


**NPDES ID:** CAL102822

**Biosolids Status:** Active

**Facility Name:** VICTOR VALLEY WRA WWTP  
15776 MAIN ST. SUITE 3 HESPERIA, CA 92345

# View Annual Report

<b>NPDES FORM 6100- 035</b>		<b>UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 BIOSOLIDS ANNUAL REPORT</b>	<b>Form Approved. OMB No. 2040-0004. Exp. 07/31/2026</b>
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EPA's sewage sludge regulations require certain publicly owned treatment works (POTWs) and Class I sewage sludge management facilities to submit to a Sewage Sludge (Biosolids) Annual Report (see 40 CFR 503.18 ([https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_118](https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_118)), 503.28 ([https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_128](https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_128)), 503.48 ([https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_148](https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_148))). Facilities that must submit a Sewage Sludge (Biosolids) Annual Report include POTWs with a design flow rate equal to or greater than one million gallons per day, POTWs that serve 10,000 people or more, Class I Sludge Management Facilities (as defined by 40 CFR 503.9 ([https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_19](https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_19))), and facilities otherwise required to file this report (e.g., permit condition, enforcement action, state law). This is the electronic form for Sewage Sludge (Biosolids) Annual Report filers to use if they are located in one of the states, tribes, or territories (<https://www.epa.gov/npdes/npdes-state-program-information>) where EPA administers the Federal biosolids program.

For the purposes of this form, the term 'sewage sludge' ([https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_19](https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_19))' also refers to the material that is commonly referred to as 'biosolids'. EPA does not have a regulatory definition for biosolids but this material is commonly referred to as sewage sludge that is placed on, or applied to the land to use the beneficial properties of the material as a soil

amendment, conditioner, or fertilizer. EPA's use of the term 'biosolids' in this form is to confirm that information about beneficially used sewage sludge (a.k.a. biosolids) should be reported on this form.

### **Public Availability of Information Submitted on and with this Program Report**

EPA may make all the information submitted through this form (including all attachments) available to the public without further notice to you. Do not use this online form to submit personal information (e.g., non-business cell phone number or non-business email address), confidential business information (CBI), or if you intend to assert a CBI claim on any of the submitted information. Pursuant to 40 CFR 2.203(a), EPA is providing you with notice that all CBI claims must be asserted at the time of submission. EPA cannot accommodate a late CBI claim to cover previously submitted information because efforts to protect the information are not administratively practicable since it may already be disclosed to the public. Although we do not foresee a need for persons to assert a claim of CBI based on the types of information requested in this form, if persons wish to assert a CBI claim we direct submitters to contact the NPDES eReporting Help Desk (NPDESereporting@epa.gov (mailto:NPDESereporting@epa.gov)) for further guidance.

Please note that EPA may contact you after you submit this report for more information regarding your sewage sludge management program.

### **Burden Statement**

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2040-0004). Responses to this collection of information are mandatory in accordance with EPA NPDES regulations (40 CFR 503.18, 503.28, and 503.48). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information are estimated to average one to five hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Program Information

**Please select all of the following that apply to your obligation to submit a Sewage Sludge (Biosolids) Annual Report in compliance with 40 CFR part 503. The facility is:**

- a POTW with a design flow rate equal to or greater than one million gallons per day

**In the reporting period, did you manage your sewage sludge or biosolids using any of the following management practices: land application, surface disposal, or incineration?**

YES  NO

**If your facility is a POTW, please provide the estimated total amount of sewage sludge produced at your facility for the reporting period (in dry metric tons). If your facility is not a POTW, please provide the estimated total amount of biosolids produced at your facility for the reporting period (in dry metric tons).**

4793.8

**Reporting Period Start Date:**

01/01/2023

**Reporting Period End Date:**

12/31/2023

## Treatment Processes

### **Processes to Significantly Reduce Pathogens (PSRP):**

Aerobic Digestion

Air Drying (or Sludge Drying Beds)

### **Processes to Further Reduce Pathogens (PFRP):**

#### **Physical Treatment Options:**

Preliminary Operations (e.g., sludge grinding, degritting, blending)

