI J. NYMAN TRUST AND JIM BRISCO ENTERPRISES, INC.; NYMAN FARM BIOSOLIDS APPLICATION AREA; MERCED COUNTY**

On 11 July 2023, Jim Brisco Enterprises, Inc. submitted a Notice of Intent (NOI), followed by submission of Form 200 and an application fee on 27 July 2023, for enrollment under the State Water Resources Control Board's Water Quality Order 2004-0012-DWQ, *General Waste Discharge Requirements for the Discharge of Biosolids to Land For Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities* (General Order). The NOI was signed by George Morrow with Jim Brisco Enterprises Inc. (Brisco), and Brad Nyman with the Bradford E. & Kristi J. Nyman Trust (Nyman Trust).

According to the NOI, Brisco plans to apply biosolids from various municipal generators throughout California on up to 1,477 acres of agricultural land owned by the Nyman Trust in Merced County. Both Brisco and the Bradford E. & Kristi J. Nyman Trust are collectively and jointly referred to as the "Discharger" for the purpose of this Notice of Applicability (NOA). Supplemental information to support the application, including a Pre-Application Report, were provided over several dates and telephone conversations through 16 October 2023.

Central Valley Water Board staff's review of the NOI and the Pre-Application Report is discussed in more detail in the attached staff memorandum. Based on the information provided in the NOI and Pre-Application report, this project meets the conditions for

enrollment under the enclosed General Order. All the requirements contained within the General Order described as applicable to Sewage Sludge – Class “B” biosolids apply to your application. The discharge is hereby covered under **enrollee number 2004-0012-DWQ-0034**. Please include this number on all correspondence related to this discharge. If the Discharger desires to land apply biosolids from additional facilities, another Pre-Application Report must be submitted.

## **PROJECT LOCATION**

The proposed project includes applying an estimated 8,900 wet tons of biosolids per year on approximately 1,477 acres of agricultural land owned by the Nyman Trust (37°06' 30" N, 120°30' 20" W) in south central Merced County referred to as the Nyman Farm Biosolids Application Area (Land Application Area). The Land Application Area is approximately 13.2 miles south of the western intersection of California Route 140 and California Route 99 in the City of Merced in Merced County (Attachment A). The land application area is composed of Assessor Parcel Numbers (APNs) 074-140-024, 074-140-035, and 074-130-013.

This portion of Merced County is within the Sacramento and San Joaquin River Basins. The operative *Water Quality Control Plan for the Sacramento and San Joaquin River Basins* (hereafter Basin Plan) designates beneficial uses, establishes narratives and numerical water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters within the basins.

## **MONITORING AND REPORTING PROGRAM**

The General Order includes Monitoring and Reporting Program (MRP) 2004-0012-DWQ. MRP 2004-0012-DWQ requires the submittal of an annual monitoring report by **15<sup>th</sup> February** of each year identifying the quantity of biosolids applied to the various fields, constituent concentrations, annual pollutant loading rates, and cumulative pollutant loading calculations. Nitrogen loading rates shall account for nitrogen from supplemental fertilizers and irrigation water.

## **SPECIFIC REQUIREMENTS**

1. Application of biosolids at a location or in a manner different from that described in the NOI and this NOA is prohibited.
2. The application shall not cause or threaten to cause pollution as defined by California Water Code section 13050.
3. There shall be no discharge of biosolids from the storage or application areas to adjacent land areas not regulated by this General Order, to surface water, or to surface water drainage courses.
4. The staging and application of biosolids shall comply with all applicable setbacks contained in the General Order as specified in Discharge Specification B.11.

