



Central Valley Regional Water Quality Control Board

22 September 2021

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George Morrow, Owner Jim Brisco Enterprises, Inc. 221 Airpark Road, Suite A Atwater, CA 95301 Antonio Azevedo, Owner 1261 W. Roosevelt Road El Nido, CA 95317

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, SILVICULTURAL, HORTICULTURAL, AND LAND RECLAMATION ACTIVITIES; JIM BRISCO ENTERPRISES, INC., AND ANTONIO AZEVEDO; AZEVEDO BIOSOLIDS APPLICATION AREA; MERCED COUNTY

On 31 August 2021, Jim Brisco Enterprises, Inc., submitted a Notice of Intent (NOI) and Pre-Application Report for coverage 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* (Biosolids General Order). According to the NOI, Jim Brisco Enterprises, Inc., plans to apply biosolids from various wastewater treatment facilities (WWTF's) throughout California, to approximately 671 acres of farmland owned by Antonio Azevedo (Azevedo Biosolids Application Area) in Merced County. Both Jim Brisco Enterprises, Inc. and Antonio Azevedo are collectively and jointly referred to as "Discharger" for the purpose of this Notice of Applicability (NOA).

On 1 September 2021, Jim Brisco Enterprises, Inc., submitted a filing fee. Additional technical information to complete the NOI was also submitted on 2 September 2021. On 15 September 2021, Notices of Intent for both the Salt and Nitrate Control Program were submitted by Jim Brisco Enterprises, Inc. The August 2021 NOI was signed by George Morrow with Jim Brisco Enterprises, Inc. and Antonio Azevedo. Review of the August 2021 NOI and Pre-Application Report is discussed in more detailed in the attached 22 September 2021 Regional Water Board staff memorandum.

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

Based on the information provided in the NOI, Pre-Application Report, and supplemental information, this project meets the conditions for approval under the enclosed Biosolids General Order. All the requirements contained within the Biosolids 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-0031**. Please include this number on all correspondence related to this discharge.

PROJECT LOCATION

The proposed project includes applying 15,000 tons of biosolids on approximately 671 acres of biosolids application area owned by Antonio Azevedo. The Azevedo Biosolids Application Area is found north of El Nido, east of Highway 59 in Merced County (Latitude 37.1858, Longitude -120.4881).

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 basin.

PROJECT DESCRIPTION

The Azevedo Biosolids Application Area was previously regulated by Merced County Department of Public Health (Merced County) under their biosolids application program. According to the NOI and Pre-Application Report, the Discharger receives Class "B" biosolids from various municipal WWTF's within California. The specific WWTF's vary from year to year but typically include:

- City of Atwater WWTF,
- Caruthers Community Services District WWTF,
- City of Chowchilla WWTF,
- Delhi County Water District WWTF,
- City of Dinuba WWTF,
- City of Kerman WWTF,
- City of Lathrop WWTF,
- City of Livingston WWTF,
- City of Malaga WWTF,
- Salida Sanitary District WWTF, and
- City of Turlock WWTF.

The fields in the Azevedo Biosolids Application Area will be cropped with corn, alfalfa, and Sudan grass. The biosolids application area consists of 10 fields as shown in **Attachment A** of this NOA and detailed in the attached Regional Water Board staff memorandum.

MONITORING AND REPORTING PROGRAM

The Biosolids General Order includes Monitoring and Reporting Program (MRP) 2004-0012-DWQ. MRP 2004-0012-DWQ requires the submittal of an annual monitoring report by 15th February of each year identifying quantity of biosolids applied to the various fields and cumulative pollutant loading calculations.

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 Biosolids 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 Biosolids 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 site 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.
- In accordance with the Biosolids General Order's Monitoring and Reporting Program, the Discharger shall submit the required annual monitoring report by 15th 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 Biosolids 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.

DOCUMENT SUBMITTALS

The Central Valley Water Board is implementing a Paperless Office System to reduce paper use, increase efficiency, and provide a more effective way for our staff, the public, and interested parties to view documents in electronic form. All monitoring and technical reports required by the Provisions of the Biosolids General Order and its Monitoring and Reporting Program must be submitted by email to our Electronic Content Management (ECM) system at <u>centralvalleyfresno@waterboards.ca.gov</u>. 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: 876198 Place Name: Azevedo Biosolids Application Area, Order: 2004-0012-DWQ-0031

In order to conserve paper and reduce mailing costs, a paper copy of the Biosolids General Order has been sent only to the Discharger. Others are advised that the <u>Biosolids General Order</u> is available on the State Water Resources Control Board's website

(https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0012.pdf).

