

ORANGE COUNTY SANITATION DISTRICT

# BIOSOLIDS MANAGEMENT COMPLIANCE REPORT

## EPA 40 CFR Part 503

### Year 2019



*Project Team for Dewatering and Thickening  
Centrifuges Project P1-101 at Plant No. 1.*

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# Orange County Sanitation District

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Sanitary District

Midway City  
Sanitary District

Irvine Ranch  
Water District

Yorba Linda  
Water District

February 13, 2020

Hope Smythe, Executive Officer  
California Regional Water Quality Control Board, Santa Ana Region  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348

**SUBJECT:** Orange County Sanitation District's Annual Compliance Report

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Enclosed please find the Orange County Sanitation District's (OCSD) Biosolids Management Compliance Report as required under the 40 CFR Part 503 regulations, Arizona Administrative Code Article 10, and the National Pollution Discharge Elimination System (NPDES) Permit No. CA0110604, Order No. R8-2012-0035.

OCSD has uploaded this report into EPA's biosolids electronic reporting database, and submitted e-mail copies to state and local regulators. A copy of OCSD's EPA electronic report is included as Appendix D.

### **Certification Statement**

The following certifications satisfy procedural requirements as listed in section V.B.5 of the Orange County Sanitation District's NPDES Permit No. CA0110604 and 40 CFR part 503, section 503.17 for the submittal of the attached compliance report for calendar year 2018.

**NPDES permit:** *I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

If you have any questions or comments regarding this packet of information or require any additional data, please contact Deirdre Bingman at (714) 593-7459. I can be reached at (714) 593-7508.



Ronald Coss  
Laboratory, Monitoring, and Compliance Manager

RC/DEB:bg

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**Our Mission:** *To protect public health and the environment by providing effective wastewater collection, treatment, and recycling.*

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Costa Mesa  
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Midway City  
Sanitary District

Irvine Ranch  
Water District

Yorba Linda  
Water District

February 13, 2020

Andy Koester  
Arizona Department of Environmental Quality  
Water Permits Section  
1110 West Washington Street, 5415-B-3  
Phoenix, Arizona 85007

SUBJECT: Orange County Sanitation District's Annual Compliance Report

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Enclosed please find the Orange County Sanitation District's (OCSD) Biosolids Management Compliance Report as required under the 40 CFR Part 503 regulations, Arizona Administrative Code Article 10, and the National Pollution Discharge Elimination System (NPDES) Permit No. CA0110604, Order No. R8-2012-0035.

OCSD has uploaded this report into EPA's biosolids electronic reporting database and submitted e-mail copies to state and local regulators. A copy of OCSD's Arizona biosolids annual reporting form is included as Appendix E, and the EPA electronic report is included as Appendix D.

### Certification Statement

The following certifications satisfy procedural requirements as listed in Arizona Administrative Code Article 10 under section R18-9-1013 for the submittal of the attached EPA 40 CFR Part 503 Compliance Report for calendar year 2018.

***Arizona Class B:** I certify, under penalty of law, that the pollutant analyses and the description of pathogen treatment and vector attraction reduction activities have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.*

If you have any questions or comments regarding this packet of information or require any additional data, please contact Deirdre Bingman at (714) 593-7459. I can be reached at (714) 593-7508.



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Enclosure

***Our Mission:** To protect public health and the environment by providing effective wastewater collection, treatment, and recycling.*



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# **2019 BIOSOLIDS MANAGEMENT COMPLIANCE REPORT**

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**Introduction**  
**Organization and Function**  
**Accomplishments**  
**Treatment Plants and Program Updates**  
**Biosolids Management**  
**Summary of Pollutants**  
**Determination of Hazardousness**  
**Biosolids Management System**

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## Introduction

The Orange County Sanitation District (OCSD) treats and manages its biosolids, the nutrient-rich, organic matter recovered through the treatment of wastewater. OCSD's Biosolids Program consists of processes to ensure solids are treated onsite and used offsite (recycled) in accordance with all regulations and best management practices.

OCSD treats and manages its biosolids in accordance with OCSD's National Pollutant Discharge Elimination System (NPDES) Permit No. CA0110604 (NPDES), Arizona Administrative Code Title 18, Ch. 9, Article 10 (R18-9), and EPA Code of Federal Regulations Title 40 Part 503 (503).

The following sections summarize OCSD's activities and performance for the compliance-reporting period of January 1 to December 31, 2019.

## Organization and Function

OCSD is a public agency that provides wastewater collection, treatment, and recycling services for approximately 2.6 million people in central and northwest Orange County, California. OCSD is a special district that is governed by a Board of Directors consisting of 25 board members appointed from 20 cities, 4 special districts, and 1 representative from the Orange County Board of Supervisors. OCSD has two plants that treat wastewater from residential, commercial and industrial sources.

- During this budgetary fiscal year (2018-2019) OCSD treated an average daily sewage influent flow of **185 million gallons per day (MGD)**, on par with the previous year.
- During this last calendar year (2019) OCSD produced **230,533 wet tons of biosolids (52,003 dry metric tons)**, which equates to an average of **632 wet tons per day of biosolids**, including digester cleanings managed as biosolids (609 tons per day excluding digester cleanings). OCSD produced 21% less biosolids than during 2018 due to the commissioning of dewatering centrifuges at both treatment plants.

## Accomplishments

OCSD accomplishments this year include:

- Recycled 100% of OCSD's biosolids, including digester cleanings.
- OCSD was awarded with the National Association of Clean Water Agencies (NACWA) Platinum Award. NACWA is the nation's leader in legislative, regulatory and legal advocacy on the full spectrum of clean water issues, as well as a top technical resource for water management, sustainability and ecosystem protection interests. See [OCSD's Awards and Honors](#) webpage for many other annual recognitions throughout the agency.

- Project P1-101 at Reclamation Plant No. 1 in Fountain Valley completed commissioning dewatering and thickening centrifuges as featured on the cover of this report.
- Project P2-92 at Treatment Plant No. 2 in Huntington Beach completed commissioning dewatering centrifuges.
- OCSD cleaned eight (8) digesters at both plants.
- OCSD's Research Program continues to stay abreast of advanced technologies. Participation in the International Technology Advisory Group (iTAG) is an integral part of OCSD's Research Program. The iTAG screens and evaluates potential beneficial technologies for the wastewater industry. Annually, OCSD hosts the iTAG and invites other wastewater treatment agencies to learn of the most promising technologies at which time agencies may choose to pilot. OCSD continues to stay current in biosolids and energy recovery technologies through this process.



**P2-92 Building and Centrifuges**

- As part of the implementation of the 2017 Biosolids Master Plan and as included in the General Manager's Work Plan goal for Fiscal Year 2017-18, OCSD has completed preliminary design of an interim food waste receiving facility. This project will be designed to receive approximately 150 wet tons of preprocessed food waste to be co-digested in OCSD's anaerobic digesters located at Plant No. 2. The added organic feedstock will account for a 10% increase of biogas production that will be used to generate electricity.
- OCSD's Board of Directors approved the 2019 Strategic Plan that includes Biosolids Management Policy initiatives to educate and advocate with the local, state, and federal agencies to assure biosolids will continue to be safely and legally used as a soil amendment and to monitor and research constituents of emerging concern such as PFAS and microplastics that may impact biosolids. In addition, OCSD will stay abreast of new technology options to convert organics to energy and other regional biosolids recycling and renewable energy partnerships within Southern California.
- OCSD's composting partner, Inland Empire Regional Composting Authority has a compost buy-back program that includes to OCSD member cities and agencies. This program offers discounted compost to incentivize the local use of compost, which will help cities meet SB1383 organics procurement mandates starting in 2022. In 2019, IERCA provided bagged compost for OCSD's annual "State of the District" and OCSD 65th Anniversary Open House events.

## Treatment Plants and Program Updates

Reclamation Plant No. 1, located in the city of Fountain Valley, treated an average of 120 MGD of wastewater. Treatment Plant No. 2, located in the City of Huntington Beach, treated an average of 65 MGD of wastewater during the most recent fiscal year.

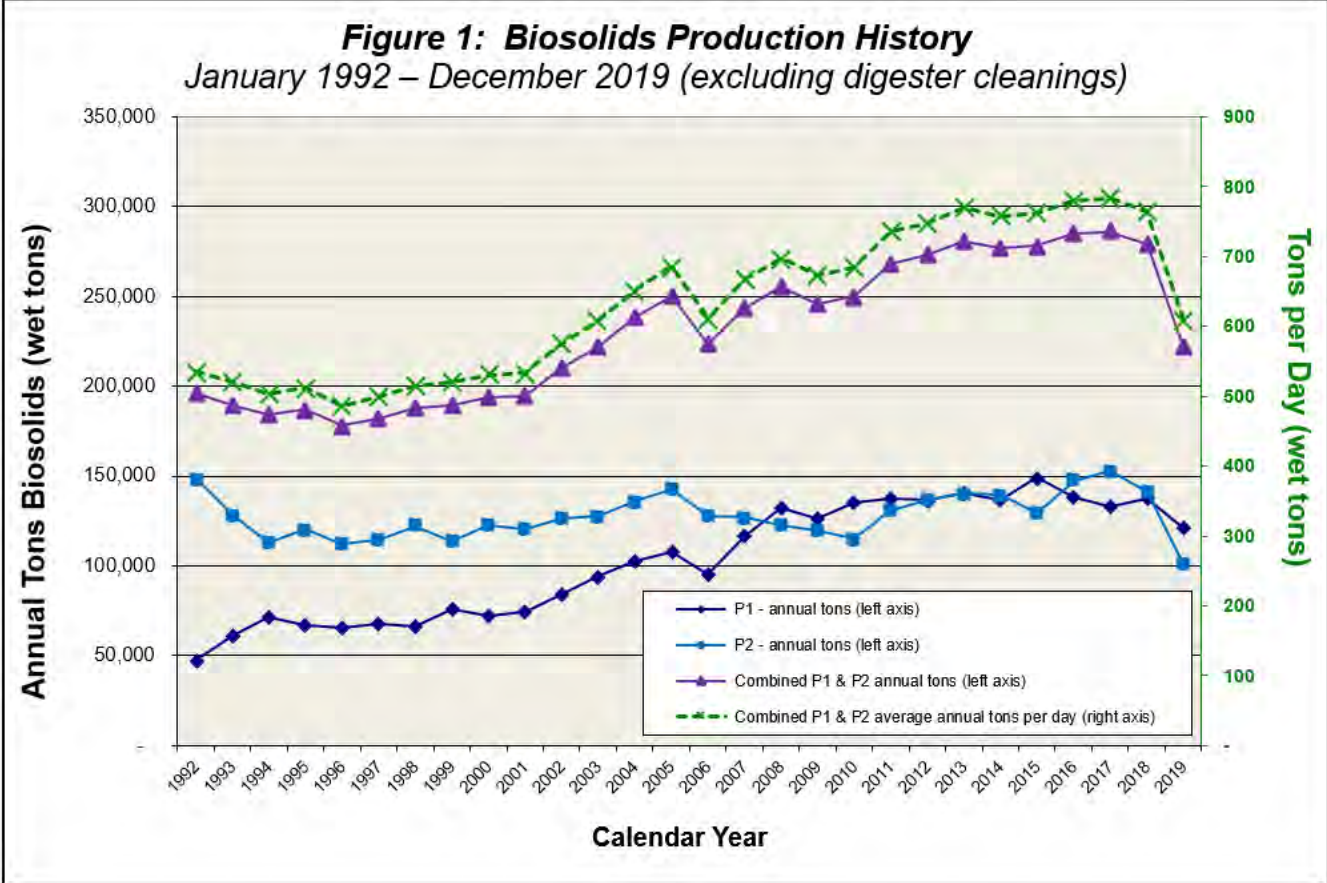
In 2019, Plant No. 1 diverted an average of approximately 10,000 cubic feet per day of primary sludge from Plant No. 1 to Plant No. 2 via the interplant sludge line. This value is down from an average of 60,000 cubic feet per day during 2018 because the new thickening centrifuges at Plant No. 1 allowed more solids to be treated at Plant No. 1, and the diversion essentially ceased by June 2019.

This year, OCSD finished commissioning new dewatering centrifuge facilities that replaced the dewatering belt filter presses at Plant No. 1 and at Plant No. 2. The total percent solids of dewatered biosolids increased significantly in 2019, resulting in approximately 25% less biosolids (wet weight) and trucks to manage (Figure 1 below). The Plant No. 1 project also installed pre-digestion centrifuges to thicken primary and secondary solids, so the existing dissolved air floatation thickening units are no longer in use. Additionally, Plant No. 1 truck loading facility was rehabilitated. With the commissioning of the centrifuges this year, the biosolids averaged about 24% total solids at Plant No. 1 and 25% total solids at Plant No. 2. More detailed data, including monthly averages, annual totals and analytical results, can be viewed in Figure 1 and Table 2 below, as well as in Appendices A, B, C, and D.

The Irvine Ranch Water District (IRWD) discharges its untreated solids (sludge) to OCSD. IRWD is currently commissioning its new solids treatment facility and plans to cease sending their solids to OCSD when the new facilities are ready to process its sludge, now estimated by 2021. This cessation is anticipated to reduce Plant No. 1's influent solids by 10 to 15 percent.

OCSD's biosolids are digested for at least 15 days at a minimum of 95 degrees Fahrenheit, with a volatile solids destruction of at least 38%. OCSD's anaerobically digested biosolids meet compliance with the "Class B Pathogen Reduction" and "Vector Attraction Reduction" definition for "Class B" biosolids as defined in 40 CFR Part 503.32(b)(3) (PSRP 3) and 503.33(b)(1). In addition, Tule Ranch/AgTech's standard operating procedure includes biosolids incorporation within 6 hours which meets 40 CFR Part 503.33(b)(10) requirement and is a valuable redundancy in rare events when OCSD experiences challenges meeting the Vector Attraction Reduction standard.

As for digester cleaning maintenance, Digester 5 was cleaned at Plant No. 1 (and Digester 9 was started). Digesters F, I, J, K, G, O, and S were cleaned at Plant No. 2.



**Biosolids Management**

For this reporting period, biosolids produced at OCSD’s two treatment facilities were managed by the contractors listed below in Table 1.

<b>Table 1- Biosolids Management Contractors</b>	
<p><b>Tule Ranch / Ag-Tech</b> 4324 E. Ashlan Ave. Fresno, CA 93726 Contact: Shaen Magan Phone: (559) 970-9432 Email: kurt@westexp.com</p>	<p><b>Synagro - Nursery Products</b> PO Box 1439 Helendale, CA 92342 Contact: Venny Vasquez Phone: (760) 265-5210 Email: vvasquez@SYNAGRO.com</p>
<p><b>Liberty Compost</b> 12421 Holloway Rd. Lost Hills, CA 93249 Contact: Patrick McCarthy Phone: (661) 797-2914 Email: patrickmccarthy@mccarthyfarms.com</p>	<p><b>Synagro – Arizona Soils</b> 5615 S. 91st Avenue Tolleson, AZ 85353 Contact: Craig Geyer Phone: (623) 936-6328 Email: CGeyer@SYNAGRO.com</p>

**Table 1- Biosolids Management Contractors**

**Inland Empire Regional Composting Authority**

12645 6th Street  
Rancho Cucamonga, CA 91739  
Contact: Jeff Ziegenbein  
Phone: (909) 993-1981  
Email: [jziegenbein@ieua.org](mailto:jziegenbein@ieua.org)

These contractors provide OCSD with biosolids management diversification and reliability, and are therefore important partners to OCSD. These contractors submit their annual compliance reports directly to EPA, in accordance with OCSD’s NPDES permit requirements. For this reporting period, OCSD’s biosolids were beneficially reused as illustrated in Table 2. More detailed breakdowns are available in Appendices A and D.

**Table 2- Biosolids Managed Tonnage Distribution**

Quantity Generated	Plant No. 1	Plant No. 2	Total	Relative %
Synagro - Nusery Products CA - (compost) (wet tons)	79,269.2	5,775.5	85,044.7	37%
<i>Synagro - Nusery Products CA - (compost) (dry metric tons)</i>	<i>17,152.9</i>	<i>2,754.9</i>	<i>19,907.8</i>	
Synagro AZ Soils (compost) (wet tons)	852.3	2,281.5	3,133.7	1.4%
<i>Synagro, AZ Soils (compost) (dry metric tons)</i>	<i>158.1</i>	<i>1,129.2</i>	<i>1,287.4</i>	
Liberty Compost CA (wet tons)	30,702.9	10,537.0	41,239.9	18%
<i>Liberty Compost CA (dry metric tons)</i>	<i>6,583.0</i>	<i>2,007.0</i>	<i>8,590.0</i>	
Inland Empire Regional Composting (wet tons)	0.0	10,021.9	10,021.9	4.3%
<i>Inland Empire Regional Composting (dry metric tons)</i>	<i>0.0</i>	<i>1,908.9</i>	<i>1,908.9</i>	
Tule Ranch AZ (land application) (wet tons)	11,245.8	79,847.2	91,092.9	40%
<i>Tule Ranch AZ (land application) (dry metric tons)</i>	<i>2,526.4</i>	<i>17,782.3</i>	<i>20,308.7</i>	
<b>Total Wet Tons</b>	<b>122,070.1</b>	<b>108,463.0</b>	<b>230,533.1</b>	<b>100%</b>
<i>Total Dry Metric Tons</i>	<i>26,420.5</i>	<i>25,582.3</i>	<i>52,002.7</i>	

**Summary of Pollutants**

OCSD’s Biosolids Monthly Compliance Reports (Appendix A) compare the concentration limits of the pollutants listed in 40 CFR 503 to OCSD’s average biosolids concentrations for each plant. The average concentrations of all pollutants in OCSD’s biosolids are typically an order of magnitude below the conservative *Table-1 Ceiling Limits* and *Table 3 Exceptional Quality Limits* found in 40 CFR Part 503, which were based on an extensive health risk assessment to ensure that biosolids are safe for recycle to build healthy soil.

Since 1976, OCSD’s Pretreatment Program has been effective in lowering the average mass of metals discharged to the marine environment by 99% and the total mass of metals in the influent sewage by 86%, thereby ensuring OCSD’s biosolids can be recycled to farm fields with low metals concentrations. Furthermore, OCSD’s influent wastewater meets drinking water standards for metals. Appendix B contains the biosolids chapter excerpt of the OCSD Pretreatment Program Annual Report ([ocsd.com/PreTreatAnnual](http://ocsd.com/PreTreatAnnual), Chapter 8) that includes graphs of metals in OCSD’s biosolids.

In accordance with OCSD's NPDES permit, biosolids are also tested semi-annually for all pollutants listed under Section 307(a) of the Clean Water Act. Appendix C contains the summary of the priority pollutants analyzed in the plants' biosolids.

## **Determination of Hazardousness**

OCSD's biosolids' pollutant concentrations are significantly below the state and federal maximum contaminant concentrations for determining a hazardous waste. See OCSD's biosolids monitoring data in Appendix C, Summary of Priority Pollutants and Trace Constituents Analysis.