5. Biosolids with less than 75% moisture shall not be applied during periods when the surface wind speed exceeds 25 miles per hour as determined by the nearest calibrated regional weather station (e.g., airport, CIMIS).
6. The application of Class "B" biosolids containing a moisture content of less than 50% is prohibited.
7. The application of biosolids to water-saturated or frozen ground or during periods of precipitation that includes runoff from the permitted Land Application Area is prohibited.
8. Application of biosolids at rates in excess of the nitrogen requirements of the crops or at rates that would degrade groundwater quality is prohibited.
9. In accordance with the General Order's Monitoring and Reporting Program, the Discharger shall submit the required annual monitoring report by **15<sup>th</sup> of February of each year.**
10. The Discharger shall submit the required annual fee (as specified in the annual billing statement issued by the State Water Resources Control Board) until this NOA is officially terminated.
11. Failure to abide by the conditions of General Order 2004-0012-DWQ, including its monitoring and reporting requirements, and this NOA could result in enforcement actions, as authorized by provisions of the California Water Code.
12. The Discharger shall notify the California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration program, per California law Fish and Game Code section 1602, prior to any activity that may substantially divert or obstruct the natural flow of any river, stream, or lake; substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or deposit or dispose of debris, waste, or other materials containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. If a lake and streambed alteration agreement (agreement) is required, the Discharger shall maintain an active agreement with CDFW consistent with California law Fish and Game Code section 1605.
13. A digital copy of the required annual monitoring report that must be sent electronically to the Central Valley Water Board shall also be sent electronically to [fondahl.lauren@epa.gov](mailto:fondahl.lauren@epa.gov) (or any future address the United States Environmental Protection Agency designates).

## **SALT AND NITRATE CONTROL PROGRAM**

The Central Valley Water Board adopted Basin Plan amendments (Resolution R5-2018-0034) incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting (i.e., Salt and Nitrate Control Programs) as part of the Central Valley Salinity Alternatives for

Long-Term Sustainability (CV-SALTS) initiative. These Basin Plan amendments became effective on 17 January 2020. For more information regarding the Salt and Nitrate Control Programs, you are encouraged to go to the [CV-SALTS Info Webpage](https://www.cvsalinity.org/public-info) (<https://www.cvsalinity.org/public-info>). Compliance with the Salt and Nitrate Control Programs is discussed further in the attached staff memorandum. As these programs are implemented, the Central Valley Water Board may find it necessary to modify the requirements of this NOA to ensure the goals of the Salt and Nitrate Control Programs are met.

As discussed in the attached staff memorandum for the Nitrate Control Program, the Discharger (CV-SALTS ID 3643) has selected Path B and submitted a Notice of Intent (NOI) to join a Management Zone Group when one is formed for the Merced Basin. In addition, the Discharger has submitted a NOI and fee to participate in the Prioritization and Optimization Study (P&O Study) to comply with the Salt Control Program.

All monitoring reports and other correspondence shall be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: [centralvalleyfresno@waterboards.ca.gov](mailto:centralvalleyfresno@waterboards.ca.gov). Documents that are 50MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

**Program:** Non-15,  
**Place ID:** 889758,  
**Facility Name:** Nyman Farm Biosolids Application Area  
**Order:** 2004-0012-DWQ-R0034.

In order to conserve paper and reduce mailing costs, a paper copy of General Order WQO 2004-012-DWQ has been sent only to the Discharger. Others are advised that the [General Order](#) is available on the State Water Board's website ([https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2004/wqo/wqo2004-0012.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0012.pdf)).

All documents, including responses to inspections and written notifications, submitted to comply with this NOA shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention to Omar Mostafa. Mr. Mostafa can be reached at (559) 445-5197 or [Omar.Mostafa@waterboards.ca.gov](mailto:Omar.Mostafa@waterboards.ca.gov). Questions regarding the permitting aspects of the NOA, and notification for termination of coverage under the General Order, shall be directed, via the paperless office system, to the WDR Permitting Unit, attention Jeff Robins. Jeff Robins can be reached at (559) 445-5976 or by email at [Jeff.Robins@waterboards.ca.gov](mailto:Jeff.Robins@waterboards.ca.gov).

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 Resources Control 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 Resources Control 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 [Copies of the laws and regulations applicable to filing petitions](https://www.waterboards.ca.gov/public_notices/petitions/water_quality) ([https://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](https://www.waterboards.ca.gov/public_notices/petitions/water_quality)) or will be provided upon request.

Coverage for your Facility under the General Order shall become effective, subject to this Notice of Applicability, immediately.

If you have any questions regarding this matter, please contact Jeff Robins by phone at (559) 445-5976 or by email at [Jeff.Robins@waterboards.ca.gov](mailto:Jeff.Robins@waterboards.ca.gov).