Thickening (e.g., Gravity and/or Flotation Thickening, Centrifugation, Belt Filter Press, Vacuum Filter, Screw Press)

Sludge Lagoon

#### **Other Processes to Manage Sewage Sludge:**

Temporary Sludge Storage (Sewage Sludge Stored on Land 2 Years or Less, Not in Sewage Sludge Unit)

Methane or Biogas Capture and Recovery

## Analytical Methods

**Did you or your facility collect sewage sludge or biosolids samples for laboratory analysis?**

YES  NO

### Analytical Methods

- EPA Method 6020 - Arsenic (ICP-MS)
- EPA Method 6010 - Cadmium (ICP-OES)
- EPA Method 6020 - Chromium (ICP-MS)
- EPA Method 6020 - Copper (ICP-MS)
- EPA Method 6020 - Lead (ICP-MS)
- EPA Method 7471 - Mercury (CVAA)
- EPA Method 6020 - Molybdenum (ICP-MS)
- EPA Method 6020 - Nickel (ICP-MS)
- EPA Method 6020 - Selenium (ICP-MS)
- EPA Method 6020 - Zinc (ICP-MS)
- EPA Method 6020 - Beryllium (ICP-MS)
- Standard Method 2540 - Total Solids
- ASTM Method D4994 - Enteric Viruses
- EPA Method 1681 - Fecal Coliform
- W.A. Yanko Method - Helminth ova.
- EPA Method 1682 - Salmonella

## Sludge Management - Land Application

**ID:** 001

**Amount:** 4337.3

**Handler, Preparer, or Applier Type:** Off-Site Third-Party Handler or Applier

**Facility Information:**

Amelia's Farm  
7950 Rock Pile Road  
Arvin, CA 93203  
US

**Contact Information:**

Edwardo Z Garcia  
Farm Owner  
661-343-7856

**Amount Transferred  
(dry metric tons):**

4337.3

**Management Practice Detail:** Agricultural Land Application

**Bulk or Bag/Container:** Bulk

**Pathogen Class:** Class A EQ

**Sewage Sludge or Biosolids Pathogen Reduction Options:**

- Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating
- Parameters
- 

**Sewage Sludge or Biosolids Vector Attraction Reduction Options:**

- Option 1 - Volatile Solids Reduction
- Option 7 - Drying (Equal to or Greater than 75 Percent)

**Did the facility land apply bulk sewage sludge when one or more pollutants in the sewage sludge exceeded 90 percent or more of any of the cumulative pollutant loading rates in Table 2 of 40 CFR 503.13?**

YES  NO  UNKNOWN

### Monitoring Data

**INSTRUCTIONS:** Pollutants, pathogen densities, and vector attraction reduction must be monitored when sewage sludge or biosolids are applied to the land. Please use the following section to report monitoring data for the land application conducted by you or your facility in the reporting period for this SSUID. These monitoring data should be representative of the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID (40 CFR 503.8(a) ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_18](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_18))). All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis. EPA will be using these data to demonstrate compliance with EPA's land application requirements (40 CFR 503, Subpart B).

### Compliance Monitoring Periods

**INSTRUCTIONS:** Please use the table below to identify the start date and end date for each compliance monitoring period. You can adjust the start and end dates as needed. Please note that the compliance monitoring periods cannot overlap and that each compliance monitoring period must have a start date that is equal to or less than the end date. The number of compliance monitoring periods is based on the number of metric tons (dry

weight basis) of sewage sludge or biosolids land applied in the reporting period (summed across all land application SSUIDs). For example, you will need to provide monitoring data for 12 compliance monitoring periods for each land application SSUID when you land apply 15,000 or more metric tons (dry weight basis) of sewage sludge or biosolids (summed across all land application SSUIDs) in the reporting period (see 40 CFR 503.16 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_116](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_116))).