### Legal Definitions

OCSD's 2012 Ocean Discharge NPDES permit requires OCSD to test its biosolids annually for hazardousness in accordance with 40 CFR Part 261. Hazardous waste is also defined under the provisions of California Code of Regulations, Title 22, Chapter 11, Article 5, and Arizona Revised Statutes, Title 49, Chapter 5, Article 2.

### Determination Summary

OCSD's biosolids are determined to be non-hazardous based on the following evaluation:

- OCSD's biosolids are not ignitable, corrosive, reactive, nor toxic in accordance with the federal regulatory definitions in 40 CFR Part 261.
- OCSD performs semi-annual testing of an extensive list of organic and inorganic compounds to verify the continued non-hazardousness of our biosolids.
- When the results are non-detectable, OCSD enters the method detection limit in the evaluation spreadsheet that compares the data to regulatory limits.
- In January and July 2019, OCSD's contract laboratory analyzed the samples at a dilution that caused five constituents to have elevated method detection limits that were higher than the regulatory limits (see footnotes in Appendix C Biosolids Priority Pollutants).
- In response, OCSD corrected the issue by re-sampling in December 2019 and requested the contract laboratory to analyze at lower detection limits for December as well as into the future. For the 2019 reporting period, OCSD has at least one result with acceptable detection limits for each regulatorily-required constituent.

## **Biosolids Management System**

OCSD continues to utilize a biosolids management system approach to effectively administer its biosolids program. The following sections highlight OCSD's continued commitment to the biosolids management system.

### Communications

OCSD has continued transparent communications during this reporting period. OCSD shares timely updates including biosolids news, annual compliance reports, biosolids videos, updated OCSD resources such as the biosolids allocation map and Biosolids

Contractor Requirements document. In 2019, the following items were posted or updated on OCSD’s biosolids website:

- Monthly compliance reports and data ([ocsd.com/nani](https://www.ocsd.com/nani)),
- Annual compliance reports ([ocsd.com/503](https://www.ocsd.com/503)),
- Biosolids allocation map ([ocsd.com/map](https://www.ocsd.com/map)), and
- Two news articles.

**Contractor Oversight Program**

OCSD has continued our strong contractor oversight program:

- No Notice of Violations (NOVs) were issued for OCSD’s active biosolids contractors;
- Performed 11 contractor site inspections;
- Addressed and closed out one contractor issues;
- Addressed and closed out one inspection finding;
- No odor complaints;
- Performed 44 hauling inspections, which reached 44 out of 77 active drivers (81%) this year. There are 19 active drivers (25%) who have earned a place on OCSD’s “Honor Roll” for excellence in their truck cleanliness, knowledge of biosolids and emergency protocol by successfully passing three consecutive hauler inspections; and
- Two contractor offsite incidents occurred in January and November 2019, in which an estimated of three gallons and 15 gallons, respectively, of biosolids were released and recovered with no impacts to waterways. The final report was submitted to Regional Water Control Board having jurisdiction in the area.

**Goals and Targets**

The 2014 – 2019 Five Year Strategic Plan is a guiding document that provides a framework that directs our work. Every two years, the Strategic Plan is reviewed, updated, and submitted for approval by the Board of Directors. A new Strategic Plan was adopted in November 2019 that will be discussed in next year’s report. This plan is available on the the OCSD Strategic Planning website (<https://www.ocsd.com/services/strategic-planning>).

**Biosolids Program Policy**

The Biosolids Program Policy, originally adopted in 1999 and amended several times over the years, is a policy committing the agency to support biosolids beneficial reuse (organics recycling). The most recent commitments, OCSD Resolution 13-03 ([www.ocsd.com/policy](https://www.ocsd.com/policy)), and OCSD’s performance relative to these commitments are reported below.

<b>Table 3 – Policy Performance</b>	
<b>Policy Commitment</b>	<b>2019 Performance</b>
1. Commit to sustainable biosolids program.	OCSD has demonstrated effective pretreatment, water and solids treatment operations, compliance, capital improvements, technology

**Table 3 – Policy Performance**

Policy Commitment	2019 Performance
<p>Support the recycling of biosolids.</p>	<p>research and planning, and biosolids contractor oversight programs.</p> <p>See this year’s accomplishments at the beginning of this report.</p> <p>In addition, OCSD demonstrates its commitment and support of recycling biosolids in its outreach 2-part video. <a href="#">Part 1</a>: How biosolids are created from sewage treatment plant solids, OCSD’s biosolids production, and where OCSD’s biosolids are recycled. <a href="#">Part 2</a>: Biosolids benefits and safety and the onsite processes used to land apply and compost biosolids.</p>
<p>2. Strive to balance financial, environmental, and societal considerations when making biosolids decisions.</p>	<p>On a day-to-day basis, OCSD is weighing these considerations and watching for issues that would alter the balance. For instance, allocating our biosolids to our diverse locations considers this “triple bottom line,” but also considers contractors performance and the 2017 Master Plan’s Ten Tenets (<a href="http://ocsd.com/bmp">ocsd.com/bmp</a>).</p>
<p>3. Utilize a biosolids management system to maintain a sustainable and publicly supported biosolids program.</p>	<p>OCSD continues to maintain our biosolids management system as outlined in this section.</p>
<p>4. Diversify portfolio of offsite biosolids management options with multiple biosolids contractors, markets, facilities, and maintaining fail-safe back-up capacity of at least 100% of its daily biosolids production.</p>	<p>See Table 2 for breakdown of our active biosolids management options.</p> <p>See Ten Tenets reporting table below.</p>
<p>5. Research and implement ways to reduce the volume of biosolids at the treatment plants to minimize the need for offsite management.</p>	<p>As mentioned in the “Treatment Plants and Program Updates” section above, OCSD’s production of biosolids has reduced by about one-quarter since the centrifuges fully commissioned in 2019.</p> <p>OCSD’s Research program actively seeks opportunities for process area improvements, including solids.</p> <p>OCSD is continuing to monitor the Supercritical Water Oxidation technology (<a href="http://www.scfi.eu">www.scfi.eu</a>) and the progress towards a feasible pilot plant.</p>
<p>6. Support continuing research of biosolids benefits and potential safety concerns.</p>	<p>OCSD continued our support of the Northwest Biosolids’ library (<a href="http://www.nwbiosolids.org">www.nwbiosolids.org</a>). The library contains references to over 2,600 biosolids-related research articles references. Northwest Biosolids sends a monthly theme-based, relevant summary of research to its members, so we can easily digest pertinent scientific information and better communicate with</p>



Table 3 – Policy Performance	
Policy Commitment	2019 Performance
	interested parties. Northwest Biosolids also has a free monthly e-Bulletin for non-members. In 2015, based on extensive research, the Northwest Biosolids association published <a href="#">a public-friendly risk brochure explaining</a> how long it takes for workers and other “exposed populations” to accumulate a dose-equivalent of pharmaceuticals or personal care products from exposure to biosolids (most in the thousands to hundred-thousands of years). This publication remains one of the best references to address emerging constituents of concern.
7. Demonstrate the benefits of biosolids compost by using it at the District’s facilities.	<p>OCSD maintains compost piles at each plant. This compost is available to our employees and our landscape contractor to demonstrate the benefits of compost. OCSD encourages employees to share their compost use photos.</p> <p>OCSD continues long-term monitoring of our composted biosolids demonstration planter that contains drought-tolerant and native species.</p>

Ten Tenets of OCSD’s Biosolids Management Plan

Read more on OCSD’s Ten Tenets and the Biosolids Master Plan at [ocsd.com/bmp](http://ocsd.com/bmp).

Table 4 – Ten Tenets of Biosolids Management Performance	
Tenet Commitment	2019 Performance
1. Allocate up to 50 percent of biosolids per biosolids contractor.	Each contractor received <b>less than 50%</b> of OCSD’s biosolids. See Table 2 for relative tonnage distribution this year. See OCSD’s current map of where OCSD’s biosolids are allocated at <a href="http://ocsd.com/map">ocsd.com/map</a> .
2. Allocate up to 50 percent of biosolids to each geographic end use market.	<p><b>Sixty percent (60%)</b> of OCSD’s biosolids were turned into <b>compost at four (4) regional facilities</b>. Combined, these facilities distributed about <b>227,000 tons</b> of composted biosolids in the following geographic markets:</p> <ul style="list-style-type: none"> <li>• 35.7% to San Bernardino County (<b>28% increase</b> over last year),</li> <li>• 32.5% to Riverside County (7% decrease over last year),</li> <li>• 16.3% to Kern County (<b>19% decrease</b> over last year),</li> <li>• 8.9% to Los Angeles County,</li> <li>• 5.3% to Maricopa County, Arizona, and</li> <li>• 1.5% to Orange County,</li> </ul> <p>The remaining <b>40%</b> of OCSD’s biosolids were used to raise crops, producing <b>6,100 tons of barley, oats, sorghum, and alfalfa for use in Arizona, California, and New Mexico</b>.</p>
3. Maintain at least three (3) different biosolids management facilities at any time.	OCSD maintained <b>five (5)</b> different management facilities. See Table 2 for relative tonnage distribution this year. See OCSD’s current map of where OCSD’s biosolids are allocated at <a href="http://ocsd.com/map">ocsd.com/map</a> .

<b>Table 4 – Ten Tenets of Biosolids Management Performance</b>	
<b>Tenet Commitment</b>	<b>2019 Performance</b>
4. Maintain at least two (2) different biosolids management practices at any time.	OCSD maintained <b>two (2)</b> different management practices, composting and land application (direct farming of feed crops with biosolids). See Table 2 for relative tonnage distribution this year. See OCSD's current map of where OCSD's biosolids are allocated at <a href="http://ocsd.com/map">ocsd.com/map</a> .
5. Maintain at least two (2) different hauling companies within the biosolids management portfolio.	OCSD and its biosolids management contractors utilized <b>three (3)</b> different hauling companies (GIC, Tule Ranch/Western Express, and Denali Water Solutions).
6. Maintain at least 200 percent (2 times daily production) contingency capacity at end use sites.	OCSD maintained an average of <b>1367% (13.7 times daily production)</b> contingency capacity.
7. Maintain 20 percent (1.2 times daily production) fail-safe hauling capacity.	OCSD maintained a range of <b>41-76% (1.4-1.8 times daily production)</b> fail-safe hauling capacity.
8. Track and encourage development of emerging markets and/or end uses for biosolids, especially for local end use options.	<p>The <a href="#">2019 Strategic Plan</a> developed by the Board of Directors and staff defines the strategic initiatives to be pursued by OCSD and provides a basis for long-term financial, capital, and operational planning. The Biosolids Management Policy initiative in the document includes commitments to educate and advocate with the local, state, and federal agencies to assure biosolids will continue to be safely and legally used as a soil amendment and monitor and research constituents of emerging concern such as PFAS and microplastics that may impact biosolids. In 2020, OCSD will be issuing a Biosolids Energy request for information that will reflect OCSD's commitment to stay abreast of new technology options to convert organics to energy and other regional biosolids recycling and renewable energy partnerships within Southern California.</p> <p>In 2018, OCSD's composting partner, Inland Empire Regional Composting Authority (IERCA), expanded their buy-back program to OCSD member cities and agencies. This program offers discounted compost to incentivize the local use of compost. In 2019, IERCA provided bagged compost for OCSD's annual "State of the District" and OCSD 65th Anniversary Open House events.</p>
9. Allocate up to 10 percent of total biosolids production for participation in emerging markets, including participation in pilot or demonstration projects.	OCSD'S Board of Directors approved the <a href="#">2019 Strategic Plan</a> . The strategic plan defines Biosolids Management Policy initiatives that include commitments to educate and advocate with the local, state, and federal agencies to assure biosolids will continue to be safely and legally used as a soil amendment and monitor and research constituents of emerging concern such as PFAS and microplastics that may impact biosolids. In addition, OCSD will stay abreast of new technology options to convert

<b>Table 4 – Ten Tenets of Biosolids Management Performance</b>	
<b>Tenet Commitment</b>	<b>2019 Performance</b>
	<p>organics to energy and other regional biosolids recycling and renewable energy partnerships within Southern California.</p> <p>No tonnage was allocated to emerging markets or pilots for this reporting year.</p>
<p>10. Explore partnerships with area soil blenders to allow incorporation of OCSD's Class A product into local markets.</p>	<p>OCSD is following the work being done by San Francisco Public Utilities Commission on their research and development of their temperature-phase anaerobically digested biosolids soil blend product. In particular, the blend and product distribution to local markets. OCSD's efforts will follow suit at the appropriate time since OCSD facilities are expected to be commissioned in about 2030.</p>

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## **APPENDIX A**

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**Table 1: OCSD Biosolids Wet and Dry Tonnage Distribution, Plant No. 1**  
**Table 2: OCSD Biosolids Wet and Dry Tonnage Distribution, Plant No. 2**  
**Biosolids Monthly Compliance Reports, January – December 2019**

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# Table 1: OCSD Biosolids Wet and Dry Tonnage Distribution

## Reclamation Plant No. 1, Fountain Valley, CA

Process Assessment	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Annual Average		
Biosolids Total Solids (%)	20	24	23	22	22	23	24	25	26	25	26	27	24		
Quantity Generated	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total		
Synagro - Nusery Products CA - compost (wet tons)	7,546	6,526	7,291	6,788	6,627	5,522	6,660	6,391	6,165	6,567	6,089	6,286	78,458	<b>Total Wet Tons 122,070</b>	
Synagro - Nusery Products CA - compost (dry metric tons)	1,369	1,421	1,521	1,324	1,322	1,127	1,450	1,420	1,426	1,459	1,408	1,539	16,786		
Synagro-AZ Soils-compost (wet tons)	516	48	25	17	48	0	0	0	0	0	0	0	654		
Synagro - AZ Soils-compost (dry metric tons)	94	11	5	3	10	0	0	0	0	0	0	0	122		
Tule Ranch AZ - land application (wet tons)	316	49	127	268	249	526	1,370	1,373	1,420	1,967	1,695	1,886	11,246		
Tule Ranch AZ - land application (dry metric tons)	57	11	27	52	50	107	298	305	328	437	392	462	2,526		
Liberty Compost CA (wet tons)	3,908	2,024	1,935	2,362	2,039	1,980	2,578	2,574	2,504	2,983	3,023	2,793	30,703		
Liberty Compost CA (dry metric tons)	709	441	404	461	407	404	561	572	579	663	699	684	6,583		
Inland Empire Regional Composting (wet tons)	0	0	0	0	0	0	0	0	0	0	0	0	0		
Inland Empire Regional Composting (dry metric tons)	0	0	0	0	0	0	0	0	0	0	0	0	0.0		
<b>Total Wet Tons</b>	<b>12,285</b>	<b>8,648</b>	<b>9,378</b>	<b>9,435</b>	<b>8,963</b>	<b>8,028</b>	<b>10,608</b>	<b>10,339</b>	<b>10,089</b>	<b>11,517</b>	<b>10,807</b>	<b>10,965</b>	<b>121,061</b>		
<b>Total Dry Metric Tons</b>	<b>2,228</b>	<b>1,883</b>	<b>1,956</b>	<b>1,840</b>	<b>1,788</b>	<b>1,638</b>	<b>2,309</b>	<b>2,297</b>	<b>2,333</b>	<b>2,559</b>	<b>2,500</b>	<b>2,685</b>	<b>26,018</b>		
Digester Cleanings	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total		
Digester Cleaning Total Solids Synagro AZ Soils (average)				Dig 5					Dig 9			Dig 9			
Synagro AZ Soils (compost) (wet tons) (digester cleanings only)	0	0	0	0	0	0	0	0	174	0	0	24	198		<b>Dry Tons 26,420</b>
Synagro, AZ Soils (compost) (dry metric tons) (digester cleanings only)	0	0	0	0	0	0	0	0	32	0	0	4	36		
Digester Cleaning Total Solids Synagro Nursery Products (average)				59%					23%			20%			
Synagro Nursery Products (compost) (wet tons) (digester cleanings only)	0	0	0	602	0	0	0	0	187	0	0	22	811		
Synagro, Nursery Products (compost) (dry metric tons) (digester cleanings only)	0	0	0	324	0	0	0	0	39	0	0	4	367		
<b>Total Wet Tons (Biosolids plus Digester Cleanings)</b>	<b>12,285</b>	<b>8,648</b>	<b>9,378</b>	<b>10,037</b>	<b>8,963</b>	<b>8,028</b>	<b>10,608</b>	<b>10,339</b>	<b>10,450</b>	<b>11,517</b>	<b>10,807</b>	<b>11,011</b>	<b>122,070</b>		
<b>Total Dry Metric Tons (Biosolids plus Digester Cleanings)</b>	<b>2,228</b>	<b>1,883</b>	<b>1,956</b>	<b>2,164</b>	<b>1,788</b>	<b>1,638</b>	<b>2,309</b>	<b>2,297</b>	<b>2,404</b>	<b>2,559</b>	<b>2,500</b>	<b>2,694</b>	<b>26,420</b>		

*FOOTNOTE: Digester cleanings percent total solids are sampled for each truck to calculate the dry metric tons for each truckload. The total dry metric tons reported above are based on the totals of each truckload's dry metric tons and may therefore vary slightly compared multiplying the average percent total solids times the total wet tons and conversion factor of 0.907.*

# Table 2: OCSD Biosolids Wet and Dry Tonnage Distribution

## Wastewater Treatment Plant No. 2, Huntington Beach, CA

Process Assessment	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Annual Average	
Biosolids Total Solids (%)	21	20	20	26	26	24	25	27	29	28	27	30	25	
Quantity Generated	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total	
Synagro - Nusery Products CA - compost (wet tons)	126	428	76	0	0	0	25	0	0	25	0	0	680	Total Wet Tons 108,463
Synagro - Nusery Products CA - compost (dry metric tons)	24	78	14	0	0	0	6	0	0	6	0	0	128	
Synagro-AZ Soils-compost (wet tons)	0	74	0	0	0	0	0	0	0	0	0	0	74	
Synagro - AZ Soils-compost (dry metric tons)	0	13	0	0	0	0	0	0	0	0	0	0	13	
Tule Ranch AZ - land application (wet tons)	10,039	8,474	8,875	7,519	7,458	5,917	5,781	5,584	4,973	5,090	4,937	5,202	79,847	
Tule Ranch AZ - land application (dry metric tons)	1,912	1,537	1,610	1,773	1,759	1,288	1,311	1,367	1,308	1,293	1,209	1,415	17,782	
Liberty Compost CA (wet tons)	480	1,639	1,087	1,543	1,467	964	887	755	481	454	176	606	10,537	
Liberty Compost CA (dry metric tons)	91	312	207	294	279	184	169	144	92	86	34	115	2,007	
Inland Empire Regional Composting (wet tons)	1,067	917	1,020	951	951	609	855	758	709	687	691	810	10,022	
Inland Empire Regional Composting (dry metric tons)	203	175	194	181	181	116	163	144	135	131	132	154	1,908.9	
<b>Total Wet Tons</b>	<b>11,711</b>	<b>11,531</b>	<b>11,057</b>	<b>10,013</b>	<b>9,875</b>	<b>7,489</b>	<b>7,548</b>	<b>7,096</b>	<b>6,163</b>	<b>6,256</b>	<b>5,803</b>	<b>6,618</b>	<b>101,160</b>	
<b>Total Dry Metric Tons</b>	<b>2,231</b>	<b>2,115</b>	<b>2,025</b>	<b>2,248</b>	<b>2,219</b>	<b>1,587</b>	<b>1,648</b>	<b>1,655</b>	<b>1,535</b>	<b>1,516</b>	<b>1,374</b>	<b>1,685</b>	<b>21,839</b>	
Digester Cleanings	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total	
				Dig F	Dig F	Dig J & S	Dig G & S	Dig G & K		Dig I	Dig I & O			
<b>Digester Cleaning Total Solids Synagro AZ Soils (average)</b>						54%	57%	58%		49%	56%			
Synagro AZ Soils (compost) (wet tons) (digester cleanings only)	0	0	0	0	0	507	708	434	0	166	392	0	2,208	Total Dry Tons 25,582
Synagro, AZ Soils (compost) (dry metric tons) (digester cleanings only)	0	0	0	0	0	248	366	228	0	74	199	0	1,116	
<b>Digester Cleaning Total Solids Synagro Nursery Products (average)</b>				55%	58%	54%	58%	59%		54%	55%			
Synagro Nursery Products (compost) (wet tons) (digester cleanings only)	0	0	0	23	1431	803	1111	670	0	498	559	0	5,095	
Synagro, Nursery Products (compost) (dry metric tons) (digester cleanings only)	0	0	0	11	757	393	585	358	0	244	279	0	2,627	
<b>Total Wet Tons (Biosolids plus Digester Cleanings)</b>	<b>11,711</b>	<b>11,531</b>	<b>11,057</b>	<b>10,036</b>	<b>11,307</b>	<b>8,799</b>	<b>9,367</b>	<b>8,200</b>	<b>6,163</b>	<b>6,920</b>	<b>6,755</b>	<b>6,618</b>	<b>108,463</b>	
<b>Total Dry Metric Tons (Biosolids plus Digester Cleanings)</b>	<b>2,231</b>	<b>2,115</b>	<b>2,025</b>	<b>2,260</b>	<b>2,976</b>	<b>2,229</b>	<b>2,599</b>	<b>2,242</b>	<b>1,535</b>	<b>1,834</b>	<b>1,852</b>	<b>1,685</b>	<b>25,582</b>	

FOOTNOTE: Digester cleanings percent total solids are sampled for each truck to calculate the dry metric tons for each truckload. The total dry metric tons reported above are based on the totals of each truckload's dry metric tons and may therefore vary slightly compared multiplying the average percent total solids times the total wet tons and conversion factor of 0.907.





## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: January 1- 31, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

Sampling date(s): 01/16/19 (Plant 1), 01/22/19, 1/29/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min*</b>	0.63	16	1.8 DNQ	43	490	14	14	31	<2.6	680	5,500	55,000	60,000	7.6	17	55
<b>Plant 1 Avg</b>	0.63	16	1.8 DNQ	36	420	11	14	28	<2.6	610	5,500	53,000	58,000		20	
<b>Plant 2 Max/Min*</b>	0.89	24	4.4	68	570	16	18	48	<2.8	820	6,300	44,000	50,000	7.6	20	66
<b>Plant 2 Avg</b>	0.73	21	4.4	49	550	14	17	40	<2.8	760	5,800	42,000	47,000		21	
<b>Table 1 (Max/Min)*</b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time</b> (Min 15 days)**	20	68	Out of Service	19	19	20	20	20	20	20	20
<b>Minimum Temperature</b> (Min 95 °F)	97	97	Out of Service	98	98	98	98	98	98	98	98

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time</b> (Min 15 days)**	19	21	19	Out of Service	19	19	97	18	19	18	19	Out of Service	19	Out of Service	19	20	18	21
<b>Minimum Temperature</b> (Min 95 °F)	97	98	99	Out of Service	97	98	100	98	98	97	98	Out of Service	98	Out of Service	99	99	99	98

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

\* Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: January 1- 31, 2019

\*\* MCRT based on a 15-Day Rolling Average. **Note that Digester 7 and Digester H were brought into service at the end of the month which resulted in higher than usual MCRTs.**

### Certifications:

**NPDES permit:** *I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

**503 Class B:** *I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)(1) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.*

**Arizona Class B:** *I certify, under penalty of law, that the pollutant analyses and the description of pathogen treatment and vector attraction reduction activities have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.*

Jim Spears  
Operations Manager

jspears@ocsd.com  
(714) 593-7081

Ron Coss  
Laboratory, Monitoring &  
Compliance Manager

rcoss@ocsd.com  
(714) 593-7508

Cindy Vellucci  
Cindy Vellucci (Apr 9, 2019)

Deirdre Bingman

Peter Park  
Peter Park (Apr 10, 2019)

Margil Jimenez  
Margil Jimenez (Apr 15, 2019)



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: February 1- 28, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

Sampling date(s): 02/19/19, 02/26/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min*</b>	0.91	21	1.6 DNQ	38	490	11	17	36	<48	590	5,100	50,000	55,000	7.6	23	60
<b>Plant 1 Avg</b>	0.89	20	1.4 DNQ	37	450	11	16	35	<48	570	5,100	47,000	52,000		24	
<b>Plant 2 Max/Min*</b>	0.72	23	4.0	41	500	13	17	40	<2.8	690	6,100	45,000	51,000	7.7	19	56
<b>Plant 2 Avg</b>	0.57	22	3.8	41	480	13	17	38	<2.8	660	6,100	43,000	49,000		20	
<b>Table 1 (Max/Min)*</b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)**</b>	22	25	Out of Service	21	21	21	21	21	21	21	21
<b>Minimum Temperature (Min 95 °F)</b>	98	98	Out of Service	98	98	98	98	98	98	98	98

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)**</b>	20	21	19	Out of Service	20	20	22	18	19	19	19	Out of Service	20	Out of Service	20	20	18	21
<b>Minimum Temperature (Min 95 °F)</b>	97	97	98	Out of Service	97	97	100	98	97	100	97	Out of Service	98	Out of Service	99	100	99	98

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

\* Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

\*\* MCRT based on a 15-Day Rolling Average.



## Biosolids Monthly Compliance Report

**Facility Name:** Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

**Monitoring Period:** February 1- 28, 2019

### Certifications:

**NPDES permit:** *I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

**503 Class B:** *I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)(1) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.*

**Arizona Class B:** *I certify, under penalty of law, that the pollutant analyses and the description of pathogen treatment and vector attraction reduction activities have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.*

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Ron Coss  
Laboratory, Monitoring &  
Compliance Manager

rcoss@ocsd.com  
(714) 593-7508

Cindy Vellucci  
Cindy Vellucci (Apr 16, 2019)

Deirdre Bingman

Rachel van Exel

Rachel van Exel

Peter Park  
Peter Park (Apr 22, 2019)

Margil Jimenez  
Margil Jimenez (Apr 22, 2019)



## Biosolids Monthly Compliance Report

**Facility Name:** Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

**Monitoring Period:** March 1- 31, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

**Sampling date(s):** 03/19/19, 03/26/19, 03/28-29/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min<sup>1</sup></b>	1.4	13	1.5 DNQ	49	440	12	15	34	<2.5	640	5,200	59,000	64,000	7.8	22	55 <sup>2</sup>
<b>Plant 1 Avg</b>	1.1	11 DNQ	1.2 DNQ	41	390	9.9	13	31	<2.5	570	5,100	57,000	62,000		23	
<b>Plant 2 Max/Min<sup>1</sup></b>	1.0	20	4.1	59	600	16	24	42	<2.9	910	6,100	55,000	61,000	8.0	20 <sup>3</sup>	66
<b>Plant 2 Avg</b>	0.91	15 DNQ	3.0 DNQ	46	480	12	19	34	<2.9	730	6,000	51,000	57,000		20 <sup>3</sup>	
<b>Table 1 (Max/Min)<sup>1</sup></b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>4</sup></b>	20	20	Out of Service	19	19	20	20	19	20	19	20
<b>Minimum Temperature (Min 95 °F)</b>	97	99	Out of Service	98	98	99	98	98	98	98	97

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>4</sup></b>	20	21	20	27 <sup>5</sup>	20	20	21	20	Out of Service	20	20	Out of Service	20	Out of Service	20	20	20	21
<b>Minimum Temperature (Min 95 °F)</b>	98	100	100	102	100	100	98	99	Out of Service	100	99	Out of Service	99	Out of Service	98	101	100	98



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: March 1- 31, 2019

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

<sup>1</sup> Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

<sup>2</sup> OCSD's new Plant No. 1 co-thickening centrifuges began processing sludge in late March 2019. The new processed stream is called centrifuge thickened sludge (CTS) and combines and thickens solids flows from the primaries (sludge and scum) and secondaries (trickling filter sludge, activated sludge plant surface waste, and waste activated sludge). The CTS was sampled and analyzed by an Arizona-certified laboratory resulting in a volatile solids value of 4.7%. The VSR calculation could not be completed for the March 28th sampling event because the corresponding primary and secondary volatile solids samples were not taken on that same day. Based on the most conservative compliance and process data, OCSD did not drop below the 38% minimum compliance level for the reduction in volatile solids content.

<sup>3</sup> Plant No. 2 began commissioning dewatering centrifuges in late March, which will result in higher percent total solids.

<sup>4</sup> MCRT based on a 15-Day Rolling Average.

<sup>5</sup> Digester E was brought into service on March 26, 2019.

### Certifications:

**NPDES permit:** *I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

**503 Class B:** *I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)(1) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.*

**Arizona Class B:** *I certify, under penalty of law, that the pollutant analyses and the description of pathogen treatment and vector attraction reduction activities have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.*

Jim Spears  
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Ron Coss (Aug 19, 2019)

Ron Coss  
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Deirdre Bingman

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Peter Park (Aug 15, 2019)



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: April 1- 30, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

Sampling date(s): 04/09/19, 04/15-16/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min<sup>1</sup></b>	1.0	14	1.4 DNQ	43	720	11	18	32	<2.6	700	6,000	65,000	71,000	7.8	21	62
<b>Plant 1 Avg</b>	0.97	13 DNQ	1.3 DNQ	39	560	11	16	30	<2.6	640	5,600	60,000	65,000		22	
<b>Plant 2 Max/Min<sup>1</sup></b>	0.75	14	3.0	44	860	13	20	37	<2.7	730	5,500	60,000	64,000	7.8	19	72
<b>Plant 2 Avg</b>	0.59	13 DNQ	3.0	44	670	13	20	37	<2.7	730	5,000	56,000	61,000		25 <sup>3</sup>	
<b>Table 1 (Max/Min)<sup>1</sup></b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>2</sup></b>	19	20	Out of Service	19	19	20	20	19	19	19	19
<b>Minimum Temperature (Min 95 °F)</b>	98	98	Out of Service	98	98	98	98	98	98	98	98

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>2</sup></b>	22	22	22	24	23	22	22	22	Out of Service	22	22	Out of Service	22	Out of Service	22	22	22	22
<b>Minimum Temperature (Min 95 °F)</b>	96	97	99	96	101	99	97	100	Out of Service	99	98	Out of Service	98	Out of Service	99	99	98	98

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

<sup>1</sup> Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

<sup>2</sup> MCRT based on a 15-Day Rolling Average.

<sup>3</sup> Plant No. 2 began commissioning dewatering centrifuges in late March, which has resulted in higher percent total solids.



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: April 1- 30, 2019

### Certifications:

**NPDES permit:** I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**503 Class B:** I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)(1) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

**Arizona Class B:** I certify, under penalty of law, that the pollutant analyses and the description of pathogen treatment and vector attraction reduction activities have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

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Deirdre Bingman

Rachel van Exel

Peter Park (Aug 20, 2019)





## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: May 1- 31, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

Sampling date(s): 05/21/19, 05/22/19 (Plant 2), 05/28/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min<sup>1</sup></b>	0.83	7.7 DNQ	1.2 DNQ	30	370	11	14	23	<2.5	540	12,000	49,000	60,000	7.7	22	68 <sup>2</sup>
<b>Plant 1 Avg</b>	0.83	7.3 DNQ	1.2 DNQ	29	360	9.9	13	23	<2.5	520	12,000	47,000	59,000		22	
<b>Plant 2 Max/Min<sup>1</sup></b>	0.73	12 DNQ	9.0	36	430	12	18	32	<2.4	630	12,000	40,000	52,000	7.9	20	41
<b>Plant 2 Avg</b>	0.67	9.4 DNQ	6.7	32	340	10	15	29	<2.4	500	9,700	35,000	45,000		26	
<b>Table 1 (Max/Min)<sup>1</sup></b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>3, 4</sup></b>	23	24	Out of Service	23	23	24	24	24	24	23	23
<b>Minimum Temperature (Min 95 °F)</b>	97	98	Out of Service	98	97	98	98	98	98	98	97

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>3</sup></b>	21	22	22	21	Out of Service	21	21	21	Out of Service	22	22	Out of Service	21	Out of Service	21	21	22	21
<b>Minimum Temperature (Min 95 °F)</b>	98	99	99	100	Out of Service	100	98	100	Out of Service	99	100	Out of Service	99	Out of Service	98	102	100	99

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

<sup>1</sup> Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

<sup>2</sup> The Plant No. 1 May primary volatile solids samples were not collected. Based on worst-case, unofficial process data, OCSD did not drop below the 38% minimum compliance level for the reduction in volatile solids content.

<sup>3</sup> MCRT based on a 15-Day Rolling Average.



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: May 1- 31, 2019

<sup>4</sup> Plant No. 1's new centrifuge thickened sludge (CTS) facility commissioning process has resulted in higher detention times. In addition, flowmeter variations that were discovered at the end of May and resolved in June did not cause OCSD's detention time to drop below the 15-day minimum compliance level for Process to Significantly Reduce Pathogens (PSRP).

### Certifications:

**NPDES permit:** *I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

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**Arizona Class B:** *I certify, under penalty of law, that the pollutant analyses and the description of pathogen treatment and vector attraction reduction activities have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.*

Jim Spears  
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Ron Coss  
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Deirdre Bingman

Rachel Van Exel

Peter Park (Aug 20, 2019)



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: June 1- 30, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

Sampling date(s): 06/04/19, 06/10-11/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min<sup>1</sup></b>	1.3	12 DNQ	2.2	44	610	13	21	38	<2.6	820	9,800	48,000	58,000	7.6	21	63
<b>Plant 1 Avg</b>	1.0	8.0 DNQ	2.0 DNQ	44	600	13	20	36	<2.6	810	9,200	47,000	57,000		23	
<b>Plant 2 Max/Min<sup>1</sup></b>	0.66	14	9.2	45	590	15	24	43	<2.3	780	6,700	43,000	49,000	7.7	19	52
<b>Plant 2 Avg</b>	0.60	9.7 DNQ	8.4	43	590	14	22	40	<2.3	780	6,600	41,000	47,000		24	
<b>Table 1 (Max/Min)<sup>1</sup></b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>2,3</sup></b>	28	28	Out of Service	28	28	28	28	28	29	28	28
<b>Minimum Temperature (Min 95 °F)</b>	98	98	Out of Service	98	98	98	98	98	98	98	98

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>2</sup></b>	22	22	22	22	Out of Service	23	23	22	Out of Service	22	22	Out of Service	22	Out of Service	23	22	Out of Service	23
<b>Minimum Temperature (Min 95 °F)</b>	99	100	100	99	Out of Service	100	100	101	Out of Service	99	100	Out of Service	99	Out of Service	99	100	Out of Service	100

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

<sup>1</sup> Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

<sup>2</sup> MCRT based on a 15-Day Rolling Average.

<sup>3</sup> Plant No. 1's new centrifuge thickened sludge (CTS) facility commissioning process has resulted in higher detention times. In addition, flowmeter variations that were discovered at the end of May and resolved in June did not cause OCSD's detention time to drop below the 15-day minimum compliance level for Process to Significantly Reduce Pathogens (PSRP).



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: June 1- 30, 2019

### Certifications:

**NPDES permit:** I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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Rachel Van Exel

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Peter Park  
Peter Park (Aug 20, 2019)



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: July 1- 31, 2019

\*\*\*REVISED on 2/18/2020\*\*\*

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

Sampling date(s): 07/16/19, 7/23/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min<sup>1</sup></b>	0.82	<6.4	2.8	50	580	14	22	37	<3.9	800	13,000	66,000	73,000	7.9	24	74
<b>Plant 1 Avg</b>	0.77 <sup>3</sup>	<6.4	2.7	48	560	14	22	35	<3.9	800	10,000	56,000	66,000		24	
<b>Plant 2 Max/Min<sup>1</sup></b>	0.69	<6.3	4.8	47	540	16	24	36	<3.8	740	8,400	57,000	64,000	7.8	24	58
<b>Plant 2 Avg</b>	0.63 <sup>3</sup>	<6.3	4.5	46	510	15	24	35	<3.8	740	7,700	51,000	59,000		25	
<b>Table 1 (Max/Min)<sup>1</sup></b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>2</sup></b>	27	28	Out of Service	27	27	28	27	28	28	27	27
<b>Minimum Temperature (Min 95 °F)</b>	98	98	Out of Service	98	98	98	98	98	98	98	98

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>2</sup></b>	22	22	22	22	Out of Service	22	22	22	Out of Service	22	22	Out of Service	22	46 <sup>4</sup>	22	22	Out of Service	22
<b>Minimum Temperature (Min 95 °F)</b>	98	100	98	99	Out of Service	100	99	101	Out of Service	101	100	Out of Service	99	99	99	101	Out of Service	99

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

<sup>1</sup> Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

<sup>2</sup> MCRT based on a 15-Day Rolling Average

<sup>3</sup> Revisions have been made to the mercury Plant No. 1 and Plant No. 2 averages due to contract laboratory calculation error.

<sup>4</sup> Digester P was brought into service on October 30, 2019.



# Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: July 1- 31, 2019

\*\*\*REVISED on 2/18/2020\*\*\*

## Certifications:

**NPDES permit:** I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**503 Class B:** I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)(1) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

**Arizona Class B:** I certify, under penalty of law, that the pollutant analyses and the description of pathogen treatment and vector attraction reduction activities have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Jim Spears  
Operations Manager

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Ron Coss

Ron Coss (Feb 19, 2020)

Ron Coss  
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Cindy Vellucci

Cindy Vellucci

Deirdre Bingman

Rachel Van Exel

Rachel Van Exel

Peter Park

Peter Park (Feb 18, 2020)

Peter Park

Lan C. Wiborg

Lan C. Wiborg (Feb 18, 2020)

Lan Wiborg



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: August 1- 31, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

Sampling date(s): 08/20/19, 08/27/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min<sup>1</sup></b>	0.71	<6.4	2.0	44	520	13	21	32	<3.9	770	12,000	46,000	56,000	8.1	24	65
<b>Plant 1 Avg</b>	0.67	<6.4	2.0 DNQ	37	440	12	18	27	<3.9	760	10,000	45,000	56,000		25	
<b>Plant 2 Max/Min<sup>1</sup></b>	0.61	<6.3	3.4	44	500	17	19	33	<3.8	760	10,000	40,000	50,000	8.1	24	44
<b>Plant 2 Avg</b>	0.58	<6.3	3.2	35	410	16	17	26	<3.8	740	8,900	35,000	44,000		27	
<b>Table 1 (Max/Min)<sup>1</sup></b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>2</sup></b>	29	29	Out of Service	29	29	29	29	29	30	29	29
<b>Minimum Temperature (Min 95 °F)</b>	98	98	Out of Service	98	98	98	98	98	98	98	98

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>2</sup></b>	24	23	23	23	Out of Service	Out of Service	23	Out of Service	23	23	Out of Service	23	24	24	24	Out of Service	23
<b>Minimum Temperature (Min 95 °F)</b>	99	99	100	99	Out of Service	Out of Service	100	Out of Service	102	102	Out of Service	100	100	100	100	Out of Service	100

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

<sup>1</sup> Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

<sup>2</sup> MCRT based on a 15-Day Rolling Average.



# Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: August 1- 31, 2019

## Certifications:

**NPDES permit:** I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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Jim Spears  
Operations Manager

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Ron Coss  
Ron Coss (Oct 21, 2019)

Ron Coss  
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## Reviewers:

			<u>Peter Park</u> Peter Park (Oct 15, 2019)	<u>Lan C. Wiborg</u> Lan C. Wiborg (Oct 15, 2019)
Cindy Vellucci	Deirdre Bingman	Rachel Van Exel	Peter Park	Lan Wiborg





## Biosolids Monthly Compliance Report

**Facility Name:** Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

**Monitoring Period:** September 1- 30, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

**Sampling date(s):** 09/17/19, 09/24/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min*</b>	1.0	<6.0	2.2	47	550	12	21	35	<3.6	820	13,000	42,000	55,000	8.1	25	41
<b>Plant 1 Avg</b>	0.92	<6.0	2.0 DNQ	47	530	10	21	35	<3.6	790	13,000	42,000	54,000		26	
<b>Plant 2 Max/Min*</b>	0.84	<5.5	3.4	43	550	16	18	33	<3.4	720	8,600	41,000	49,000	8.1	28	48
<b>Plant 2 Avg</b>	0.72	<5.5	3.0	43	520	14	18	33	<3.4	700	8,500	40,000	49,000		29	
<b>Table 1 (Max/Min)*</b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)**</b>	28	28	Out of Service	31	27	28	28	28	28	28	28
<b>Minimum Temperature (Min 95 °F)</b>	97	98	Out of Service	99	98	98	98	97	98	98	98

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)**</b>	24	23	23	23	Out of Service	Out of Service	23	Out of Service	Out of Service	23	23	Out of Service	23	24	24	23	Out of Service	23
<b>Minimum Temperature (Min 95 °F)</b>	99	99	99	99	Out of Service	Out of Service	99	Out of Service	Out of Service	102	102	Out of Service	100	99	99	101	Out of Service	100

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

\* Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

\*\* MCRT based on a 15-Day Rolling Average.



# Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: September 1- 30, 2019

## Certifications:

**NPDES permit:** I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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Jim Spears  
Operations Manager

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Ron Coss

Ron Coss (Nov 19, 2019)

Ron Coss  
Laboratory, Monitoring &  
Compliance Manager

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## Reviewers:

Cindy Vellucci	Deirdre Bingman	Rachel Van Exel	Peter Park (Nov 6, 2019)	Lan C. Wiborg (Nov 6, 2019)

Cindy Vellucci

Deirdre Bingman

Rachel Van Exel

Peter Park

Lan Wiborg



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: October 1- 31, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

Sampling date(s): 10/15/19,10/22/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min*</b>	0.82	<6.3	1.9	49	560	10	21	41	<3.9	770	12,000	59,000	66,000	7.9	24	64
<b>Plant 1 Avg</b>	0.79	<6.3	1.8 DNQ	49	550	10	21	41	<3.9	750	9,600	51,000	61,000		25	
<b>Plant 2 Max/Min*</b>	0.63	<5.6	3.1	44	560	16	19	36	<3.4	720	5,500	55,000	60,000	8.0	27	58
<b>Plant 2 Avg</b>	0.57	<5.6	3.0	44	550	16	19	36	<3.4	710	5,500	52,000	57,000		28	
<b>Table 1 (Max/Min)*</b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)**</b>	27	27	Out of Service	Out of Service	26	27	27	27	27	27	27
<b>Minimum Temperature (Min 95 °F)</b>	98	98	Out of Service	Out of Service	98	98	98	98	98	98	98

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)**</b>	21	21	21	22	Out of Service	Out of Service	22	Out of Service	Out of Service	22	22	Out of Service	23	21	21	21	Out of Service	22
<b>Minimum Temperature (Min 95 °F)</b>	98	99	99	98	Out of Service	Out of Service	99	Out of Service	Out of Service	100	99	Out of Service	98	98	98	99	Out of Service	99

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

\* Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

\*\* MCRT based on a 15-Day Rolling Average.



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: October 1- 31, 2019

### Certifications:

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Jim Spears  
Operations Manager

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Ron Coss

Ron Coss (Jan 13, 2020)

Ron Coss  
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### Reviewers:

Cindy Vellucci

Deirdre Bingman

Rachel Van Exel

Peter Park (Jan 8, 2020)

Peter Park

Lan C. Wiborg (Jan 8, 2020)

Lan Wiborg



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: November 1- 30, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

Sampling date(s): 11/12/19,11/19/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min<sup>1</sup></b>	0.69	<6.0	1.7 DNQ	49	510	14	20	35	<3.6	780	13,000	42,000	55,000	7.7	25	60
<b>Plant 1 Avg</b>	0.69	<6.0	1.3 DNQ	38	510	13	16	27	<3.6	640	11,000	41,000	53,000		26	
<b>Plant 2<sup>1</sup> Max/Min</b>	0.68	<6.1	2.9	52	490	23	18	36	<3.7	720	8,000	46,000	54,000	8.0	25	62
<b>Plant 2 Avg</b>	0.66	<6.1	2.2 DNQ	38	470	19	15	28	<3.7	590	7,200	46,000	53,000		27	
<b>Table 1 (Max/Min)<sup>1</sup></b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>3</sup></b>	23	22	334 <sup>2</sup>	Out of Service	28	22	22	22	22	22	22
<b>Minimum Temperature (Min 95 °F)</b>	98	98	98	Out of Service	98	98	98	98	98	98	98

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>3</sup></b>	21	20	21	21	Out of Service	Out of Service	21	Out of Service	Out of Service	21	21	34 <sup>4</sup>	Out of Service	21	21	20	Out of Service	21
<b>Minimum Temperature (Min 95 °F)</b>	98	98	99	98	Out of Service	Out of Service	98	Out of Service	Out of Service	98	99	98	Out of Service	98	100	100	Out of Service	98



## Biosolids Monthly Compliance Report

**Facility Name:** Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

**Monitoring Period:** November 1- 30, 2019

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

<sup>1</sup> Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

<sup>2</sup> Digester 8 went back in service on 11/26/19 and was fed CTS at 10 cuft/cycle.

<sup>3</sup> MCRT based on a 15-Day Rolling Average.

<sup>4</sup> Digester N was placed in service on 11/14/19.

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Jim Spears  
Operations Manager

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Ron Coss

Ron Coss (Jan 29, 2020)

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Cindy Vellucci

Cindy Vellucci

Deirdre Bingman

Rachel Van Exel

Rachel Van Exel

Peter Park

Peter Park (Jan 20, 2020)

Peter Park

Lan C. Wiborg

Lan C. Wiborg (Jan 23, 2020)

Lan Wiborg



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: December 1- 31, 2019

This notice and necessary information demonstrates compliance with requirements of the Code of Federal Regulations Title 40 Part 503 and the Arizona Administrative Code Title 18, Chapter 9, Article 10 for land application pollutant concentrations, Class B pathogen reduction via anaerobic digestion (40CFR 503.32(b)(3)(A)(3), AAC R18-9-1006(E)(5)), and vector attraction reduction via volatile solids reduction (40CFR 503.33(b)(1), AAC R18-9-1010(A)(1)).

Sampling date(s): 12/03/19, 12/10/19

	Mercury (mg/kg dry)	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Molybdenum (mg/kg dry)	Nickel (mg/kg dry)	Selenium (mg/kg dry)	Zinc (mg/kg dry)	Ammonia Nitrogen (mg/kg dry)	Organic Nitrogen (mg/kg dry)	Total Nitrogen (mg/kg dry)	pH	Total Solids (%)	VSR (%)
<b>Plant 1 Max/Min<sup>1</sup></b>	1.0	<6.2	1.7 DNQ	50	520	10	17	33	<3.8	740	11,000	39,000	50,000	7.9	25	75
<b>Plant 1 Avg</b>	0.86	<6.2	1.4 DNQ	41	520	9.8	14	33	<3.8	720	9,400	39,000	49,000		27	
<b>Plant 2 Max/Min<sup>1</sup></b>	0.50	<5.2	2.5	43	500	16	16	34	<3.2	700	8,100	46,000	52,000	7.8	29	55
<b>Plant 2 Avg</b>	0.47	<5.2	2.2	37	480	15	14	31	<3.2	700	7,200	45,000	52,000		30	
<b>Table 1 (Max/Min)<sup>1</sup></b>	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
<b>Table 3 (Avg)</b>	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>2</sup></b>	28	26	43 <sup>3</sup>	Out of Service	33 <sup>3</sup>	26	26	26	26	26	26
<b>Minimum Temperature (Min 95 °F)</b>	98	98	99	Out of Service	99	99	99	99	99	98	98

OCSD Plant 2	System Summary	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (Min 15 days)<sup>3</sup></b>	26	26	26	26	Out of Service	Out of Service	26	Out of Service	Out of Service	26	26	27	Out of Service	26	26	26	Out of Service	26
<b>Minimum Temperature (Min 95 °F)</b>	98	99	99	99	Out of Service	Out of Service	98	Out of Service	Out of Service	98	98	98	Out of Service	99	100	99	Out of Service	100



## Biosolids Monthly Compliance Report

Facility Name: Orange County Sanitation District Reclamation Plant #1, Fountain Valley, CA and Treatment Plant #2, Huntington Beach, CA

Monitoring Period: December 1- 31, 2019

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

<sup>1</sup> Maximum values are reported for metals and nitrogen parameters; minimum values are reported for pH, volatile solids reduction (VSR) and total solids. Analysis of pH is conducted to comply with AAC R18-9-1007(A)(1). The limit for total solids applies only if biosolids are sent to a California landfill, per CCR Title 27 Section 20220(c)(3).

<sup>2</sup> MCRT based on a 15-Day Rolling Average.

<sup>3</sup> Digester 8 came into service late in November. Digesters 8 and 10 were both fed less than the rest of the system causing higher detention times

### Certifications:

**NPDES permit:** *I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

**503 Class B:** *I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)(1) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.*

**Arizona Class B:** *I certify, under penalty of law, that the pollutant analyses and the description of pathogen treatment and vector attraction reduction activities have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.*

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Ron Coss

Ron Coss (Jan 29, 2020)

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Lan C. Wiborg (Jan 29, 2020)

Lan Wiborg





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# **SOLIDS MANAGEMENT PROGRAM**

**Introduction**  
**Biosolids Quality**

## SOLIDS MANAGEMENT PROGRAM

### 8.1 INTRODUCTION

This section provides an overview of OCSD's Biosolids Program, focusing on the biosolids quality with respect to metals. Biosolids are nutrient-rich, treated organic matter recovered through the treatment of wastewater. These solids are considered a resource because of their nutrient and energy values, and they are recyclable in part because of their low metal content. The pretreatment program is a key element in ensuring the recyclability of OCSD's biosolids by minimizing the discharge of heavy metals and other undesirable constituents into the collection system and ultimately the treated solids, which are used to fertilize farms.

OCSD's annual biosolids compliance report was completed, submitted to regulators, and posted online in February. Visit [OCSD.com/503](http://OCSD.com/503) to access the most recent document that contains Biosolids Program information, regulations, quantities, policies, guiding principles, and how and where biosolids are recycled.

### 8.2 BIOSOLIDS QUALITY

Biosolids quality plays an important role in ensuring the continued recyclability of OCSD's biosolids. OCSD's pretreatment program has been extremely effective in reducing and maintaining levels of pollutants (e.g., OCSD's influent sewage meets drinking water standards for the biosolids monitoring metals). The ceiling concentrations and EQ (exceptional quality) concentrations promulgated by the EPA's biosolids regulations (40 CFR 503) are presented in the figures as a reference. For FY 2018/19, OCSD biosolids met the EQ limits for all the regulated parameters.

<b>TABLE 8.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2010-2019</b> (Concentration in mg/kg, dry weight) Orange County Sanitation District, Resource Protection Division								
Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg	Min.	Max	Avg.
Arsenic		41						
	2009-10		2.0	10	5.2	4.4	10	7.2
	2010-11		7.2	9.7	8.4	8.6	12	10
	2011-12		2.3	11	7.4	6.6	66	22
	2012-13		0	7.8	4.7	2.0	10	7.0
	2013-14*		3.5	9.5	5.8	5.4	11	8.4
	2014-15		4.5	11	7.2	7.8	12	9.3
	2015-16*		6.3	12	8.3	6.2	12	9.2
	2016-17*		6.7	12	8.1	5.6	12	8.6
	2017-18*		7.2	16	9.9	7.9	16	11
2018-19*		7.3	23.5	16	9.4	23.5	18	

<b>TABLE 8.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2010-2019</b> <b>(Concentration in mg/kg, dry weight)</b> Orange County Sanitation District, Resource Protection Division								
Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Cadmium		39						
	2009-10		1.1	4.4	2.9	1.0	4.8	2.8
	2010-11		1.2	3.8	2.6	1.4	5.0	2.5
	2011-12		0.8	6.0	3.8	1.1	4.4	3.6
	2012-13		2.6	7.8	4.7	1.9	4.4	3.1
	2013-14*		1.6	11	3.9	2.1	6.0	3.5
	2014-15		2.7	7.8	5.1	3.1	5.8	4.0
	2015-16*		1.3	4.7	2.5	2.0	4.5	3.0
	2016-17		2.6	3.1	2.3	2.0	3.8	3.0
	2017-18*		1.7	4.4	3.0	2.5	7.7	5.1
2018-19*		1.2	3.0	1.6	2.7	8.4	4.2	
Chromium		**						
	2009-10		29	56	44	30	54	47
	2010-11		41	58	47	50	66	59
	2011-12		42	74	52	40	70	56
	2012-13		42	56	49	42	59	49
	2013-14		39	52	45	40	53	46
	2014-15		30	51	40	34	70	46
	2015-16		31	89	46	28	60	46
	2016-17		30	89	49	29	67	46
	2017-18		27	38	34	38	54	44
2018-19		29	58	39	32	53	45	
Copper		1,500						
	2009-10		420	620	540	370	560	500
	2010-11		520	600	570	500	720	570
	2011-12		430	670	520	380	720	520
	2012-13		480	640	540	500	640	540
	2013-14		460	540	510	470	540	500
	2014-15		320	570	470	320	560	470
	2015-16		380	560	460	340	570	480
	2016-17		400	560	460	340	570	490
	2017-18		320	500	420	380	590	460
2018-19		355	600	470	335	665	510	

<b>TABLE 8.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2010-2019</b> <b>(Concentration in mg/kg, dry weight)</b> Orange County Sanitation District, Resource Protection Division								
Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Lead		300						
	2009-10		9.0	44	23	9.0	20	17
	2010-11		21	24	23	9.0	30	20
	2011-12		ND	25	9.0	ND	32	13
	2012-13		7.5	19	15	7.5	17	14
	2013-14*		13	17.5	14	13	17	14
	2014-15*		8.7	15	13	9.0	17	13
	2015-16*		8.3	20	12	8.0	17	13
	2016-17*		7.9	20	11	7.5	17	12
	2017-18*		8.9	19	12	10	16	13
2018-19		9.9	15	12	10.4	15	13	
Mercury		17						
	2009-10		1.0	3.2	1.4	0.9	1.6	1.3
	2010-11		0.8	2.2	1.3	0.8	2.3	1.2
	2011-12		0.8	1.4	1.2	0.8	2.6	1.3
	2012-13		0.7	4.1	1.5	0.8	3.8	1.4
	2013-14		0.8	1.2	1.0	0.7	2.8	1.4
	2014-15		1.0	1.5	1.1	1.0	1.5	1.0
	2015-16		0.6	1.7	0.93	0.64	1.2	1.0
	2016-17		0.53	1.7	0.90	0.70	1.2	0.90
	2017-18		0.66	1.1	0.85	0.34	1.1	0.79
2018-19		0.6	1.1	0.86	0.6	1.0	0.77	
Molybdenum		**						
	2008-09		12	16	15	8.0	16	14
	2009-10		6.0	16	13	6.0	14	10
	2010-11		12	19	15	4.8	18	14
	2011-12		6.5	18	13	12	20	17
	2012-13		9.8	20	14	12	20	15
	2013-14		12	18	15	14	18	15
	2014-15		9.4	18	15	12	20	16
	2015-16*		11	18	15	11	23	16
	2016-17		12	18	15	11	23	16
	2017-18*		10	16	14	13	18	15
	2018-19		13	20	16	15	22	18