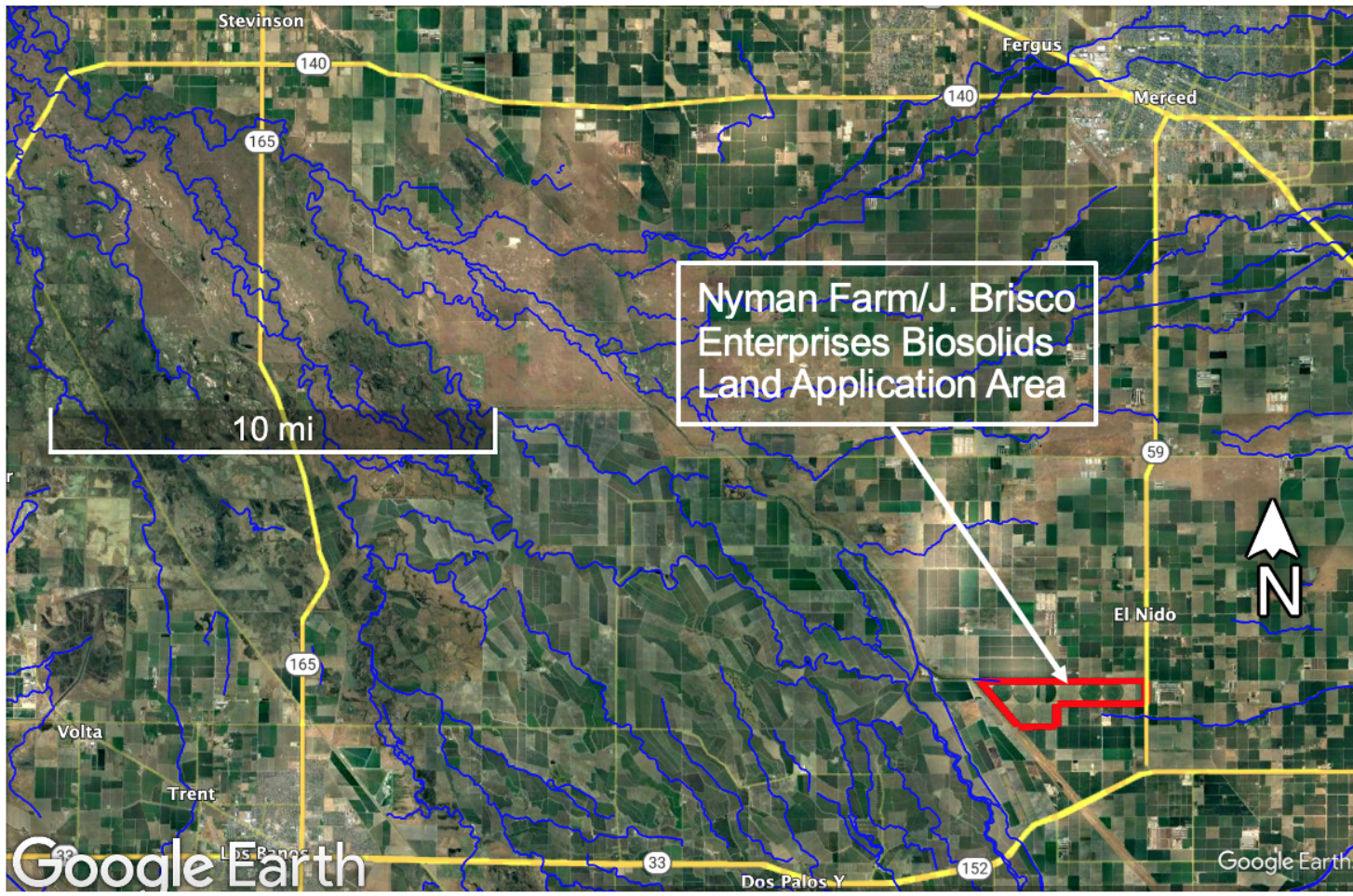
*Original Signed by Scott J. Hatton for:*  
Patrick Pulupa  
Executive Officer

Attachments:

- Attachment A – Site Location Map
- Attachment B – Biosolids Application Area Maps
- 18 October 2023 Central Valley Water Board Staff Memorandum
- State Water Resources Control Board Order WQ 2004-0012-DWQ