<b>Compliance Monitoring Event No.</b>	<b>Compliance Monitoring Period Start Date:</b>	<b>Compliance Monitoring Period End Date:</b>
1	<u>01/01/2023</u>	<u>02/28/2023</u>

**Do you have analytical results to report for this monitoring period?**

YES  NO

### **Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. In accordance with 40 CFR 503.13(a) ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)), EPA's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113))). EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)) to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Please only select a "No Data Indicator Code" if you are reporting no data for the sampling period or particular parameter.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Arsenic			F (No Sampling or Analysis Conducted - Other Reason)
Cadmium			F (No Sampling or Analysis Conducted - Other Reason)
Copper			F (No Sampling or Analysis Conducted - Other Reason)
Lead			F (No Sampling or Analysis Conducted - Other Reason)
Mercury			F (No Sampling or Analysis Conducted - Other Reason)
Molybdenum			F (No Sampling or Analysis Conducted - Other Reason)
Nickel			F (No Sampling or Analysis Conducted - Other Reason)

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Selenium			F (No Sampling or Analysis Conducted - Other Reason)
Zinc			F (No Sampling or Analysis Conducted - Other Reason)

### **Pathogen And Vector Attraction Reduction**

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this SSUID. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 40 CFR 503.32(b)(2)].

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Pathogen Reduction Selected Alternatives</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)



<b>Sewage Sludge or Biosolids Parameter</b>	<b>Pathogen Reduction Selected Alternatives</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)

**Note:** Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(f\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f)))]. The following units should be used for pathogen data (see 40 CFR 503.32 (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.32>)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
  - When using the Class B - Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).

- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Report the vector attraction reduction data for the biosolids or sewage sludge that was placed on an active sewage sludge unit during the compliance monitoring period for this SSUID.

Sewage Sludge or Biosolids Parameter	Vector Attraction Reduction Selected Options	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	Option 1 - Volatile Solids Reduction			F (No Sampling or Analysis Conducted - Other Reason)

**Note:** Vector attraction is the characteristic of sewage sludge that attracts rodents, flies, mosquitos, or other organisms capable of transporting infectious agents [see 40 CFR 503.31(k) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(k\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(k)))]. The following units should be used for vector attraction reduction data (see 40 CFR 503.33) (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33>):

- Solids, total volatile, shall be reported as percent removal. See calculation procedures in "Environmental Regulations and Technology - Control of Pathogens and Vector Attraction in Sewage Sludge" (<https://www.epa.gov/biosolids/control-pathogens-and-vector-attraction-sewage-sludge>), EPA-625/R-92/013, 1992, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268) [see 40 CFR 503.33(b)(1) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33\(b\)\(1\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33(b)(1)))]. Volatile solids is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air [see 40 CFR 503.31(l) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(l\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(l)))].

- Specific Oxygen Update Rate (SOUR) shall be reported as milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius. SOUR is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge [see 40 CFR 503.31(h) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(h\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(h)))].

**Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Arsenic			F (No Sampling or Analysis Conducted - Other Reason)
Cadmium			F (No Sampling or Analysis Conducted - Other Reason)
Copper			F (No Sampling or Analysis Conducted - Other Reason)
Lead			F (No Sampling or Analysis Conducted - Other Reason)

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Mercury			F (No Sampling or Analysis Conducted - Other Reason)
Nickel			F (No Sampling or Analysis Conducted - Other Reason)
Selenium			F (No Sampling or Analysis Conducted - Other Reason)
Zinc			F (No Sampling or Analysis Conducted - Other Reason)

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis)</b>	<b>If No Data, Select One Of The Following</b>
Total Nitrogen (TKN plus Nitrate-Nitrite)			F (No Sampling or Analysis Conducted - Other Reason)

**Compliance**  
**Monitoring Event No.**  
2

**Compliance**  
**Monitoring Period**  
**Start Date:**  
03/01/2023

**Compliance**  
**Monitoring Period**  
**End Date:**  
04/30/2023

**Do you have analytical results to report for this monitoring period?**

YES  NO

**Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. In accordance with 40 CFR 503.13(a) ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)), EPA's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113))). EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)) to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Please only select a "No Data Indicator Code" if you are reporting no data for the sampling period or particular parameter.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Arsenic			F (No Sampling or Analysis Conducted - Other Reason)