If you have any questions regarding this matter, please contact Denise Soria by phone at (559) 444-2488 or by email at <u>dsoria@waterboards.ca.gov</u>.

Original Signed by Clay L. Rodgers for: Patrick Pulupa Executive Officer

Attachment:

• Attachment A – Biosolids Application Area Map

Enclosures:

- 22 September 2021 Regional Water Board Staff Memorandum
- State Water Resources Control Board Order WQ 2014-0153-DWQ (Discharger Only)

cc's:

- Adam Forbes, Division of Drinking Water, Fresno (via email)
- Esther Canal, Merced County Environmental Health, Merced (via email)



ATTACHMENT A – BIOSOLIDS APPLICATION AREA MAP NOTICE OF APPLICABILITY 2004-0012-DWQ-0031 FOR JIM BRISCO ENTERPRISES, INC., AND ANTONIO AZEVEDO AZEVEDO BIOSOLIDS APPLICATION AREA MERCED COUNTY





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

> Denise Soria Water Resource Control Engineer



DATE: 22 September 2021

APPLICABILITY OF COVERAGE; 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, SILVICULTURAL, HORTICULTURAL, AND LAND RECLAMATION ACTIVITIES; JIM BRISCO ENTERPRISES, INC., AND ANTONIO AZEVEDO; AZEVEDO BIOSOLIDS APPLICATION AREA; MERCED COUNTY

BACKGROUND INFORMATION

On 31 August 2021, Central Valley Water Board staff received a Notice of Intent (NOI) and Pre-Application Report from Jim Brisco Enterprises, Inc., and Antonio Azevedo for coverage under 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* (Biosolids General Order). On 1 September 2021, an application fee was received. Additional technical information to complete the NOI was also submitted on 2 September 2021.

This memorandum provides a summary of Central Valley Water Board staff's review of the NOI, Pre-Application Report and the applicability of the discharge to be covered under the Biosolids General Order.

BACKGROUND INFORMATION

According to the NOI and Pre-Application Report, the Discharger receives Class "B" biosolids from various municipal wastewater treatment facilities (WWTF) within California, these can vary from year to year but typically include the following:

KARL E. LONGLEY SCD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

- City of Atwater WWTF
- Caruthers Community Services District WWTF
- City of Chowchilla WWTF
- Delhi County Water District WWTF
- City of Dinuba WWTF
- City of Kerman WWTF
- City of Lathrop WWTF
- City of Livingston WWTF
- Malaga Community Water District WWTF
- Salida Sanitary District WWTF
- City of Turlock WWTF

The Discharger also submitted a Pre-Application Report for the application of biosolids to 671 acres of land owned by Antonio Azevedo in assessor parcel number (APN) 074-090-035-000 of sections 1, 2, 11, and 12, Township 9 South, Range 13 East, Mount Diablo Base & Meridian in Merced County. The Azevedo Biosolids Application Area was previously regulated by Merced County Department of Public Health (Merced County) under their biosolids application program. The fields will be cropped with corn and alfalfa. The biosolids application area consists of ten fields shown in Attachment A of the NOA and listed in Table 1 below.

Field	Acreage APN		
Field 1	58	074-090-035-000	
Field 2	26	6 074-090-035-000	
Field 3	45	074-090-035-000	
Field 4	19	074-090-035-000	
Field 5	86	074-090-035-000	
Field 6	87	074-090-035-000	
Field 9	86	074-090-035-000	
Field 10	89	074-090-035-000	
Field 13	88	074-090-035-000	
Field 14	87	074-090-035-000	
Total	671		

Table 1. Biosolids Application Area

The biosolids application area is relative flat with slope less than three percent and depth to groundwater in the area ranges from 31 to 41 feet below ground surface and generally flows in the southwest direction according to the Lines of Equal Elevation of Groundwater map published by the Department of Water Resources in Spring 2011. Therefore, no erosion control plan or groundwater monitoring is required for the biosolids application area.

BIOSOLIDS TREATMENT AND SAMPLING

Jim Brisco Enterprises, Inc. proposes to apply 15,000 dry tons of biosolids to a total of approximately 671 acres during the fall. Jim Brisco Enterprises, Inc. and Antonio Azevedo are collectively and jointly referred to as "Discharger" for the purpose of this memorandum.