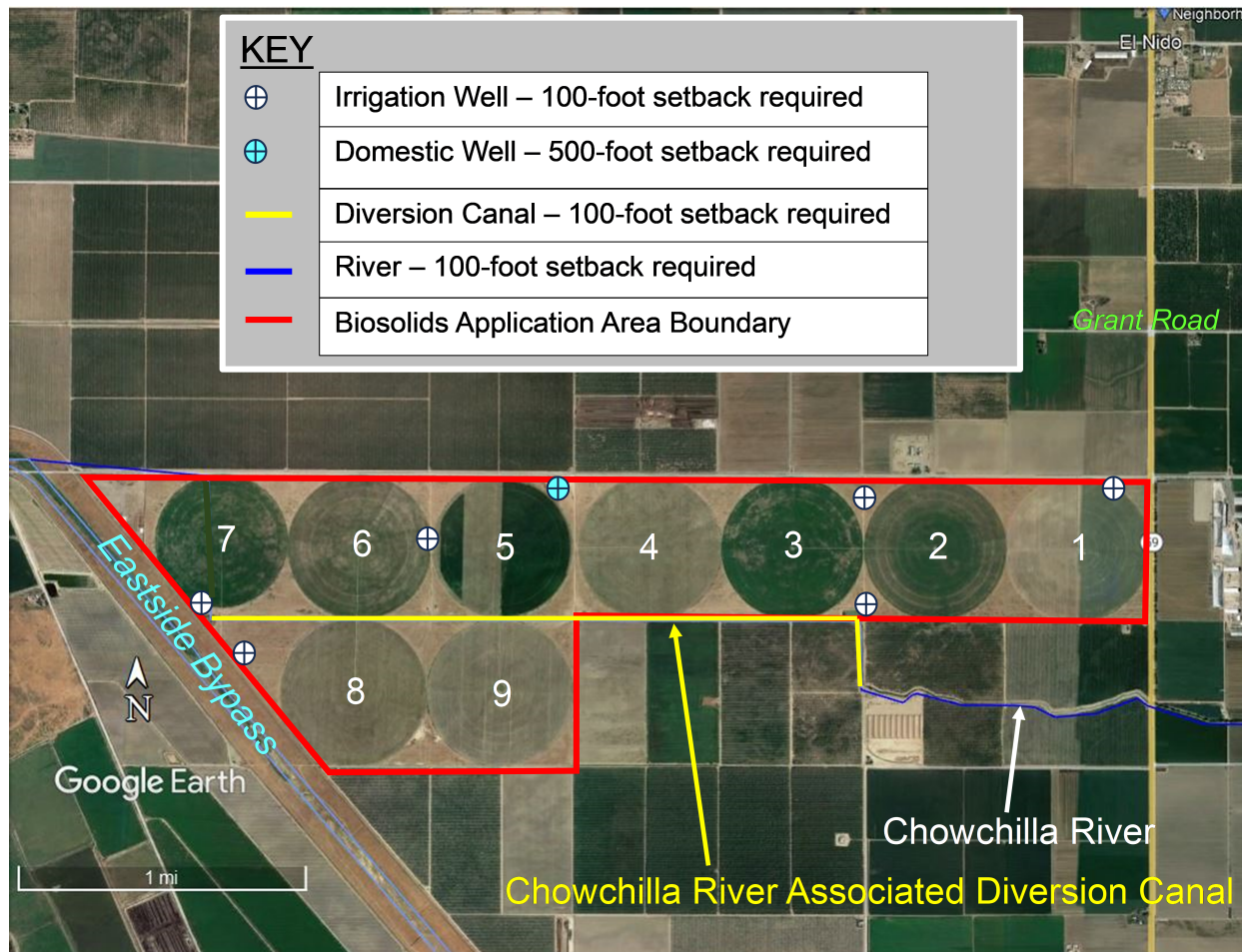
cc's:

- Laurel Warddrip, State Water Resources Control Board, DWQ, Sacramento (via email)
- Chris Moskal, State Water Resources Control Board, OCC, Sacramento (via email)
- Laleh Rastegarzadeh, State Water Resources Control Board, DWQ, Biosolids, Sacramento (via email)
- Michael Byrd, California Dept. Of Fish and Wildlife, Lake & Streambed Alteration Program (via email)
- [RB5S-cvsalts@waterboards.ca.gov](mailto:RB5S-cvsalts@waterboards.ca.gov)
- Lauren Fondahl, EPA Region 9 Biosolids Coordinator (via email)
- Kion Kashefi, Anteris Agronomics (via email)
- Omar Mostafa, Central Valley Water Board, Fresno (via email)
- Esther Canal, Merced County Environmental Health, Fresno, CA



**ATTACHMENT A – SITE LOCATION MAP**

NOTICE OF APPLICABILITY 2004-0012-DWQ-0034  
FOR  
BRADFORD E. & KRISTI J. NYMAN TRUST AND JIM BRISCO ENTERPRISES, INC;  
NYMAN FARM BIOSOLIDS APPLICATION AREA;  
MERCED COUNTY  
Drawing Reference: Google Earth



**ATTACHMENT B – SITE PLAN MAP**  
 NOTICE OF APPLICABILITY 2004-0012-DWQ-0034  
 FOR  
 BRADFORD E. & KRISTI J. NYMAN TRUST AND JIM BRISCO ENTERPRISES, INC;  
 NYMAN FARM BIOSOLIDS APPLICATION AREA;  
 MERCED COUNTY  
 Drawing Reference: Google Earth



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## Central Valley Regional Water Quality Control Board

**TO:** Scott J. Hatton  
Supervising Water Resource Control Engineer

**FROM:** Alexander S. Mushegan  
Senior Water Resource Control Engineer  
RCE 84208

Jeff Robins  
Water Resource Control Engineer  
RCE 94056

**DATE:** 18 October 2023

**APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ-2004-0012-DWQ; GENERAL WASTE DISCHARGE REQUIREMENTS FOR THE DISCHARGE OF BIOSOLIDS TO LAND FOR USE AS A SOIL AMENDMENT IN AGRICULTURAL, SILVACULTURAL, HORTICULTURAL, AND LAND RECLAMATION ACTIVITIES; BRADFORD E. & KRISTI J. NYMAN TRUST AND JIM BRISCO ENTERPRISES, INC.; NYMAN FARM BIOSOLIDS APPLICATION AREA; MERCED COUNTY**

### **BACKGROUND INFORMATION**

On 11 July 2023, Jim Brisco Enterprises, Inc. submitted a Notice of Intent (NOI), followed by submission of Form 200 and an application fee on 27 July 2023 requesting enrollment under the State Water Resources Control Board's Water Quality Order 2004-0012-DWQ, *General Waste Discharge Requirements for the Discharge of Biosolids to Land For Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities* (General Order). The NOI was signed by George Morrow with Jim Brisco Enterprises, Inc. (Brisco) and Brad Nyman with the Bradford E. & Kristi J. Nyman Trust (Nyman Trust) for the application of biosolids on the Nyman Farm Biosolids Application Area (referred to as Site or Land Application Area). Staff received a revised NOI on 2 October 2023 and a revised Pre-Application Report on 4 October 2023. Supplementary information was received via email and telephone conversations through 16 October 2023.



This memorandum provides a summary of Central Valley Water Board staff's review of the submittal and the applicability of the discharge to be covered under the General Order.

### PROJECT DESCRIPTION

According to the NOI, the Discharger will receive Class "B" biosolids from various generators within California, who can vary from year to year. The total land area for the biosolids application is 1,477 acres (does not account for land loss due to setbacks) on land owned by the Nyman Trust (Discharger). Jim Brisco Enterprises, Inc. is hired as the operator to manage and carry out the land application of the biosolids. For 2023, the NOI listed the following generators and their estimated wet tons of biosolids to be land applied in Table 1 below.