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Cadmium			F (No Sampling or Analysis Conducted - Other Reason)
Copper			F (No Sampling or Analysis Conducted - Other Reason)
Lead			F (No Sampling or Analysis Conducted - Other Reason)
Mercury			F (No Sampling or Analysis Conducted - Other Reason)
Molybdenum			F (No Sampling or Analysis Conducted - Other Reason)
Nickel			F (No Sampling or Analysis Conducted - Other Reason)
Selenium			F (No Sampling or Analysis Conducted - Other Reason)

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Zinc			F (No Sampling or Analysis Conducted - Other Reason)

**Pathogen And Vector Attraction Reduction**

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this SSUID. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 40 CFR 503.32(b)(2)].

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Pathogen Reduction Selected Alternatives</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Pathogen Reduction Selected Alternatives</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters			F (No Sampling or Analysis Conducted - Other Reason)

**Note:** Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(f\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f)))]. The following units should be used for pathogen data (see 40 CFR 503.32 (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.32>)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
  - When using the Class B - Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).



- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Report the vector attraction reduction data for the biosolids or sewage sludge that was placed on an active sewage sludge unit during the compliance monitoring period for this SSUID.

Sewage Sludge or Biosolids Parameter	Vector Attraction Reduction Selected Options	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	Option 1 - Volatile Solids Reduction			F (No Sampling or Analysis Conducted - Other Reason)

**Note:** Vector attraction is the characteristic of sewage sludge that attracts rodents, flies, mosquitos, or other organisms capable of transporting infectious agents [see 40 CFR 503.31(k) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(k\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(k)))]. The following units should be used for vector attraction reduction data (see 40 CFR 503.33) (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33>):

- Solids, total volatile, shall be reported as percent removal. See calculation procedures in "Environmental Regulations and Technology - Control of Pathogens and Vector Attraction in Sewage Sludge" (<https://www.epa.gov/biosolids/control-pathogens-and-vector-attraction-sewage-sludge>), EPA-625/R-92/013, 1992, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268) [see 40 CFR 503.33(b)(1) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33\(b\)\(1\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33(b)(1)))]. Volatile solids is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air [see 40 CFR 503.31(l) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(l\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(l)))].

- Specific Oxygen Update Rate (SOUR) shall be reported as milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius. SOUR is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge [see 40 CFR 503.31(h) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(h\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(h)))].

**Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Arsenic			F (No Sampling or Analysis Conducted - Other Reason)
Cadmium			F (No Sampling or Analysis Conducted - Other Reason)
Copper			F (No Sampling or Analysis Conducted - Other Reason)
Lead			F (No Sampling or Analysis Conducted - Other Reason)

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Mercury			F (No Sampling or Analysis Conducted - Other Reason)
Nickel			F (No Sampling or Analysis Conducted - Other Reason)
Selenium			F (No Sampling or Analysis Conducted - Other Reason)
Zinc			F (No Sampling or Analysis Conducted - Other Reason)

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis)</b>	<b>If No Data, Select One Of The Following</b>
Total Nitrogen (TKN plus Nitrate-Nitrite)			F (No Sampling or Analysis Conducted - Other Reason)

**Compliance  
Monitoring Event No.**  
3

**Compliance  
Monitoring Period  
Start Date:**  
05/01/2023

**Compliance  
Monitoring Period  
End Date:**  
06/30/2023

**Do you have analytical results to report for this monitoring period?**

YES  NO

**Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]**

YES  NO

**Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. In accordance with 40 CFR 503.13(a) ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)), EPA's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113))). EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)) to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Please only select a "No Data Indicator Code" if you are reporting no data for the sampling period or particular parameter.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Arsenic			F (No Sampling or Analysis Conducted - Other Reason)
Cadmium			F (No Sampling or Analysis Conducted - Other Reason)
Copper			F (No Sampling or Analysis Conducted - Other Reason)
Lead			F (No Sampling or Analysis Conducted - Other Reason)
Mercury			F (No Sampling or Analysis Conducted - Other Reason)
Molybdenum			F (No Sampling or Analysis Conducted - Other Reason)
Nickel			F (No Sampling or Analysis Conducted - Other Reason)

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Selenium			F (No Sampling or Analysis Conducted - Other Reason)
Zinc			F (No Sampling or Analysis Conducted - Other Reason)

**Pathogen And Vector Attraction Reduction**

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this SSUID. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 40 CFR 503.32(b)(2)].