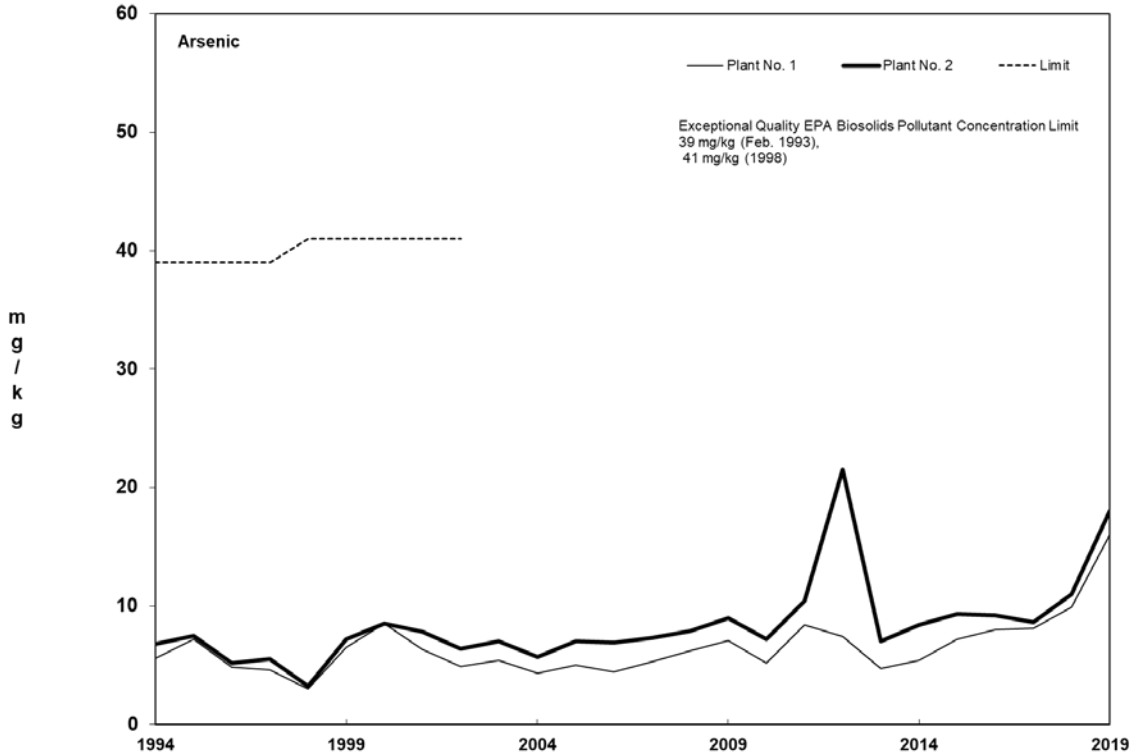
<b>TABLE 8.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2010-2019</b> <b>(Concentration in mg/kg, dry weight)</b> Orange County Sanitation District, Resource Protection Division								
Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Nickel		420						
	2009-10		12	36	28	9	27	21
	2010-11		28	46	37	14	38	32
	2011-12		15	48	35	20	39	31
	2012-13		34	48	40	23	41	30
	2013-14		36	55	43	28	56	37
	2014-15		26	47	37	26	41	34
	2015-16*		29	45	38	20	41	33
	2016-17		25	45	36	21	41	32
	2017-18		28	37	32	31	39	34
2018-19		23	44	33	29	44	37	
Selenium		100						
	2009-10		2.7	18	7.3	2.8	16	5.6
	2010-11		2.8	26	11	3.7	26	9.8
	2011-12		ND	26	9.0	ND	19	9.0
	2012-13		0	20	9.0	0	20	8.0
	2013-14*		3.5	13	7.9	4.2	13	8.3
	2014-15*		4.1	13	7.1	4.5	15	7.3
	2015-16*		4.4	11	8.1	3.7	10	7.6
	2016-17*		4.1	10	8.4	4.8	10	8.0
	2017-18*		3.0	7.8	4.9	2.7	8.0	4.9
2018-19*		2.5	48	6.6	2.3	2.9	2.7	
Silver		**						
	2009-10		10	18	15	7.4	13	10
	2010-11		10	17	13	5.2	12	9.6
	2011-12		7	14	10	4.0	12	8.5
	2012-13		6.2	14	8.6	6.4	13	8.6
	2013-14*		2.9	7.6	5.3	3.6	9.1	6.3
	2014-15*		3.3	7.8	5.8	3.4	8.6	6.5
	2015-16*		2.4	7.7	5.6	2.5	7.9	5.6
	2016-17*		2.7	5.6	4.4	2.5	6.8	4.9
	2017-18*		3.2	5.1	3.9	3.7	5	4.2
2018-19*		2.9	5.1	4.0	3.5	5.8	4.3	

<b>TABLE 8.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2010-2019</b> <b>(Concentration in mg/kg, dry weight)</b> Orange County Sanitation District, Resource Protection Division								
Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Zinc		2,800						
	2009-10		560	810	740	520	790	710
	2010-11		630	740	700	700	830	740
	2011-12		560	880	710	560	910	750
	2012-13		640	860	720	680	880	770
	2013-14		590	730	670	620	750	700
	2014-15		420	720	620	470	740	670
	2015-16		500	770	620	520	890	730
	2016-17		550	770	610	520	890	740
	2017-18		470	680	600	590	910	720
	2018-19		515	805	604	500	790	720

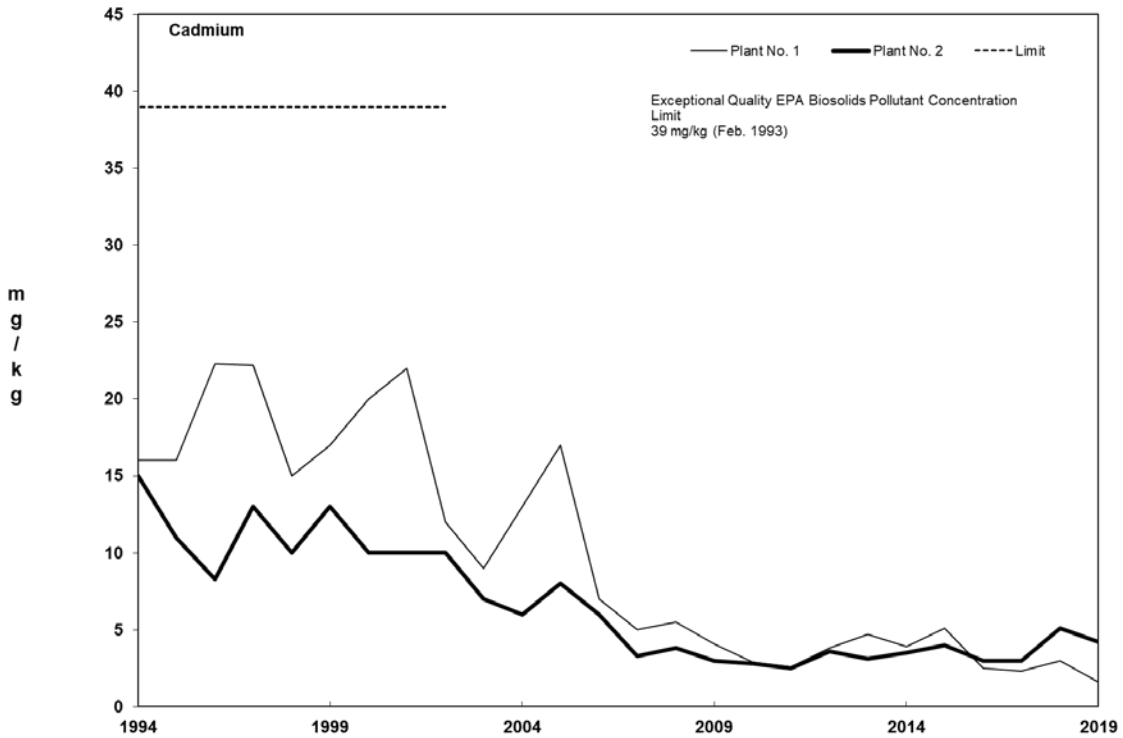
\*Calculations included data below the reporting limit, but above the method detection limit, and were therefore flagged as “detected not quantified” or the method detection limit was substituted for non-detect values.

\*\*EPA’s extensive health risk analysis determined that no limits were needed for these metals (EPA 40CFR 503).

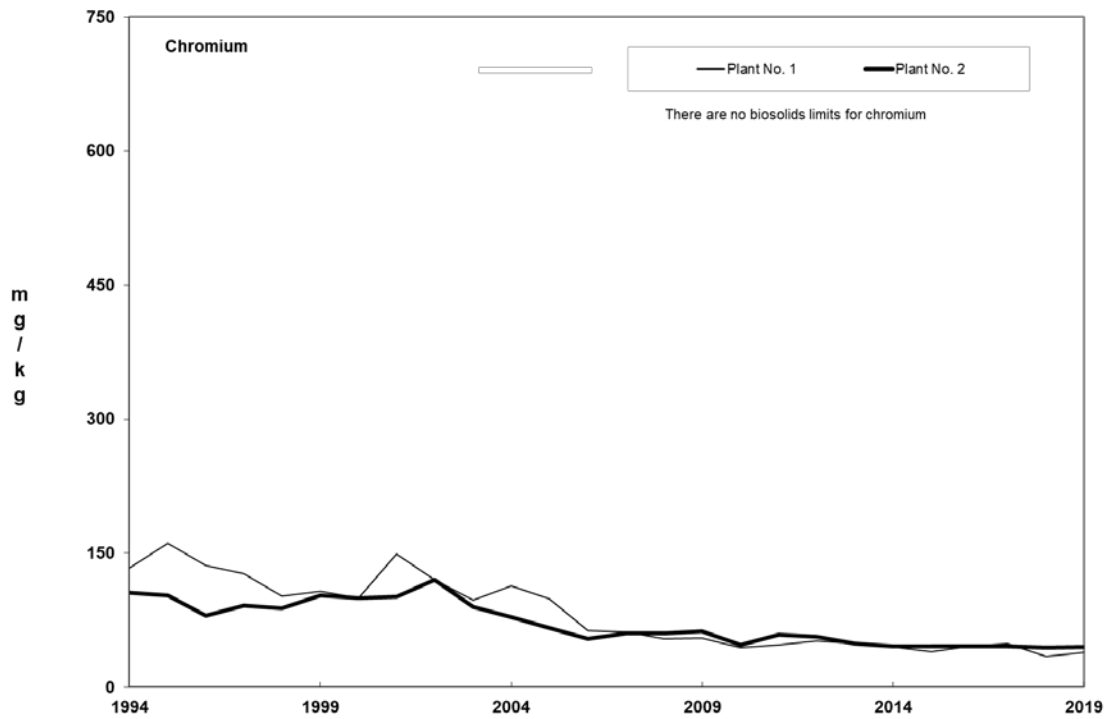




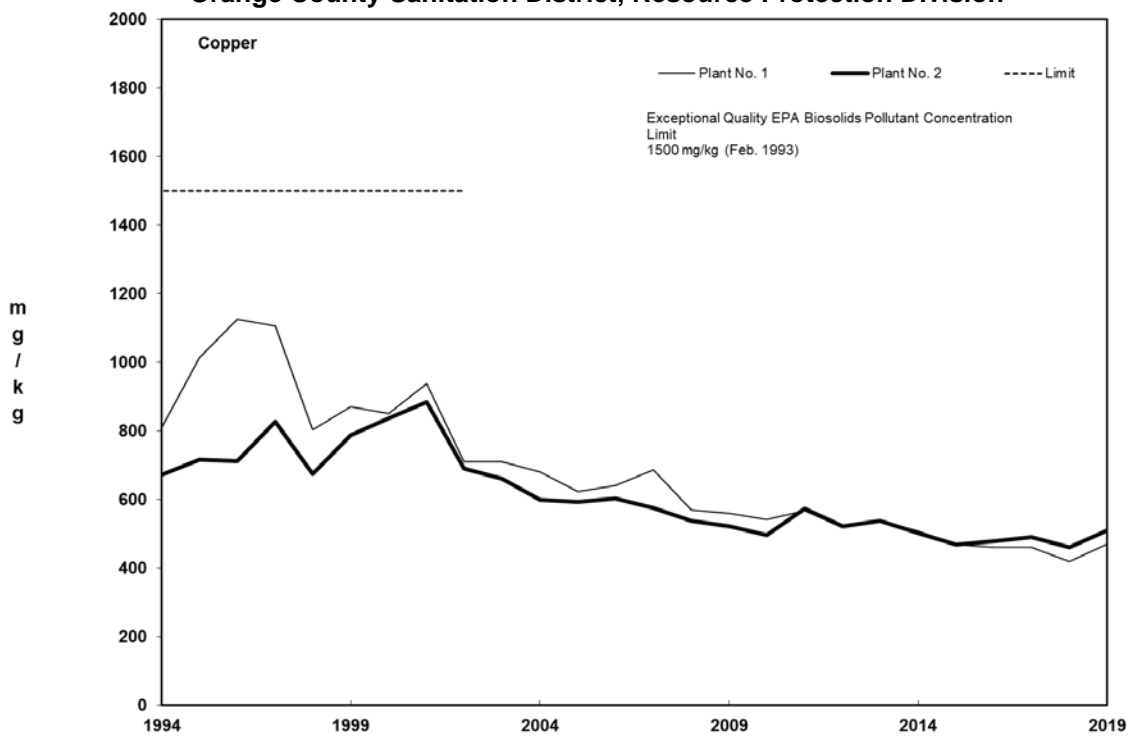
**Figure 8-1 Trends in Concentrations of Arsenic in Biosolids, Fiscal Years 1994-2019 Orange County Sanitation District, Resource Protection Division**



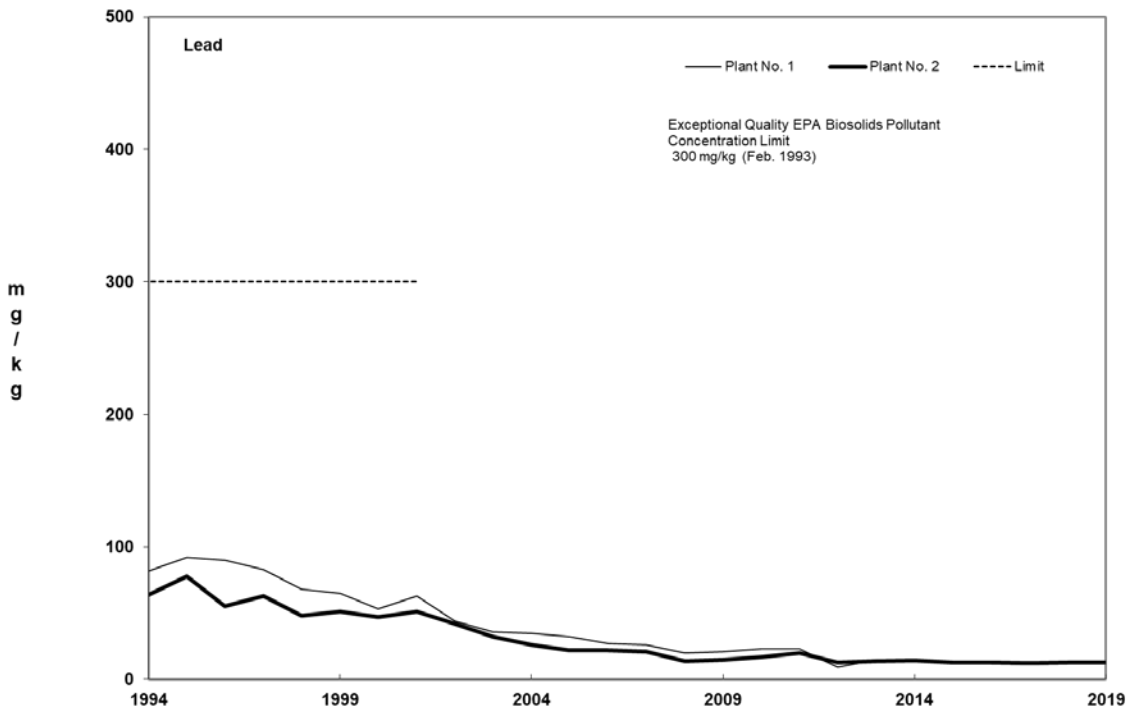
**Figure 8-2 Trends in Concentrations of Cadmium in Biosolids, Fiscal Years 1994-2019 Orange County Sanitation District, Resource Protection Division**



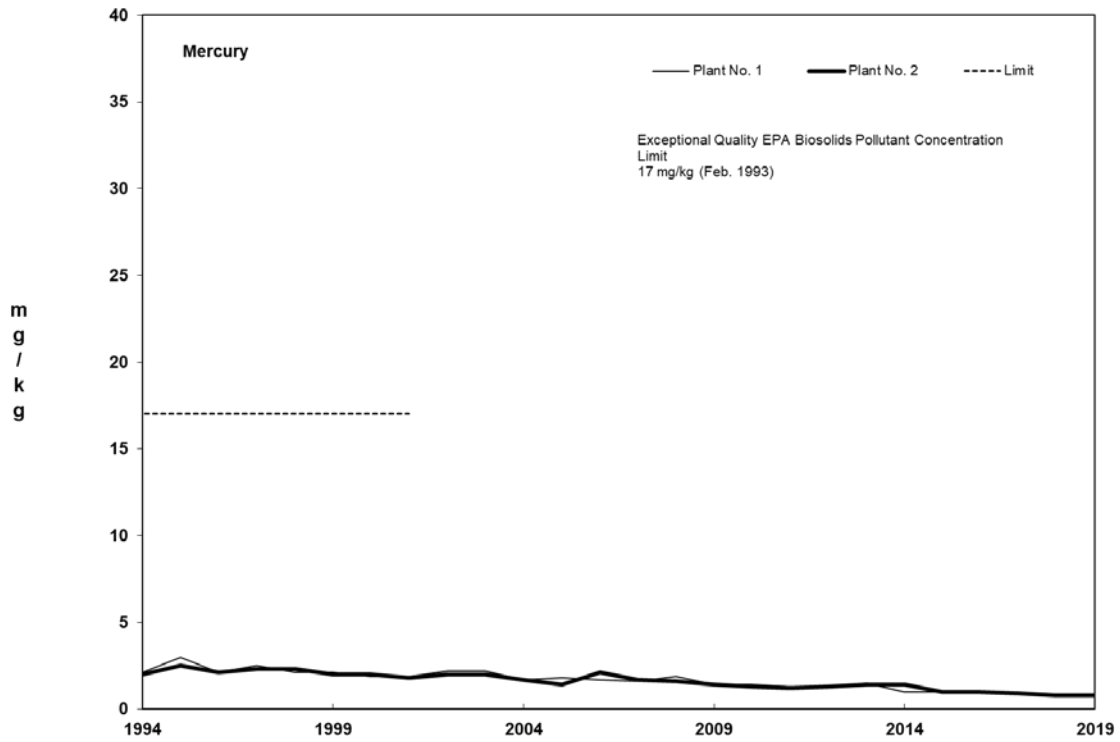
**Figure 8-3 Trends in Concentrations of Chromium in Biosolids, Fiscal Years 1994-2019 Orange County Sanitation District, Resource Protection Division**



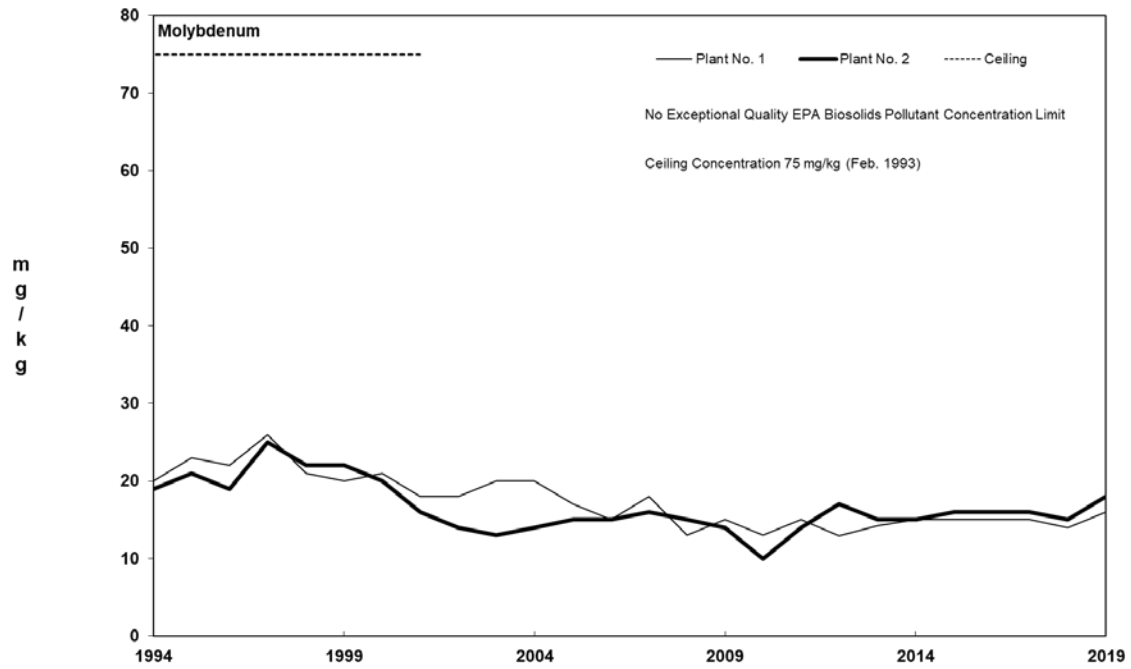
**Figure 8-4 Trends in Concentrations of Copper in Biosolids, Fiscal Years 1994-2019 Orange County Sanitation District, Resource Protection Division**