**Table 1 - Waste Generators and Estimated Wet Tons**

<b>Waste Generator (municipality)</b>	<b>Estimated Wet Tons</b>
Atwater	800
Caruthers	50
Coalinga	200
Delhi	500
Lathrop	1,100
Livingston	400
Salida	150
Tracy	3,000
Turlock	2,500
Woodlake	200
Total	8,900

The proposed project includes the application of biosolids on up to 1,477 acres of farmland in south central Merced County, as shown in **Attachment A** of the Notice of Applicability (NOA). The fields will be used to grow alfalfa and dryland wheat. The alfalfa will be grown on the circular irrigated portions of the fields. The dryland wheat will be grown either on the unirrigated annular space between the outer boundary of the square field and circular irrigated field or the entire square field. The biosolids application area consists of nine, center-pivot irrigation fields, as shown in **Attachment B** of the NOA. Currently four of the circular fields are not irrigated.

According to the Discharger, biosolids applications will comply with all applicable setbacks listed in the General Order or the Merced County biosolids ordinance, whichever is more stringent. The Chowchilla River and Associated Diversion Canal passes through the Land Application Area and, per the General Order, the Discharger is required to maintain a minimum 100-foot setback distance from the canal. There are also six irrigation wells on or near the Land Application Area, which the Discharger must also maintain a 100-foot set-back from. Lastly, there is one domestic water supply well

on the perimeter of the Land Application Area that the Discharger is required to maintain a minimum 500-foot setback from per the General Order.

The Land Application Area is relatively flat with slopes less than one percent. Depth to groundwater in the area ranges from about 54 to 100 feet below ground surface (bgs) based on Fall 2022 available groundwater data for nearby wells from the [California Department of Water Resources \(DWR\) SGMA Interactive Groundwater Map](https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels) (<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels>). Due to the depth of groundwater being greater than 25 feet, no groundwater monitoring is required (per the General order). Due to the site slope of less than one percent, no erosion control plan is required (per the General Order).

The biosolids application areas are situated in a rural area with limited access due to barbed wire fencing around the Land Application Area. Therefore, the Land Application Area meets the site restriction for Class B biosolids in section 503.32(b)(5)(viii), 40 CFR.

### **BIOSOLIDS TREATMENT AND SAMPLING**

Sample calculations (for dryland wheat with varying residual soil nitrogen) from the Discharger showed biosolids application rates between 4.8 to 7.3 wet tons per acre per year. Application rates may vary further depending on residual soil nitrogen, crop grown, nitrogen in the biosolids, nitrogen in the irrigation water, supplemental fertilizers, etc. The Pre-Application report lists an average application rate of 20 tons per acre. However, according to the Discharger, individual application events sometimes are as high as 50 wet tons per acre depending on the parameters listed above. The higher average application rate is likely due to alfalfa using an estimated 2.7 times as much nitrogen as dryland wheat.

The submitted data characterizes biosolids from various generators within California submitted as part of the NOI and the Pre-Application Report. The average metal concentration of the various generators is summarized in Table 2 below and compared to the 40 Code of Federal Regulations (CFR), Part 503 (503.13 (a)(1) and Table 1) requirements for the application of biosolids to land. For each biosolids land application event, the Discharger must verify the ceiling concentration requirements have been met before biosolids may be land applied. If the biosolids metals concentration is not below the ceiling concentration, the biosolids may not be land applied.

**Table 2 - Biosolids Metals Concentrations**

<b>Constituent/ Parameter</b>	<b>Units</b>	<b>Average (range of values)</b>	<b>Ceiling Concentration Limits</b>	<b>Pollutant Concentration Limits for Exceptional Quality Biosolids</b>
Arsenic	mg/kg	14.8 (0.5-88) See note 1	75	41
Cadmium	mg/kg	1.1 (0.3-2.6)	85	39
Copper	mg/kg	357.9 (14-1,000)	4,300	1,500
Lead	mg/kg	16.7 (4.3-54)	840	300
Mercury	mg/kg	1.2 (0.02-3.8)	57	17
Molybdenum	mg/kg	10.3 (4.8-15)	75	--
Nickel	mg/kg	20.3 (4-45)	420	420
Selenium	mg/kg	8.4 (3.73 -13)	100	100
Zinc	mg/kg	1,404 (50-5,700)	7,500	2,800

1. The 2023 biosolids metals concentration for Livingston was not below the ceiling concentration. The Discharger can only land apply biosolids that are below the ceiling concentration limits.