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Pathogen Reduction Selected Alternatives</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	0.21	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	0.3	

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

**Note:** Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(f\)\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f)))]. The following units should be used for pathogen data (see 40 CFR 503.32 (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.32>)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
  - When using the Class B - Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).

- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Report the vector attraction reduction data for the biosolids or sewage sludge that was placed on an active sewage sludge unit during the compliance monitoring period for this SSUID.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Vector Attraction Reduction Selected Options</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Solids, total volatile percent removal	Option 1 - Volatile Solids Reduction	=	85.18	

**Note:** Vector attraction is the characteristic of sewage sludge that attracts rodents, flies, mosquitos, or other organisms capable of transporting infectious agents [see 40 CFR 503.31(k) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(k\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(k)))]. The following units should be used for vector attraction reduction data (see 40 CFR 503.33) (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33>):

- Solids, total volatile, shall be reported as percent removal. See calculation procedures in "Environmental Regulations and Technology - Control of Pathogens and Vector Attraction in Sewage Sludge" (<https://www.epa.gov/biosolids/control-pathogens-and-vector-attraction-sewage-sludge>), EPA-625/R-92/013, 1992, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268) [see 40 CFR 503.33(b)(1) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33\(b\)\(1\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33(b)(1)))]. Volatile solids is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air [see 40 CFR 503.31(l) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(l\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(l)))].



- Specific Oxygen Update Rate (SOUR) shall be reported as milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius. SOUR is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge [see 40 CFR 503.31(h) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(h\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(h)))].

### **Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Arsenic			F (No Sampling or Analysis Conducted - Other Reason)
Cadmium			F (No Sampling or Analysis Conducted - Other Reason)
Copper			F (No Sampling or Analysis Conducted - Other Reason)
Lead			F (No Sampling or Analysis Conducted - Other Reason)

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Mercury			F (No Sampling or Analysis Conducted - Other Reason)
Nickel			F (No Sampling or Analysis Conducted - Other Reason)
Selenium			F (No Sampling or Analysis Conducted - Other Reason)
Zinc			F (No Sampling or Analysis Conducted - Other Reason)

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis)</b>	<b>If No Data, Select One Of The Following</b>
Total Nitrogen (TKN plus Nitrate-Nitrite)			F (No Sampling or Analysis Conducted - Other Reason)

**Compliance  
Monitoring Event No.**  
4

**Compliance  
Monitoring Period**  
**Start Date:**  
07/01/2023

**Compliance  
Monitoring Period**  
**End Date:**  
08/31/2023

**Do you have analytical results to report for this monitoring period?**

YES  NO

**Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]**

YES  NO

### **Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. In accordance with 40 CFR 503.13(a) ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)), EPA's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113))). EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)) to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Please only select a "No Data Indicator Code" if you are reporting no data for the sampling period or particular parameter.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Arsenic	=	9.6	
Cadmium	=	2	
Copper	=	260	
Lead	=	8.8	
Mercury	=	0.99	
Molybdenum	=	11	
Nickel	=	18	
Selenium	=	9.9	
Zinc	=	970	

### **Pathogen And Vector Attraction Reduction**

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this SSUID. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 40 CFR 503.32(b)(2)].

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Pathogen Reduction Selected Alternatives</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	0.21	

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Pathogen Reduction Selected Alternatives</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	0.3	
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

**Note:** Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(f\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f)))]. The following units should be used for pathogen data (see 40 CFR 503.32 (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.32>)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
  - When using the Class B - Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of

total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.

- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Report the vector attraction reduction data for the biosolids or sewage sludge that was placed on an active sewage sludge unit during the compliance monitoring period for this SSUID.