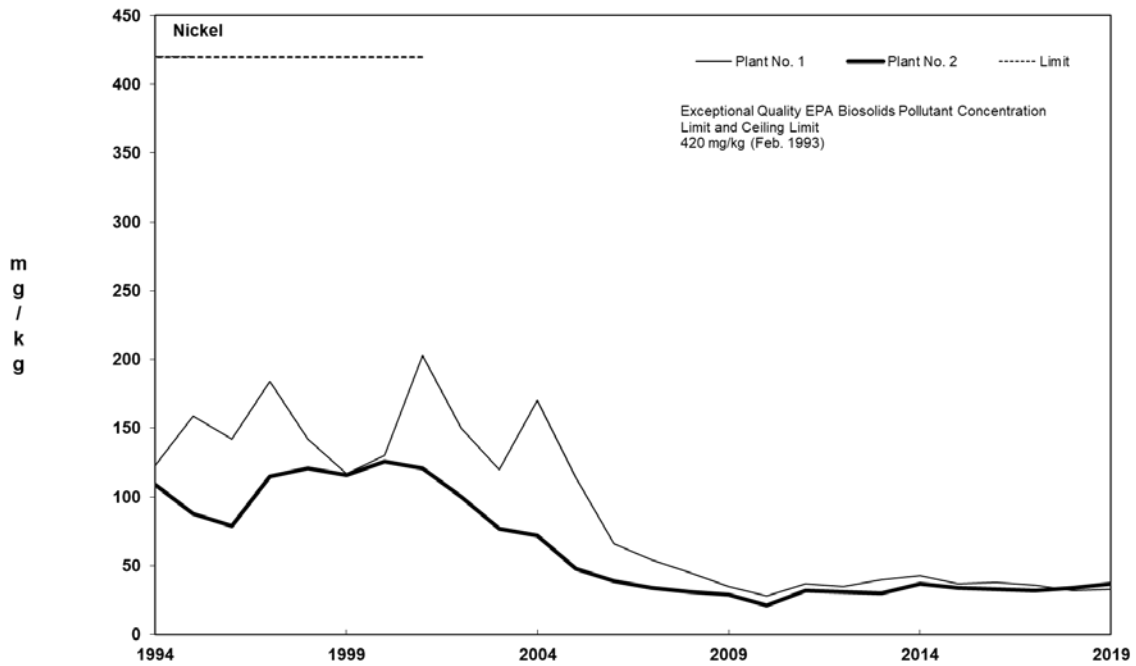
**Figure 8-5 Trends in Concentrations of Lead in Biosolids, Fiscal Years 1994-2019 Orange County Sanitation District, Resource Protection Division**



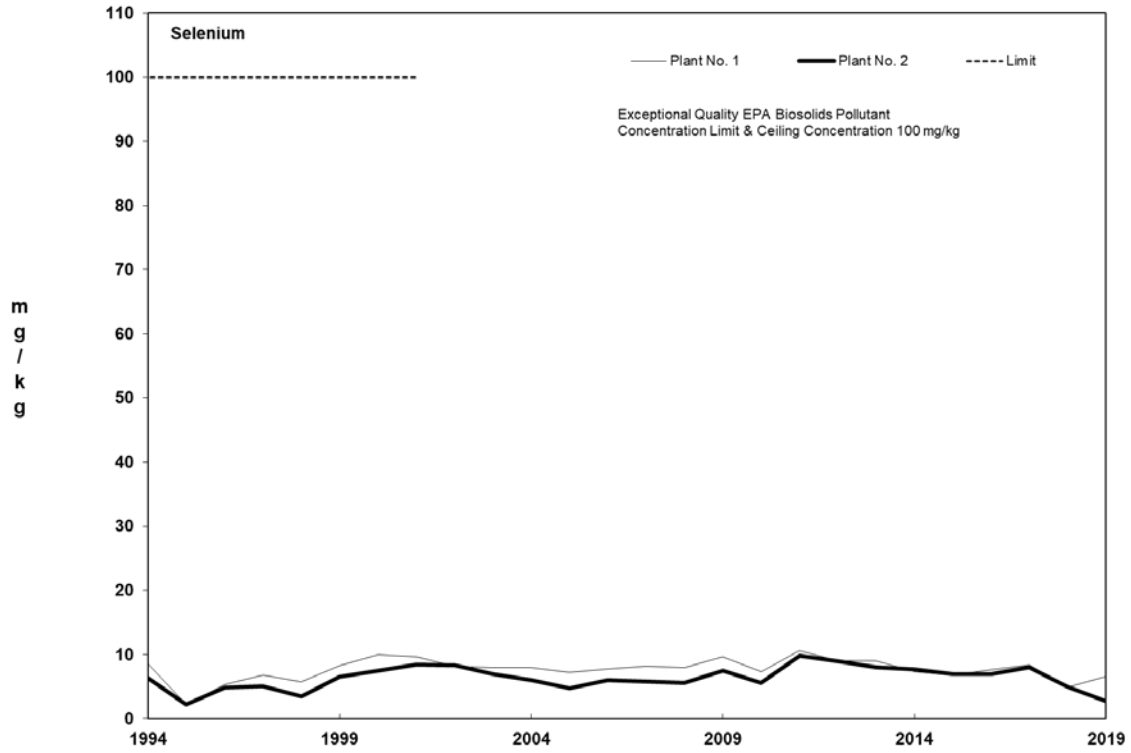
**Figure 8-6 Trends in Concentrations of Mercury in Biosolids, Fiscal Years 1994-2019 Orange County Sanitation District, Resource Protection Division**



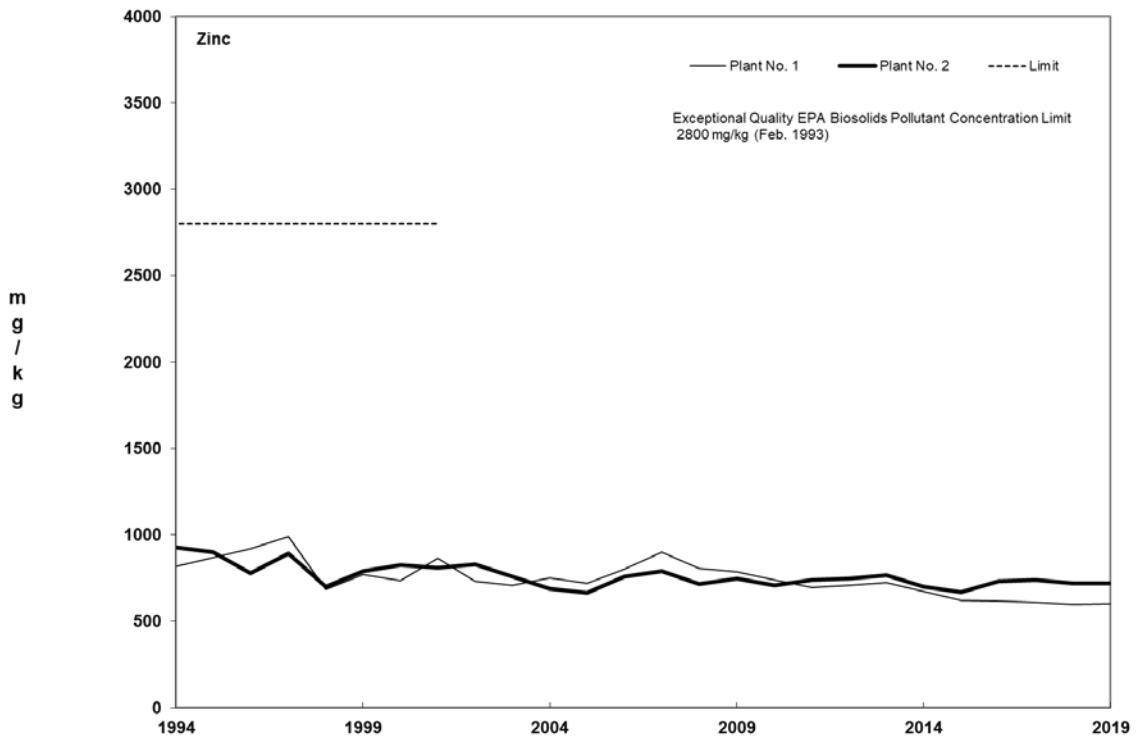
**Figure 8-7 Trends in Concentrations of Molybdenum in Biosolids, Fiscal Years 1994-2019 Orange County Sanitation District, Resource Protection Division**



**Figure 8-8 Trends in Concentrations of Nickel in Biosolids, Fiscal Years, 1994-2019 Orange County Sanitation District, Resource Protection Division**



**Figure 8-9 Trends in Concentrations of Selenium in Biosolids, Fiscal Years 1994-2019 Orange County Sanitation District, Resource Protection Division**



**Figure 8-10 Trends in Concentrations of Zinc in Biosolids, Fiscal Years 1994-2019 Orange County Sanitation District, Resource Protection Division**

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**Summary of Priority Pollutants and  
Trace Constituents Analysis in Biosolids**

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## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
General Chemistry	Ammonia-N	SM 4500 NH3 G	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	5500	240	1200		
					01/29/2019	5400	220	1100		
					02/19/2019	5100	210	1100		
					02/26/2019	5000	200	1000		
					03/19/2019	4900	200	1000		
					03/26/2019	5200	220	1100		
					04/09/2019	5200	210	1100		
					04/16/2019	6000	230	1200		
					05/21/2019	11000	400	2000		
					05/28/2019	12000	440	2200		
					06/04/2019	9800	460	2300		
					06/11/2019	8600	400	2000		
					07/16/2019	7500	170	220		
					07/23/2019	13000	410	2100		
					08/20/2019	12000	1000	5200		
					08/27/2019	8700	990	5000		
					09/17/2019	12000	390	2000		
					09/24/2019	13000	380	1900		
					10/15/2019	7200	160	210		
					10/22/2019	12000	410	2100		
					11/12/2019	9600	190	970		
		11/19/2019	13000	970	4800					
		12/03/2019	7700	350	1800					
		12/10/2019	11000	400	2000					
		Annual Mean	8800							
		Annual Max	13000							
			SM 4500 NH3 G		mg/kg dry weight	Plant 2 Cake	01/22/2019	5300	220	1100
							01/29/2019	6300	250	1300
							02/19/2019	6000	240	1200
	02/26/2019	6100					250	1300		
	03/19/2019	6100					260	1300		
	03/26/2019	5900					240	1200		
	04/09/2019	5500					240	1200		
	Annual Mean	5900								
	Annual Max	6300								

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		SM 4500 NH3 G	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	4400	180	890
					05/22/2019	12000	430	2200
					05/28/2019	7300	290	1400
					06/04/2019	6500	210	1000
					06/11/2019	6700	170	870
					07/16/2019	6900	170	220
					07/23/2019	8400	190	960
					08/20/2019	10000	1000	5100
					08/27/2019	7800	850	4300
					09/17/2019	8600	180	890
					09/24/2019	8300	170	860
					10/15/2019	5400	150	190
					10/22/2019	5500	180	900
					11/12/2019	6300	200	990
					11/19/2019	8000	360	1800
					12/03/2019	8100	170	840
					12/10/2019	6300	170	850
					Annual Mean	7400		
					Annual Max	12000		
Fluoride	EPA 300.0	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	26	17	24	
				04/09/2019	150	15	22	
				07/16/2019	140	1.6	16	
				Annual Mean	110			
				Annual Max	150			
	EPA 300.0	mg/kg dry weight	Plant 2 Cake	01/22/2019	26	16	22	
				04/09/2019	65	17	24	
				Annual Mean	46			
	EPA 300.0	mg/kg dry weight	Plant 2 Dewatering Cake	07/16/2019	160	1.6	16	
				Annual Mean	160			
	Annual Max	160						
	Hexavalent Chromium	EPA 7196A	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	ND	60	120
04/09/2019					ND	54	110	
07/16/2019					ND	4.1	8.3	
10/15/2019					ND	2.0	4.0	
Annual Mean					<60			
Annual Max					<60			
EPA 7196A		mg/kg dry weight	Plant 2 Cake	01/22/2019	ND	56	110	
				04/09/2019	ND	60	120	
				Annual Mean	<60			
				Annual Max	<60			
EPA 7196A		mg/kg dry weight	Plant 2 Dewatering Cake	07/16/2019	ND	4.1	8.2	
				10/15/2019	ND	1.8	3.6	
				Annual Mean	<4.1			
				Annual Max	<4.1			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
	Kjeldahl Nitrogen	EPA 351.2	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	60000	6400	8600		
					01/29/2019	55000	5300	7000		
					02/19/2019	55000	6000	8000		
					02/26/2019	48000	6200	8200		
					03/19/2019	64000	7300	9700		
					03/26/2019	60000	7500	10000		
					04/09/2019	59000	7300	9800		
					04/16/2019	71000	5800	7700		
					05/21/2019	60000	7400	9800		
					05/28/2019	57000	5500	7400		
					06/04/2019	58000	6300	8400		
					06/11/2019	55000	5600	7500		
					07/16/2019	73000	1300	3800		
					07/23/2019	58000	4900	6500		
					08/20/2019	56000	4700	6300		
					08/27/2019	55000	5100	6800		
					09/17/2019	53000	4800	6400		
					09/24/2019	55000	5500	7300		
					10/15/2019	66000	1300	3800		
					10/22/2019	55000	7500	10000		
		11/12/2019	50000	5300	7100					
		11/19/2019	55000	6300	8400					
		12/03/2019	47000	6100	8100					
		12/10/2019	50000	7400	9900					
		Annual Mean	57000							
		Annual Max	73000							
				EPA 351.2	mg/kg dry weight	Plant 2 Cake	01/22/2019	44000	4800	6400
							01/29/2019	50000	9900	13000
02/19/2019	51000						6900	9200		
02/26/2019	46000						7000	9400		
03/19/2019	61000						8200	11000		
03/26/2019	53000						8800	12000		
04/09/2019	57000						6400	8500		
Annual Mean	52000									
Annual Max	61000									

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL				
		EPA 351.2	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	64000	5000	6600				
					05/22/2019	52000	7700	10000				
					05/28/2019	37000	5600	7500				
					06/04/2019	49000	8400	11000				
					06/11/2019	45000	5500	7300				
					07/16/2019	64000	1300	3800				
					07/23/2019	53000	4900	6600				
					08/20/2019	50000	4600	6100				
					08/27/2019	38000	3600	4900				
					09/17/2019	48000	4300	5800				
					09/24/2019	49000	5400	7200				
					10/15/2019	60000	1200	3400				
					10/22/2019	54000	6200	8300				
					11/12/2019	51000	5100	6800				
					11/19/2019	54000	5700	7600				
					12/03/2019	51000	4600	6100				
					12/10/2019	52000	5300	7000				
					Annual Mean	51000						
					Annual Max	64000						
					Nitrate-N	EPA 300.0	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	ND	3.9	5.3
									01/29/2019	ND	3.6	4.9
02/19/2019	ND	3.4	4.7									
02/26/2019	ND	3.2	4.4									
03/19/2019	ND	3.3	4.6									
03/26/2019	ND	3.6	5.0									
04/09/2019	9.3	3.5	4.8									
04/16/2019	ND	3.8	5.2									
05/21/2019	ND	3.2	4.5									
05/28/2019	ND	3.6	4.9									
06/04/2019	ND	3.7	5.1									
06/11/2019	ND	3.2	4.4									
07/16/2019	ND	2.1	4.1									
07/23/2019	ND	3.3	4.6									
08/20/2019	ND	3.3	4.6									
08/27/2019	ND	3.2	4.4									
09/17/2019	ND	3.2	4.4									
09/24/2019	ND	3.1	4.3									
10/15/2019	ND	2.0	3.9									
10/22/2019	ND	3.3	4.6									
11/12/2019	ND	3.2	4.3									
11/19/2019	ND	3.1	4.3									
12/03/2019	ND	2.8	3.9									
12/10/2019	ND	3.3	4.5									
Annual Mean	3.5 DNQ											
Annual Max	9.3											

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 300.0	mg/kg dry weight	Plant 2 Cake	01/22/2019	ND	3.6	4.9
					01/29/2019	ND	4.1	5.6
					02/19/2019	ND	3.9	5.3
					02/26/2019	ND	4.0	5.6
					03/19/2019	ND	4.3	5.9
					03/26/2019	ND	4.0	5.5
					04/09/2019	ND	3.8	5.2
					Annual Mean	<4.3		
					Annual Max	<4.3		
		EPA 300.0	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	ND	2.9	4.0
					05/22/2019	ND	3.5	4.8
					05/28/2019	ND	2.3	3.2
					06/04/2019	ND	3.4	4.6
					06/11/2019	ND	2.8	3.9
					07/16/2019	ND	2.1	4.1
					07/23/2019	ND	3.1	4.3
					08/20/2019	ND	3.3	4.6
					08/27/2019	ND	2.2	3.1
					09/17/2019	ND	2.9	4.0
					09/24/2019	ND	2.8	3.8
					10/15/2019	ND	1.8	3.5
					10/22/2019	ND	2.9	4.0
11/12/2019	ND	3.2	4.4					
11/19/2019	ND	2.9	4.0					
12/03/2019	ND	2.7	3.7					
12/10/2019	ND	2.8	3.8					
Annual Mean	<3.5							
Annual Max	<3.5							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Nitrite-N	EPA 300.0	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	ND	5.3	7.3
					01/29/2019	ND	4.9	6.7
					02/19/2019	ND	4.7	6.4
					02/26/2019	ND	4.4	6.0
					03/19/2019	ND	4.6	6.2
					03/26/2019	ND	5.0	6.8
					04/09/2019	ND	4.8	6.5
					04/16/2019	26	5.2	7.1
					05/21/2019	ND	4.5	6.1
					05/28/2019	ND	4.9	6.7
					06/04/2019	ND	5.1	6.9
					06/11/2019	ND	4.4	6.0
					07/16/2019	1.6 DNQ	1.3	4.1
					07/23/2019	ND	4.6	6.3
					08/20/2019	ND	4.6	6.3
					08/27/2019	9.0	4.4	6.0
					09/17/2019	ND	4.4	5.9
					09/24/2019	ND	4.3	5.8
					10/15/2019	1.4 DNQ	1.2	3.9
					10/22/2019	ND	4.6	6.2
					11/12/2019	ND	4.3	5.9
					11/19/2019	ND	4.3	5.9
					12/03/2019	ND	3.9	5.3
					12/10/2019	ND	4.5	6.1
		Annual Mean	5.4 DNQ					
		Annual Max	26					
		EPA 300.0	mg/kg dry weight	Plant 2 Cake	01/22/2019	ND	4.9	6.7
					01/29/2019	ND	5.6	7.7
					02/19/2019	ND	5.3	7.2
					02/26/2019	ND	5.6	7.6
		03/19/2019	ND		5.9	8.0		
		03/26/2019	ND		5.5	7.5		
		04/09/2019	ND		5.2	7.1		
Annual Mean	<5.9							
Annual Max	<5.9							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 300.0	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	ND	4.0	5.4
					05/22/2019	ND	4.8	6.6
					05/28/2019	ND	3.2	4.3
					06/04/2019	ND	4.6	6.3
					06/11/2019	ND	3.9	5.3
					07/16/2019	ND	1.3	4.1
					07/23/2019	ND	4.3	5.8
					08/20/2019	ND	4.6	6.3
					08/27/2019	ND	3.1	4.2
					09/17/2019	ND	4.0	5.5
					09/24/2019	ND	3.8	5.2
					10/15/2019	ND	1.1	3.5
					10/22/2019	ND	4.0	5.5
					11/12/2019	ND	4.4	6.0
					11/19/2019	ND	4.0	5.5
					12/03/2019	ND	3.7	5.0
					12/10/2019	ND	3.8	5.2
					Annual Mean	<4.8		
					Annual Max	<4.8		
					Organic Lead	HML 939-M	mg/kg dry weight	Plant 1 Dewatering Cake
04/09/2019	ND	0.21	0.24					
07/16/2019	ND	0.028	0.041					
10/15/2019	ND	0.051	0.073					
Annual Mean	<0.30							
Annual Max	<0.30							
HML 939-M	mg/kg dry weight	Plant 2 Cake	01/22/2019	ND		0.30	0.35	
			04/09/2019	ND		0.24	0.28	
			Annual Mean	<0.30				
			Annual Max	<0.30				
HML 939-M	mg/kg dry weight	Plant 2 Dewatering Cake	07/16/2019	ND		0.027	0.040	
			10/15/2019	ND		0.049	0.071	
			Annual Mean	<0.049				
			Annual Max	<0.049				