According to the Discharger, biosolids applied to the Land Application Area will meet Pathogen Reduction Requirements for Class B biosolids under 40 CFR Part 503.32 (b)(2) for all waste generators served by the Discharger. Thus, the geometric mean of seven samples for each waste generator served must have a fecal coliform density of less than 2,000,000 colony forming units (CFU) or most probable number (MPN) per gram of biosolids dry weight. The most recent lab results are summarized in Table 3 below. For each biosolids land application event, the Discharger must verify the pathogen reduction requirements have been met before the biosolids may be land applied.

**Table 3 - Geometric Mean Density of Fecal Coliform**

<b>Waste Generators</b>	<b>Most Recent Sample Year</b>	<b>Geometric Mean of Fecal Coliform Concentrations (CFU or MPN per gram of biosolids – dry weight basis))</b>
Atwater	2021	28
Caruthers	2023	974
Coalinga	2023	915
Delhi	2023	0.96
Lathrop	2022	162
Livingston	2023	3.15
Salida	2022	412
Tracy	2023	0.9
Turlock	2023	0.9
Woodlake	2023	3.41

The Discharger reports sludge generators they serve will primarily meet the Vector Attraction Reduction (VAR) Requirements in accordance with the percent solids measurements. Thus, for land application of biosolids from facilities with anaerobic or aerobic digestion of sludge, the sludge must be greater than 75% solids under section 503.33(b)(7) [Option 7]. For land application of biosolids from facilities that are not anaerobically or aerobically digested, then the sludge must be at least 90% solids to meet the requirements of section 503.33(b)(8) [Option 8]. If the sludge does not meet the percent solids requirements for land application, the Discharger may incorporate the biosolids into the soil within six hours under section 503.33 (b)(10) [Option 10] to meet VAR requirements, or propose another acceptable method to meet VAR requirements. For each biosolids land application event, the Discharger must verify the vector attraction reduction requirements have been met. Table 4 below summarizes the requirements and information, with respect to percent solids of the sludge, for the facilities served under this NOA.

**Table 4 -Required Percent Solids to Meet Vector Attraction Reduction Requirements**

<b>Waste (sewage sludge) Generator</b>	<b>Data Year</b>	<b>Average Percent Solids</b>	<b>Aerobic or Anaerobic Sludge Digestion?</b>	<b>Required % Solids for Land Application Using VAR Option 7 or 8</b>
Atwater	2021	82%	Yes	75%
Caruthers	2022	93%	Yes	75%
Coalinga	2023	98%	Yes	75%
Delhi	2023	97%	No	90%
Lathrop	2022	90%	Yes	75%
Livingston	2023	91%	No	90%
Salida	2022	92%	Yes	75%
Tracy	2023	96%	Yes	75%

Waste (sewage sludge) Generator	Data Year	Average Percent Solids	Aerobic or Anaerobic Sludge Digestion?	Required % Solids for Land Application Using VAR Option 7 or 8
Turlock	2023	87%	Yes	75%
Woodlake	2023	83% See note 1	No	90%

1. The Discharger has indicated they will either retest, to see if their biosolids have increased their percent solids over time, or they will incorporate the biosolids into the soil within six hours as an alternate way to meet VAR requirements Option 10 (503.33 (b)(10)).

### SALT AND NITRATE CONTROL PROGRAMS

The Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting (Resolution R5-2018-0034). The Basin Plan amendments became effective on 17 January 2020 and were revised by the Central Valley Water Board in 2020 with [Resolution R5-2020-0057](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf) ([https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/resolutions/r5-2020-0057\\_res.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf)). The Discharger (**CV-SALTS ID: 3643**) submitted a Notice of Intent (NOI) on 7 September 2023 selecting Option 2 (Alternative Option for Salt Permitting) and is participating in the Prioritization and Optimization (P&O) Study.

For the Nitrate Control Program, the Discharger has selected Path B and submitted a Notice of Intent (NOI) to join a Management Zone Group. The Discharger is in the process of joining the Chowchilla Management Zone when one is formed for the Merced Basin. In addition, the Discharger has submitted a NOI and fee to participate in the Prioritization and Optimization Study (P&O Study) to comply with the Salt Control Program.

[More information on the Salt and Nitrate Control Program](https://www.cvsalinity.org/public-info) may be found on the Internet. (<https://www.cvsalinity.org/public-info>).