Sewage Sludge or Biosolids Parameter	Vector Attraction Reduction Selected Options	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	Option 1 - Volatile Solids Reduction	=	85.47	

**Note:** Vector attraction is the characteristic of sewage sludge that attracts rodents, flies, mosquitos, or other organisms capable of transporting infectious agents [see 40 CFR 503.31(k) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(k\)\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(k)))]. The following units should be used for vector attraction reduction data (see 40 CFR 503.33) (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33>):

- Solids, total volatile, shall be reported as percent removal. See calculation procedures in "Environmental Regulations and Technology - Control of Pathogens and Vector Attraction in Sewage Sludge" (<https://www.epa.gov/biosolids/control-pathogens-and-vector-attraction-sewage-sludge>), EPA-625/R-92/013, 1992, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268) [see 40 CFR 503.33(b)(1) (<https://www.ecfr.gov/current/title-40/chapter->

[/subchapter-O/part-503/subpart-D/section-503.33#p-503.33\(b\)\(1\)\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33(b)(1))). Volatile solids is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air [see 40 CFR 503.31(l)

([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(l\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(l)))).

- Specific Oxygen Update Rate (SOUR) shall be reported as milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius. SOUR is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge [see 40 CFR 503.31(h) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(h\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(h))))].

### Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic	=	8	
Cadmium	=	1.2	
Copper	=	217	
Lead	=	8.4	
Mercury	=	0.53	
Nickel	=	14.6	
Selenium	=	6.5	
Zinc	=	813	

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Total Nitrogen (TKN plus Nitrate-Nitrite)	=	33.2	

<b>Compliance Monitoring Event No.</b> 5	<b>Compliance Monitoring Period Start Date:</b> <u>09/01/2023</u>	<b>Compliance Monitoring Period End Date:</b> <u>10/31/2023</u>
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**Do you have analytical results to report for this monitoring period?**

YES  NO

**Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]**

YES  NO

### **Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. In accordance with 40 CFR 503.13(a) ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)), EPA's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a



land application ceiling pollutant limit (Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113))). EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)) to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Please only select a "No Data Indicator Code" if you are reporting no data for the sampling period or particular parameter.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Arsenic			F (No Sampling or Analysis Conducted - Other Reason)
Cadmium			F (No Sampling or Analysis Conducted - Other Reason)
Copper			F (No Sampling or Analysis Conducted - Other Reason)
Lead			F (No Sampling or Analysis Conducted - Other Reason)
Mercury			F (No Sampling or Analysis Conducted - Other Reason)

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Molybdenum			F (No Sampling or Analysis Conducted - Other Reason)
Nickel			F (No Sampling or Analysis Conducted - Other Reason)
Selenium			F (No Sampling or Analysis Conducted - Other Reason)
Zinc			F (No Sampling or Analysis Conducted - Other Reason)

**Pathogen And Vector Attraction Reduction**

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this SSUID. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 40 CFR 503.32(b)(2)].

Sewage Sludge or Biosolids Parameter	Pathogen Reduction Selected Alternatives	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	0.22	
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	0.32	
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

**Note:** Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(f\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f)))]. The following units should be used for pathogen data (see 40 CFR 503.32 (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.32>)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
  - When using the Class B - Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.
- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Report the vector attraction reduction data for the biosolids or sewage sludge that was placed on an active sewage sludge unit during the compliance monitoring period for this SSUID.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Vector Attraction Reduction Selected Options</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Solids, total volatile percent removal	Option 1 - Volatile Solids Reduction	=	81.37	

**Note:** Vector attraction is the characteristic of sewage sludge that attracts rodents, flies, mosquitos, or other organisms capable of transporting infectious agents [see 40 CFR 503.31(k) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(k\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(k)))]. The following units should be used for vector attraction reduction data (see 40 CFR 503.33) (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33>):

- Solids, total volatile, shall be reported as percent removal. See calculation procedures in "Environmental Regulations and

Technology - Control of Pathogens and Vector Attraction in Sewage Sludge" (<https://www.epa.gov/biosolids/control-pathogens-and-vector-attraction-sewage-sludge>), EPA-625/R-92/013, 1992, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268) [see 40 CFR 503.33(b)(1) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33\(b\)\(1\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33(b)(1)))]. Volatile solids is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air [see 40 CFR 503.31(l) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(l\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(l)))].