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Organic Nitrogen	CALC	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	55000	--	--
					01/29/2019	50000	--	--
					02/19/2019	50000	--	--
					02/26/2019	43000	--	--
					03/19/2019	59000	--	--
					03/26/2019	55000	--	--
					04/09/2019	54000	--	--
					04/16/2019	65000	--	--
					05/21/2019	49000	--	--
					05/28/2019	45000	--	--
					06/04/2019	48000	--	--
					06/11/2019	46000	--	--
					07/16/2019	66000	--	--
					07/23/2019	45000	--	--
					08/20/2019	44000	--	--
					08/27/2019	46000	--	--
					09/17/2019	41000	--	--
					09/24/2019	42000	--	--
					10/15/2019	59000	--	--
					10/22/2019	43000	--	--
					11/12/2019	40000	--	--
					11/19/2019	42000	--	--
					12/03/2019	39000	--	--
		12/10/2019	39000	--	--			
		Annual Mean	49000					
		Annual Max	66000					
		CALC	mg/kg dry weight	Plant 2 Cake	01/22/2019	39000	--	--
					01/29/2019	44000	--	--
					02/19/2019	45000	--	--
					02/26/2019	40000	--	--
					03/19/2019	55000	--	--
					03/26/2019	47000	--	--
					04/09/2019	52000	--	--
			Annual Mean	46000				
			Annual Max	55000				



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		CALC	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	60000	--	--
					05/22/2019	40000	--	--
					05/28/2019	30000	--	--
					06/04/2019	43000	--	--
					06/11/2019	38000	--	--
					07/16/2019	57000	--	--
					07/23/2019	45000	--	--
					08/20/2019	40000	--	--
					08/27/2019	30000	--	--
					09/17/2019	39000	--	--
					09/24/2019	41000	--	--
					10/15/2019	55000	--	--
					10/22/2019	49000	--	--
					11/12/2019	45000	--	--
					11/19/2019	46000	--	--
					12/03/2019	43000	--	--
					12/10/2019	46000	--	--
					Annual Mean	44000		
					Annual Max	60000		
					pH		EPA 9045C	pH units
01/29/2019	7.6	0.10	0.1					
02/19/2019	7.6	0.10	0.1					
02/26/2019	7.8	0.10	0.1					
03/19/2019	7.8	0.10	0.1					
03/26/2019	7.8	0.10	0.1					
04/09/2019	8.0	0.10	0.1					
04/16/2019	7.8	0.10	0.1					
05/21/2019	8.0	0.10	0.1					
05/28/2019	7.7	0.10	0.1					
06/04/2019	7.6	0.10	0.1					
06/11/2019	7.7	0.10	0.1					
07/16/2019	7.9	1.7	1.7					
07/23/2019	8.1	0.10	0.1					
08/20/2019	8.2	0.10	0.1					
08/27/2019	8.1	0.10	0.1					
09/17/2019	8.2	0.10	0.1					
09/24/2019	8.1	0.10	0.1					
10/15/2019	8.0	1.7	1.7					
10/22/2019	7.9	0.10	0.1					
11/12/2019	8.4	0.10	0.1					
11/19/2019	7.7	0.10	0.1					
12/03/2019	8.2	0.10	0.1					
12/10/2019	7.9	0.10	0.1					
Annual Mean	7.9							
Annual Max	8.4							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 9045C	pH units	Plant 2 Cake	01/22/2019	7.9	0.10	0.1
					01/29/2019	7.6	0.10	0.1
					02/19/2019	7.7	0.10	0.1
					02/26/2019	8.0	0.10	0.1
					03/19/2019	8.0	0.10	0.1
					03/26/2019	8.0	0.10	0.1
					04/09/2019	8.1	0.10	0.1
					Annual Mean	7.9		
					Annual Max	8.1		
		EPA 9045C	pH units	Plant 2 Dewatering Cake	04/16/2019	7.8	0.10	0.1
					05/22/2019	8.3	0.10	0.1
					05/28/2019	7.9	0.10	0.1
					06/04/2019	7.7	0.10	0.1
					06/11/2019	7.8	0.10	0.1
					07/16/2019	7.8	1.7	1.7
					07/23/2019	8.0	0.10	0.1
					08/20/2019	8.2	0.10	0.1
					08/27/2019	8.1	0.10	0.1
					09/17/2019	8.1	0.10	0.1
					09/24/2019	8.1	0.10	0.1
					10/15/2019	8.1	1.7	1.7
					10/22/2019	8.0	0.10	0.1
					11/12/2019	8.1	0.10	0.1
					11/19/2019	8.0	0.10	0.1
					12/03/2019	8.0	0.10	0.1
					12/10/2019	7.8	0.10	0.1
					Annual Mean	8.0		
Annual Max	8.3							
TETRAETHYL LEAD	HML 939-M	mg/kg dry weight	Plant 1 Dewatering Cake	10/15/2019	ND	0.036	0.073	
				Annual Mean	<0.036			
				Annual Max	<0.036			
	HML 939-M	mg/kg dry weight	Plant 2 Dewatering Cake	10/15/2019	ND	0.034	0.071	
				Annual Mean	<0.034			
				Annual Max	<0.034			
TETRAMETHYL LEAD	HML 939-M	mg/kg dry weight	Plant 1 Dewatering Cake	10/15/2019	ND	0.051	0.073	
				Annual Mean	<0.051			
				Annual Max	<0.051			
	HML 939-M	mg/kg dry weight	Plant 2 Dewatering Cake	10/15/2019	ND	0.049	0.071	
				Annual Mean	<0.049			
				Annual Max	<0.049			
Total Cyanide	EPA 9014	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	ND	2.1	2.5	
				04/09/2019	ND	1.8	2.1	
				07/16/2019	12	0.33	0.78	
				10/15/2019	5.3	1.5	3.6	
				Annual Mean	5.3 DNQ			
				Annual Max	12			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
		EPA 9014	mg/kg dry weight	Plant 2 Cake	01/22/2019	ND	1.9	2.2			
					04/09/2019	ND	2.0	2.4			
					Annual Mean	<2.0					
					Annual Max	<2.0					
		EPA 9014	mg/kg dry weight	Plant 2 Dewatering Cake	07/16/2019	9.7	0.33	0.78			
					10/15/2019	7.0	1.4	3.4			
					Annual Mean	8.4					
					Annual Max	9.7					
		Total Nitrogen	CALC	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	60000	--	--		
						01/29/2019	55000	--	--		
						02/19/2019	55000	--	--		
						02/26/2019	48000	--	--		
						03/19/2019	64000	--	--		
						03/26/2019	60000	--	--		
04/09/2019	59000					--	--				
04/16/2019	71000					--	--				
05/21/2019	60000					--	--				
05/28/2019	57000					--	--				
06/04/2019	58000					--	--				
06/11/2019	55000					--	--				
07/16/2019	73000					--	--				
07/23/2019	58000					--	--				
08/20/2019	56000					--	--				
08/27/2019	55000					--	--				
09/17/2019	53000					--	--				
09/24/2019	55000					--	--				
10/15/2019	66000					--	--				
10/22/2019	55000					--	--				
11/12/2019	50000					--	--				
11/19/2019	55000					--	--				
12/03/2019	47000	--	--								
12/10/2019	50000	--	--								
		Annual Mean		57000							
		Annual Max		73000							
		CALC	mg/kg dry weight	Plant 2 Cake	01/22/2019	44000	--	--			
					01/29/2019	50000	--	--			
					02/19/2019	51000	--	--			
					02/26/2019	46000	--	--			
					03/19/2019	61000	--	--			
					03/26/2019	53000	--	--			
					04/09/2019	57000	--	--			
							Annual Mean		52000		
							Annual Max		61000		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		CALC	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	64000	--	--
					05/22/2019	52000	--	--
					05/28/2019	37000	--	--
					06/04/2019	49000	--	--
					06/11/2019	45000	--	--
					07/16/2019	64000	--	--
					07/23/2019	53000	--	--
					08/20/2019	50000	--	--
					08/27/2019	38000	--	--
					09/17/2019	48000	--	--
					09/24/2019	49000	--	--
					10/15/2019	60000	--	--
					10/22/2019	54000	--	--
					11/12/2019	51000	--	--
					11/19/2019	54000	--	--
					12/03/2019	51000	--	--
					12/10/2019	52000	--	--
					Annual Mean	51000		
					Annual Max	64000		
	Total Solids	SM 2540G	%	Plant 1 Dewatering Cake	01/22/2019	21	0.050	0.050
01/29/2019					22	0.050	0.050	
02/19/2019					23	0.050	0.050	
02/26/2019					25	0.050	0.050	
03/19/2019					24	0.050	0.050	
03/26/2019					22	0.050	0.050	
04/09/2019					22	0.050	0.050	
04/16/2019					21	0.050	0.050	
05/21/2019					22	0.050	0.050	
05/28/2019					22	0.050	0.050	
06/04/2019					21	0.050	0.050	
06/11/2019					24	0.050	0.050	
07/16/2019					24	0.10	0.10	
07/23/2019					24	0.050	0.050	
08/20/2019					24	0.050	0.050	
08/27/2019					25	0.050	0.050	
09/17/2019					25	0.050	0.050	
09/24/2019					26	0.050	0.050	
10/15/2019					25	0.050	0.050	
10/22/2019					24	0.050	0.050	
11/12/2019	26	0.050	0.050					
11/19/2019	25	0.050	0.050					
12/03/2019	28	0.050	0.050					
12/10/2019	25	0.050	0.050					
				Annual Mean	24			
				Annual Max	28			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		SM 2540G	%	Plant 1 Cake	01/16/2019	17	0.050	0.050
					Annual Mean	17		
					Annual Max	17		
		SM 2540G	%	Plant 2 Cake	01/22/2019	22	0.050	0.050
					01/29/2019	20	0.050	0.050
					02/19/2019	21	0.050	0.050
					02/26/2019	19	0.050	0.050
					03/19/2019	20	0.050	0.050
					03/26/2019	20	0.050	0.050
					04/09/2019	20	0.050	0.050
					04/15/2019	19	0.050	0.050
					05/21/2019	21	0.050	0.050
					05/28/2019	22	0.050	0.050
					06/04/2019	19	0.050	0.050
					06/10/2019	19	0.050	0.050
					Annual Mean	20		
					Annual Max	22		
		SM 2540G	%	Plant 2 Dewatering Cake	03/29/2019	26	0.050	0.050
					04/09/2019	28	0.050	0.050
					04/16/2019	28	0.050	0.050
					05/22/2019	20	0.050	0.050
					05/28/2019	35	0.050	0.050
					06/04/2019	24	0.050	0.050
					06/11/2019	27	0.050	0.050
					07/16/2019	24	0.10	0.10
					07/23/2019	26	0.050	0.050
					08/20/2019	24	0.050	0.050
					08/27/2019	29	0.050	0.050
					09/17/2019	28	0.050	0.050
					09/24/2019	29	0.050	0.050
10/15/2019	28				0.050	0.050		
10/22/2019	27				0.050	0.050		
11/12/2019	25				0.050	0.050		
11/19/2019	28				0.050	0.050		
12/03/2019	30				0.050	0.050		
12/10/2019	29				0.050	0.050		
Annual Mean	27							
Annual Max	35							
Trace Elements	Antimony	EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	ND	1.7	24
					04/09/2019	ND	1.5	21
					07/16/2019	1.9 DNQ	1.4	20
					10/15/2019	ND	1.3	19
					Annual Mean	1.6 DNQ		
					Annual Max	1.9 DNQ		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL					
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	ND	1.6	22					
					04/09/2019	ND	1.7	24					
					Annual Mean	<1.7							
					Annual Max	<1.7							
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	07/16/2019	2.1 DNQ	1.4	20					
					10/15/2019	1.7 DNQ	1.2	18					
					Annual Mean	1.9 DNQ							
					Annual Max	2.1 DNQ							
		Arsenic		EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	16	2.6	14			
							01/29/2019	15	2.4	13			
							02/19/2019	21	2.3	13			
							02/26/2019	19	2.2	12			
							03/19/2019	13	2.2	12			
							03/26/2019	9.8 DNQ	2.4	13			
04/09/2019	11 DNQ						2.3	13					
04/16/2019	14						2.6	14					
05/21/2019	7.7 DNQ						2.2	12					
05/28/2019	6.8 DNQ						2.4	13					
06/04/2019	12 DNQ						2.5	14					
06/11/2019	3.9 DNQ						2.2	12					
07/16/2019	ND						6.3	12					
07/23/2019	ND						6.4	12					
08/20/2019	ND						6.4	12					
08/27/2019	ND						6.2	12					
09/17/2019	ND						6.0	12					
09/24/2019	ND						5.9	11					
10/15/2019	ND						6.0	12					
10/22/2019	ND						6.3	12					
11/12/2019	ND						6.0	12					
11/19/2019	ND						5.9	11					
12/03/2019	ND						5.5	11					
12/10/2019	ND						6.2	12					
Annual Mean	9.3 DNQ												
Annual Max	21												
							EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	24	2.5	13
										01/29/2019	17	2.8	15
		02/19/2019	20	2.6	14								
		02/26/2019	23	2.8	15								
		03/19/2019	20	2.9	16								
		03/26/2019	10 DNQ	2.7	15								
		04/09/2019	12 DNQ	2.6	14								
		Annual Mean	18 DNQ										
		Annual Max	24										

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	14	2.0	11			
					05/22/2019	12 DNQ	2.4	13			
					05/28/2019	6.7 DNQ	1.6	8.4			
					06/04/2019	14	2.3	12			
					06/11/2019	5.3 DNQ	1.9	10			
					07/16/2019	ND	6.3	12			
					07/23/2019	ND	6.0	12			
					08/20/2019	ND	6.3	12			
					08/27/2019	ND	5.2	10			
					09/17/2019	ND	5.5	11			
					09/24/2019	ND	5.3	10			
					10/15/2019	ND	5.5	11			
					10/22/2019	ND	5.6	11			
					11/12/2019	ND	6.1	12			
					11/19/2019	ND	5.5	11			
					12/03/2019	ND	5.1	9.9			
					12/10/2019	ND	5.2	10			
					Annual Mean	7.0 DNQ					
					Annual Max	14					
Barium		EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	340	0.47	24			
					04/09/2019	360	0.42	21			
					07/16/2019	620	8.0	20			
					Annual Mean	440					
					Annual Max	620					
					EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	1100	0.44	22
								04/09/2019	1100	0.48	24
								Annual Mean	1100		
								Annual Max	1100		
					EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	07/16/2019	1200	8.0	20
								Annual Mean	1200		
								Annual Max	1200		
					Beryllium		EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	ND
04/09/2019	ND	0.051	2.1								
07/16/2019	ND	0.077	2.0								
10/15/2019	ND	0.074	1.9								
Annual Mean	<0.077										
Annual Max	<0.077										
EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	ND						0.054	2.2
			04/09/2019	ND						0.057	2.4
			Annual Mean	<0.057							
			Annual Max	<0.057							
EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	07/16/2019	ND						0.078	2.0
			10/15/2019	ND						0.067	1.8
			Annual Mean	<0.078							
Annual Max	<0.078										

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Cadmium	EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	1.7 DNQ	0.12	2.4
					01/29/2019	1.8 DNQ	0.11	2.2
					02/19/2019	1.6 DNQ	0.10	2.1
					02/26/2019	1.2 DNQ	0.097	2.0
					03/19/2019	1.5 DNQ	0.099	2.0
					03/26/2019	0.85 DNQ	0.11	2.2
					04/09/2019	1.1 DNQ	0.10	2.1
					04/16/2019	1.4 DNQ	0.11	2.3
					05/21/2019	1.1 DNQ	0.097	2.0
					05/28/2019	1.2 DNQ	0.11	2.2
					06/04/2019	1.8 DNQ	0.11	2.3
					06/11/2019	2.2	0.098	2.0
					07/16/2019	2.8	0.25	2.0
					07/23/2019	2.6	0.26	2.1
					08/20/2019	2.0 DNQ	0.26	2.1
					08/27/2019	2.0	0.25	2.0
					09/17/2019	2.2	0.24	1.9
					09/24/2019	1.7 DNQ	0.24	1.9
					10/15/2019	1.9	0.24	1.9
					10/22/2019	1.6 DNQ	0.25	2.0
					11/12/2019	0.95 DNQ	0.24	1.9
					11/19/2019	1.7 DNQ	0.24	1.9
					12/03/2019	1.7 DNQ	0.22	1.8
					12/10/2019	1.0 DNQ	0.25	2.0
		Annual Mean	1.6 DNQ					
		Annual Max	2.8					
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	4.4	0.11	2.2
					01/29/2019	4.4	0.12	2.5
					02/19/2019	3.5	0.12	2.3
					02/26/2019	4.0	0.12	2.5
			03/19/2019	4.1	0.13	2.6		
			03/26/2019	1.9 DNQ	0.12	2.4		
			04/09/2019	3.0	0.12	2.4		
			Annual Mean	3.6 DNQ				
			Annual Max	4.4				