On 31 October 2019, the Central Valley Water Board issued Jim Brisco Enterprises, Inc., and Ed Silva an NOA under the Biosolids General Order and assigned the discharge enrollee number 2004-0012-DWQ-0025. In November and December 2020, about 6,185 dry tons biosolids were applied by Jim Brisco Enterprises, Inc., to the Ed Silva Biosolids Application Area. On 26 July 2021, coverage under the Biosolids General Order for the Ed Silva Biosolids Application Area was terminated. Jim Brisco Enterprises, Inc., has now secured land with Antonio Azevedo and proposes to operate the Azevedo Biosolids Application Area similarly to the Ed Silva Biosolids Application Area during the 2021 season.

The submitted data characterizes biosolids generated from various municipal WWTF's within California. The average metal concentration of the various municipal WWTF's are summarized in Table 2 and compared to the 40 Code of Federal Regulations (CFR), Part 503 requirements for the application of biosolids to land.

Constituent/Parameter	Units	Average	Ceiling Concentration Limits	Pollutant Concentration Limits for Exceptional Quality and Pollutant Concentration Biosolids
Arsenic	mg/kg	7.34	75	41
Cadmium	mg/kg	1.45	85	39
Copper	mg/kg	134.35	4,300	1,500
Lead	mg/kg	9.21	840	300
Mercury	mg/kg	0.58	57	17
Molybdenum	mg/kg	7.96	75	
Nickel	mg/kg	18.08	420	420
Selenium	mg/kg	5.28	100	100
Zinc	mg/kg	612	7,500	2,800

Table 2. Biosolids Metal Concentrations

As shown in Table 1, the concentration of metals in the biosolids generated at the various municipal WWTF's are below the Ceiling Concentrations Limits for All Biosolids Applied to Land (Table 1, section 503.13 CFR) and the Pollutant Concentration Limits for Exceptional Quality (Table 3, section 503.13 CFR).

The geometric mean of the density of fecal coliform (in most probable number per gram) for the various municipal WWTF's are as follows: <16 (Atwater); <48,500 (Caruthers); <250 (Chowchilla); <12 (Delhi); <3,600 (Dinuba – old sludge); 4,100 (Dinuba – New

sludge); <54 (Kerman); <56,900 (Lathrop); <75 (Livingston); <350 (Malaga); 225 (Salida); and 1.8 (Turlock). As described, the geometric mean of the density of fecal coliform of the various municipal WWTF's is less than 2,000,000 Most Probable Number per gram. Therefore, biosolids generated at the various municipal WWTF's meet the Class B Pathogen Reduction Requirements, Alternative 1 of section 503.32(b)(2), 40 CFR.

The Discharger is proposing to farm corn, alfalfa, and Sudan grass. Most of the biosolids application areas (Fields 3, 4, 5, 6, 9, 10, 13, and 14) are bounded on all four sides by private roads restricting public access. Fields 1 and 2 are bounded by private road on three sides and by Highway 59 on the west side. The Discharger meets the Site Restrictions for Class B biosolids of section 503.32(b)(5), 40 CFR.

According to the information provided by Jim Brisco Enterprises, Inc., biosolids generated at the various municipal WWTF's meet either Option 1 or 7 of the Vector Attraction Reduction Requirements of sections 503.33(b)(1) and 503.33(b)(7), 40 CFR, respectively.

SALT AND NITRATE CONTROL PROGRAMS

For the Nitrate Control Program, the Azevedo Biosolids Application Area (CV-SALTS ID 3597) is within Groundwater Basin 5-22.04 (San Joaquin Valley -Merced), a Priority 2 basin/sub-basin. Implementation within a Priority 2 basin/sub-basin will occur within two to four years after the effective date of the Nitrate Control Program. On 15 September 2021, the Central Valley Water Board received a Nitrate Control Program Notice of Intent where the Discharger has elected to participate in a management zone once one is formed for Groundwater Basin 5-22.04 (San Joaquin Valley - Merced).

For the Salt Control Program, the Discharger has elected to participate in the P&O Study. On 15 September 2021, the Central Valley Water Board received a Salt Control Program Notice of Intent for the Azevedo Biosolids Application Area. The P&O filing fee is still outstanding and will be completed once the CV-SALTS ID is activated.

COMMENTS

Based on the information presented in the 31 August 2021 NOI, Pre-Application Report, and supplemental information, the discharge of biosolids to land is consistent with the requirements of 40 CFR, Part 503 for the use of Class B biosolids.