- Specific Oxygen Update Rate (SOUR) shall be reported as milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius. SOUR is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge [see 40 CFR 503.31(h) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(h\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(h)))].

**Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Arsenic			F (No Sampling or Analysis Conducted - Other Reason)
Cadmium			F (No Sampling or Analysis Conducted - Other Reason)

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Copper			F (No Sampling or Analysis Conducted - Other Reason)
Lead			F (No Sampling or Analysis Conducted - Other Reason)
Mercury			F (No Sampling or Analysis Conducted - Other Reason)
Nickel			F (No Sampling or Analysis Conducted - Other Reason)
Selenium			F (No Sampling or Analysis Conducted - Other Reason)
Zinc			F (No Sampling or Analysis Conducted - Other Reason)

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis)</b>	<b>If No Data, Select One Of The Following</b>
Total Nitrogen (TKN plus Nitrate-Nitrite)			F (No Sampling or Analysis Conducted - Other Reason)

<b>Compliance Monitoring Event No.</b>	<b>Compliance Monitoring Period Start Date:</b>	<b>Compliance Monitoring Period End Date:</b>
6	<u>11/01/2023</u>	<u>12/31/2023</u>

**Do you have analytical results to report for this monitoring period?**

YES  NO

**Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [For example, this will be the case if you only collected and analyzed one sample of sewage sludge or biosolids for this compliance monitoring period.]**

YES  NO

### **Maximum Concentration Data for All Sewage Sludge or Biosolids Applied to Land**

This section summarizes the maximum pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. In accordance with 40 CFR 503.13(a) ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)), EPA's regulations prohibit land application of bulk sewage sludge or sewage sludge sold or gave away sewage sludge in a bag or other container when one or more sewage sludge pollutant concentrations in the sewage sludge exceed a land application ceiling pollutant limit (Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113))). EPA will compare the pollutant concentrations in this section against the ceiling concentration

limits in Table 1 of 40 CFR 503.13 ([http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rgn=div5#se40.32.503_113)) to identify noncompliance events. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Please only select a "No Data Indicator Code" if you are reporting no data for the sampling period or particular parameter.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Arsenic			F (No Sampling or Analysis Conducted - Other Reason)
Cadmium			F (No Sampling or Analysis Conducted - Other Reason)
Copper			F (No Sampling or Analysis Conducted - Other Reason)
Lead			F (No Sampling or Analysis Conducted - Other Reason)
Mercury			F (No Sampling or Analysis Conducted - Other Reason)
Molybdenum			F (No Sampling or Analysis Conducted - Other Reason)



<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Nickel			F (No Sampling or Analysis Conducted - Other Reason)
Selenium			F (No Sampling or Analysis Conducted - Other Reason)
Zinc			F (No Sampling or Analysis Conducted - Other Reason)

### **Pathogen And Vector Attraction Reduction**

Report the pathogen densities in the sewage sludge or biosolids that was applied to land during the reporting year for this SSUID. Please report the maximum pathogen density for Class A sewage sludge or biosolids. When using the Class B – Alternative 1 management option, please report the geometric mean of the density of fecal coliform in Class B sewage sludge or biosolids [see 40 CFR 503.32(b)(2)].

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Pathogen Reduction Selected Alternatives</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Fecal Coliform	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	0.21	

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Pathogen Reduction Selected Alternatives</b>	<b>Value Qualifier</b>	<b>Value</b>	<b>If No Data, Select One Of The Following</b>
Salmonella	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	0.31	
Enteric Viruses	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	
Helminth Ova	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters	<	1	

**Note:** Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova [see 40 CFR 503.31(f) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(f\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(f)))]. The following units should be used for pathogen data (see 40 CFR 503.32 (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.32>)):

- Density of fecal coliform in the sewage sludge shall be reported as Most Probable Number per gram of total solids (dry weight basis).
  - When using the Class B - Alternative 1 management option, the density of fecal coliform in the sewage sludge shall be reported as Most Probable Number or Colony Forming Units per gram of

total solids (dry weight basis) expressed as the geometric mean of the results of seven individual samples of sewage sludge.

- Density of Salmonella sp. bacteria in the sewage sludge shall be reported as Most Probable Number per four grams of total solids (dry weight basis).
- Density of enteric viruses shall be reported as plaque-forming unit per four grams of total solids (dry weight basis).
- Density of Helminth Ova. shall be reported as viable helminth ovum per four grams of total solids (dry weight basis).

Report the vector attraction reduction data for the biosolids or sewage sludge that was placed on an active sewage sludge unit during the compliance monitoring period for this SSUID.

Sewage Sludge or Biosolids Parameter	Vector Attraction Reduction Selected Options	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	Option 1 - Volatile Solids Reduction	=	84.09	

**Note:** Vector attraction is the characteristic of sewage sludge that attracts rodents, flies, mosquitos, or other organisms capable of transporting infectious agents [see 40 CFR 503.31(k) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(k\)\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(k)))]. The following units should be used for vector attraction reduction data (see 40 CFR 503.33) (<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33>):

- Solids, total volatile, shall be reported as percent removal. See calculation procedures in "Environmental Regulations and Technology - Control of Pathogens and Vector Attraction in Sewage Sludge" (<https://www.epa.gov/biosolids/control-pathogens-and-vector-attraction-sewage-sludge>), EPA-625/R-92/013, 1992, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268) [see 40 CFR 503.33(b)(1) (<https://www.ecfr.gov/current/title-40/chapter->

[https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33\(b\)\(1\)\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.33#p-503.33(b)(1))). Volatile solids is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air [see 40 CFR 503.31(l)

([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(l\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(l)))).

- Specific Oxygen Update Rate (SOUR) shall be reported as milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius. SOUR is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge [see 40 CFR 503.31(h) ([https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31\(h\)](https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503/subpart-D/section-503.31#p-503.31(h))))].

### Monthly Average Pollutant Concentration Data for All Sewage Sludge or Biosolids Applied to Land

This section summarizes the monthly average pollutant concentrations in the biosolids or sewage sludge that was applied to land during the compliance monitoring period for this SSUID. All pollutant monitoring data should be reported in milligrams per kilogram (mg/kg), dry weight basis.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)	If No Data, Select One Of The Following
Arsenic			F (No Sampling or Analysis Conducted - Other Reason)
Cadmium			F (No Sampling or Analysis Conducted - Other Reason)
Copper			F (No Sampling or Analysis Conducted - Other Reason)

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis or Pass/Fail)</b>	<b>If No Data, Select One Of The Following</b>
Lead			F (No Sampling or Analysis Conducted - Other Reason)
Mercury			F (No Sampling or Analysis Conducted - Other Reason)
Nickel			F (No Sampling or Analysis Conducted - Other Reason)
Selenium			F (No Sampling or Analysis Conducted - Other Reason)
Zinc			F (No Sampling or Analysis Conducted - Other Reason)

Report the average concentration (mg/kg, dry weight basis) of Total Nitrogen (TKN plus Nitrate-Nitrite, as N) in the sewage sludge or biosolids that was applied to land during the compliance monitoring period for this SSUID.

<b>Sewage Sludge or Biosolids Parameter</b>	<b>Value Qualifier</b>	<b>Parameter Concentration (mg/kg, dry-weight basis)</b>	<b>If No Data, Select One Of The Following</b>
Total Nitrogen (TKN plus Nitrate-Nitrite)			F (No Sampling or Analysis Conducted - Other Reason)

Sludge Management - Surface Disposal

Sludge Management - Incineration

Sludge Management - Other Management Practice

Additional Information

**Please enter any additional information that you would like to provide in the comment box below.**

VVWRA performs sampling and analysis on sewage sludge when it is ready to be sent off-site. During 2023, samples were collected and analyzed during June, July, August, October, and November. The annually-required priority pollutant scan was performed during July 2023.

**Additional Attachments**

Name	Created Date	Size
VVWRA Annual Biosolids July 7 2023.pdf	02/15/2024 9:42 AM	1.57 MB

Certification Information

Form has not been certified yet.