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	3.0	0.088	1.8
					05/22/2019	9.0	0.11	2.2
					05/28/2019	4.3	0.069	1.4
					06/04/2019	9.2	0.10	2.0
					06/11/2019	7.5	0.084	1.7
					07/16/2019	4.8	0.25	2.0
					07/23/2019	4.2	0.24	1.9
					08/20/2019	2.9	0.25	2.0
					08/27/2019	3.4	0.21	1.7
					09/17/2019	3.4	0.22	1.8
					09/24/2019	2.6	0.21	1.7
					10/15/2019	3.1	0.22	1.8
					10/22/2019	2.9	0.22	1.8
					11/12/2019	1.5 DNQ	0.24	2.0
					11/19/2019	2.9	0.22	1.8
					12/03/2019	2.5	0.20	1.7
					12/10/2019	1.8	0.21	1.7
					Annual Mean	4.1 DNQ		
					Annual Max	9.0		
	Chromium	EPA 6010C	mg/kg dry weight		Plant 1 Dewatering Cake	01/22/2019	29	1.0
01/29/2019				43		0.96	8.9	
02/19/2019				38		0.91	8.5	
02/26/2019				35		0.85	7.9	
03/19/2019				49		0.87	8.0	
03/26/2019				32		0.95	8.8	
04/09/2019				35		0.90	8.4	
04/16/2019				43		1.0	9.3	
05/21/2019				28		0.85	7.9	
05/28/2019				30		0.94	8.8	
06/04/2019				44		0.99	9.2	
06/11/2019				43		0.86	8.0	
07/16/2019				46		2.7	8.1	
07/23/2019				50		2.7	8.3	
08/20/2019				29		2.7	8.3	
08/27/2019				44		2.6	8.0	
09/17/2019				47		2.5	7.7	
09/24/2019				46		2.5	7.7	
10/15/2019				49		2.6	7.8	
10/22/2019				48		2.7	8.2	
11/12/2019	26	2.5	7.7					
11/19/2019	49	2.5	7.6					
12/03/2019	50	2.3	7.0					
12/10/2019	31	2.6	8.0					
				Annual Mean	40			
				Annual Max	50			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	41	0.96	8.9		
					01/29/2019	68	1.1	10		
						46	1.1	10		
					02/19/2019	41	1.0	9.4		
					02/26/2019	41	1.1	10		
					03/19/2019	59	1.1	10		
					03/26/2019	32	1.1	9.8		
					04/09/2019	44	1.0	9.5		
		Annual Mean	46							
		Annual Max	68							
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	43	0.77	7.2		
					05/22/2019	36	0.93	8.7		
					05/28/2019	28	0.60	5.6		
					06/04/2019	45	0.88	8.2		
	06/11/2019				40	0.74	6.9			
	07/16/2019				44	2.7	8.2			
	07/23/2019				47	2.5	7.7			
	08/20/2019				25	2.7	8.2			
	08/27/2019				44	2.2	6.8			
	09/17/2019				43	2.3	7.1			
	09/24/2019				42	2.3	6.9			
	10/15/2019				44	2.3	7.1			
	10/22/2019				44	2.4	7.2			
	11/12/2019				24	2.6	7.9			
	11/19/2019	52	2.3	7.1						
	12/03/2019	43	2.2	6.6						
	12/10/2019	31	2.2	6.7						
	Annual Mean	40								
Annual Max	52									
Cobalt	EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	2.1 DNQ	0.26	9.4			
				04/09/2019	2.2 DNQ	0.23	8.4			
				07/16/2019	2.7 DNQ	0.38	8.1			
				Annual Mean	2.3 DNQ					
				Annual Max	2.7 DNQ					
				EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	2.8 DNQ	0.24	8.9
							04/09/2019	3.7 DNQ	0.26	9.5
							Annual Mean	3.2 DNQ		
	Annual Max	3.7 DNQ								
	EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	07/16/2019	3.3 DNQ	0.38	8.2			
				Annual Mean	3.3 DNQ					
				Annual Max	3.3 DNQ					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL				
	Copper	EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	350	2.1	12				
					01/29/2019	490	2.0	11				
					02/19/2019	490	1.9	11				
					02/26/2019	400	1.7	9.8				
					03/19/2019	440	1.8	10				
					03/26/2019	330	2.0	11				
					04/09/2019	400	1.8	10				
					04/16/2019	720	2.1	12				
					05/21/2019	340	1.7	9.8				
					05/28/2019	370	1.9	11				
					06/04/2019	610	2.0	12				
					06/11/2019	590	1.8	10				
					07/16/2019	580	6.1	10				
					07/23/2019	530	6.3	10				
					08/20/2019	360	6.2	10				
					08/27/2019	520	6.0	10				
					09/17/2019	550	5.9	9.7				
					09/24/2019	500	5.8	9.6				
					10/15/2019	560	5.9	9.7				
					10/22/2019	530	6.2	10				
					11/12/2019	500	5.8	9.6				
					11/19/2019	510	5.8	9.5				
					12/03/2019	520	5.3	8.8				
					12/10/2019	510	6.1	10				
		Annual Mean					490					
		Annual Max					720					
				EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	520	2.0	11		
							01/29/2019	570	2.2	13		
							02/19/2019	500	2.1	12		
							02/26/2019	460	2.2	12		
03/19/2019	600						2.3	13				
03/26/2019	350						2.2	12				
04/09/2019	470						2.1	12				
Annual Mean							500					
Annual Max							600					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	860	1.6	8.9
					05/22/2019	430	1.9	11
					05/28/2019	240	1.2	7.0
					06/04/2019	590	1.8	10
					06/11/2019	580	1.5	8.6
					07/16/2019	540	6.2	10
					07/23/2019	480	5.8	9.6
					08/20/2019	320	6.2	10
					08/27/2019	500	5.1	8.4
					09/17/2019	550	5.4	8.9
					09/24/2019	490	5.2	8.6
					10/15/2019	560	5.3	8.8
					10/22/2019	540	5.5	9.0
					11/12/2019	490	6.0	9.9
					11/19/2019	450	5.4	8.9
					12/03/2019	450	5.0	8.3
					12/10/2019	500	5.1	8.4
					Annual Mean	500		
					Annual Max	860		
					Iron		EPA 6010C	mg/kg dry weight
01/29/2019	62000	9.7	44					
02/19/2019	75000	9.4	42					
02/26/2019	59000	8.8	39					
03/19/2019	61000	9.0	40					
03/26/2019	46000	9.8	44					
04/09/2019	64000	9.6	43					
04/16/2019	63000	10	47					
05/21/2019	51000	8.8	39					
05/28/2019	44000	9.7	44					
06/04/2019	67000	10	46					
06/11/2019	64000	8.9	40					
07/16/2019	75000	26	41					
07/23/2019	67000	27	41					
08/20/2019	72000	27	42					
08/27/2019	69000	26	40					
09/17/2019	69000	25	39					
09/24/2019	65000	25	38					
10/15/2019	72000	25	39					
10/22/2019	71000	27	41					
11/12/2019	69000	25	39					
11/19/2019	63000	25	38					
12/03/2019	75000	46	70					
12/10/2019	64000	26	40					
Annual Mean	64000							
Annual Max	75000							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	71000	9.9	44
					01/29/2019	65000	11	50
					02/19/2019	66000	10	47
					02/26/2019	63000	11	50
					03/19/2019	78000	12	52
					03/26/2019	49000	11	49
					04/09/2019	63000	10	47
					Annual Mean	65000		
					Annual Max	78000		
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	66000	8.0	36
					05/22/2019	60000	9.7	43
					05/28/2019	44000	6.3	28
					06/04/2019	78000	9.1	41
					06/11/2019	73000	7.6	34
					07/16/2019	82000	27	41
					07/23/2019	73000	25	38
					08/20/2019	76000	27	41
					08/27/2019	68000	22	34
					09/17/2019	70000	23	36
					09/24/2019	67000	22	34
					10/15/2019	70000	23	35
					10/22/2019	71000	24	36
11/12/2019	78000	26	39					
11/19/2019	68000	23	36					
12/03/2019	66000	21	33					
12/10/2019	72000	22	34					
Annual Mean	70000							
Annual Max	82000							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Lead	EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	8.7	0.65	4.7
					01/29/2019	14	0.61	4.4
					02/19/2019	11	0.58	4.2
					02/26/2019	10	0.54	3.9
					03/19/2019	12	0.55	4.0
					03/26/2019	7.7	0.61	4.4
					04/09/2019	10	0.57	4.2
					04/16/2019	11	0.64	4.7
					05/21/2019	8.7	0.54	3.9
					05/28/2019	11	0.60	4.4
					06/04/2019	13	0.63	4.6
					06/11/2019	13	0.55	4.0
					07/16/2019	14	3.1	4.1
					07/23/2019	13	3.1	4.1
					08/20/2019	13	3.1	4.1
					08/27/2019	11	3.0	4.0
					09/17/2019	12	2.9	3.9
					09/24/2019	8.3	2.9	3.8
					10/15/2019	10	2.9	3.9
					10/22/2019	10	3.1	4.1
		11/12/2019	11	2.9	3.9			
		11/19/2019	14	2.9	3.8			
		12/03/2019	9.5	2.7	3.5			
		12/10/2019	10	3.0	4.0			
		Annual Mean	11					
		Annual Max	14					
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	12	0.61	4.4
					01/29/2019	16	0.69	5.0
			02/19/2019	13	0.64	4.7		
			02/26/2019	13	0.68	5.0		
			03/19/2019	16	0.71	5.2		
			03/26/2019	8.6	0.67	4.9		
			04/09/2019	13	0.65	4.8		
			Annual Mean	13				
			Annual Max	16				

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	12	0.49	3.6
					05/22/2019	12	0.59	4.3
					05/28/2019	8.7	0.38	2.8
					06/04/2019	15	0.56	4.1
					06/11/2019	13	0.47	3.4
					07/16/2019	16	3.1	4.1
					07/23/2019	14	2.9	3.8
					08/20/2019	17	3.1	4.1
					08/27/2019	14	2.6	3.4
					09/17/2019	16	2.7	3.6
					09/24/2019	12	2.6	3.4
					10/15/2019	16	2.7	3.5
					10/22/2019	15	2.7	3.6
					11/12/2019	15	3.0	3.9
					11/19/2019	23	2.7	3.6
					12/03/2019	13	2.5	3.3
					12/10/2019	16	2.5	3.4
					Annual Mean	15		
					Annual Max	23		
	Magnesium	EPA 6010C	mg/kg dry weight		Plant 1 Dewatering Cake	01/22/2019	3600	16
				01/29/2019		5100	15	110
				02/19/2019		5200	14	110
				02/26/2019		4100	13	98
				03/19/2019		4800	13	100
				03/26/2019		3500	15	110
				04/09/2019		5000	14	100
				04/16/2019		5400	16	120
				05/21/2019		3100	13	98
				05/28/2019		3200	15	110
				06/04/2019		5000	15	120
				06/11/2019		4400	13	100
				07/16/2019		5700	14	100
				07/23/2019		5700	14	100
				08/20/2019		3200	14	100
				08/27/2019		5400	13	100
				09/17/2019		6200	13	97
				09/24/2019		5500	13	96
				10/15/2019		5700	13	97
				10/22/2019		5500	14	100
				11/12/2019	2800	13	96	
				11/19/2019	5100	13	95	
				12/03/2019	6700	12	88	
				12/10/2019	3500	13	100	
				Annual Mean	4700			
				Annual Max	6700			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	6300	15	110
					01/29/2019	7100	17	130
					02/19/2019	6300	16	120
					02/26/2019	6000	17	120
					03/19/2019	7800	17	130
					03/26/2019	4500	16	120
					04/09/2019	6200	16	120
					Annual Mean	6300		
					Annual Max	7800		
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	6100	12	89
					05/22/2019	4600	15	110
					05/28/2019	5300	9.4	70
					06/04/2019	6600	14	100
					06/11/2019	5600	11	86
					07/16/2019	6300	14	100
					07/23/2019	6100	13	96
					08/20/2019	4200	14	100
					08/27/2019	7800	11	84
					09/17/2019	8900	12	89
					09/24/2019	7900	11	86
					10/15/2019	7900	12	88
					10/22/2019	7400	12	90
11/12/2019	3600	13	99					
11/19/2019	7000	12	89					
12/03/2019	6300	11	83					
12/10/2019	4100	11	84					
Annual Mean	6200							
Annual Max	8900							



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Mercury	EPA 7471A	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	0.63	0.057	0.095
					01/29/2019	0.62	0.054	0.090
					02/19/2019	0.86	0.052	0.086
					02/26/2019	0.91	0.047	0.079
					03/19/2019	0.72	0.048	0.080
					03/26/2019	1.4	0.11	0.18
					04/09/2019	1.0	0.051	0.084
					04/16/2019	0.94	0.057	0.095
					05/21/2019	0.82	0.048	0.079
					05/28/2019	0.83	0.053	0.088
					06/04/2019	1.3	0.056	0.093
					06/11/2019	0.72	0.048	0.079
					07/16/2019	0.71	0.36	0.36
					07/23/2019	0.82	0.049	0.082
					08/20/2019	0.71	0.050	0.084
					08/27/2019	0.63	0.049	0.082
					09/17/2019	0.83	0.048	0.081
					09/24/2019	1.0	0.046	0.077
					10/15/2019	0.82	0.36	0.36
					10/22/2019	0.75	0.049	0.082
					11/12/2019	0.68	0.046	0.077
					11/19/2019	0.69	0.046	0.077
					12/03/2019	1.0	0.042	0.070
		12/10/2019	0.71	0.050	0.083			
		Annual Mean	0.84					
		Annual Max	1.4					
		EPA 7471A	mg/kg dry weight	Plant 2 Cake	01/22/2019	0.89	0.053	0.088
					01/29/2019	0.57	0.061	0.10
					02/19/2019	0.72	0.057	0.094
					02/26/2019	0.41	0.060	0.10
					03/19/2019	0.81	0.063	0.10
					03/26/2019	1.0	0.058	0.097
					04/09/2019	0.43	0.056	0.094
		Annual Mean	0.69					
		Annual Max	1.0					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 7471A	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	0.75	0.044	0.073
					05/22/2019	0.60	0.052	0.086
					05/28/2019	0.73	0.034	0.057
					06/04/2019	0.66	0.051	0.085
					06/11/2019	0.54	0.041	0.069
					07/16/2019	0.57	0.37	0.37
					07/23/2019	0.69	0.048	0.080
					08/20/2019	0.54	0.049	0.082
					08/27/2019	0.61	0.041	0.068
					09/17/2019	0.84	0.043	0.072
					09/24/2019	0.60	0.042	0.069
					10/15/2019	0.63	0.35	0.35
					10/22/2019	0.51	0.043	0.072
					11/12/2019	0.68	0.048	0.080
					11/19/2019	0.64	0.043	0.071
					12/03/2019	0.44	0.040	0.066
					12/10/2019	0.50	0.042	0.070
					Annual Mean	0.62		
					Annual Max	0.84		
					Molybdenum		EPA 6010C	mg/kg dry weight
01/29/2019	14	0.25	8.9					
02/19/2019	17	0.24	8.5					
02/26/2019	14	0.22	7.9					
03/19/2019	15	0.23	8.0					
03/26/2019	11	0.25	8.8					
04/09/2019	13	0.24	8.4					
04/16/2019	18	0.26	9.3					
05/21/2019	12	0.22	7.9					
05/28/2019	14	0.25	8.8					
06/04/2019	21	0.26	9.2					
06/11/2019	19	0.23	8.0					
07/16/2019	22	0.74	8.1					
07/23/2019	22	0.76	8.3					
08/20/2019	15	0.76	8.3					
08/27/2019	21	0.73	8.0					
09/17/2019	21	0.71	7.7					
09/24/2019	21	0.70	7.7					
10/15/2019	21	0.71	7.8					
10/22/2019	20	0.75	8.2					
11/12/2019	12	0.71	7.7					
11/19/2019	20	0.70	7.6					
12/03/2019	17	0.64	7.0					
12/10/2019	11	0.74	8.0					
Annual Mean	17							
Annual Max	22							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	16	0.25	8.9
					01/29/2019	18	0.29	10
					02/19/2019	17	0.26	9.4
					02/26/2019	17	0.28	10
					03/19/2019	24	0.29	10
					03/26/2019	13	0.28	9.8
					04/09/2019	19	0.27	9.5
					Annual Mean	18		
					Annual Max	24		
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	20	0.20	7.2
					05/22/2019	18	0.25	8.7
					05/28/2019	11	0.16	5.6
					06/04/2019	24	0.23	8.2
					06/11/2019	20	0.19	6.9
					07/16/2019	23	0.75	8.2
					07/23/2019	24	0.70	7.7
					08/20/2019	14	0.75	8.2
					08/27/2019	19	0.62	6.8
					09/17/2019	18	0.65	7.1
					09/24/2019	18	0.63	6.9
					10/15/2019	19	0.65	7.1
					10/22/2019	18	0.66	7.2
					11/12/2019	11	0.72	7.9
					11/19/2019	18	0.65	7.1
					12/03/2019	16	0.60	6.6
12/10/2019	11	0.61	6.7					
Annual Mean	18							
Annual Max	24							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Nickel	EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	25	0.85	9.4
					01/29/2019	31	0.80	8.9
					02/19/2019	36	0.76	8.5
					02/26/2019	34	0.71	7.9
					03/19/2019	34	0.72	8.0
					03/26/2019	27	0.79	8.8
					04/09/2019	27	0.75	8.4
					04/16/2019	32	0.84	9.3
					05/21/2019	22	0.71	7.9
					05/28/2019	23	0.79	8.8
					06/04/2019	33	0.83	9.2
					06/11/2019	38	0.72	8.0
					07/16/2019	33	2.1	8.1
					07/23/2019	37	2.1	8.3
					08/20/2019	21	2.1	8.3
					08/27/2019	32	2.0	8.0
					09/17/2019	34	2.0	7.7
					09/24/2019	35	2.0	7.7
					10/15/2019	41	2.0	7.8
					10/22/2019	41	2.1	8.2
					11/12/2019	19	2.0	7.7
					11/19/2019	35	2.0	7.6
					12/03/2019	33	1.8	7.0
		12/10/2019	32	2.1	8.0			
		Annual Mean	31					
		Annual Max	41					
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	31	0.80	8.9
					01/29/2019	48	0.90	10
					02/19/2019	35	0.84	9.4
					02/26/2019	40	0.89	10
					03/19/2019	42	0.93	10
					03/26/2019	26	0.88	9.8
					04/09/2019	37	0.85	9.5
			Annual Mean	37				
			Annual Max	48				

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL					
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	36	0.64	7.2					
					05/22/2019	32	0.78	8.7					
					05/28/2019	25	0.50	5.6					
					06/04/2019	43	0.73	8.2					
					06/11/2019	37	0.62	6.9					
					07/16/2019	34	2.1	8.2					
					07/23/2019	36	2.0	7.7					
					08/20/2019	19	2.1	8.2					
					08/27/2019	33	1.7	6.8					
					09/17/2019	32	1.8	7.1					
					09/24/2019	33	1.8	6.9					
					10/15/2019	36	1.8	7.1					
					10/22/2019	35	1.9	7.2					
					11/12/2019	19	2.0	7.9					
					11/19/2019	36	1.8	7.1					
					12/03/2019	28	1.7	6.6					
					12/10/2019	34	1.7	6.7					
					Annual Mean	32							
					Annual Max	43							
					Selenium		EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	ND	2.6	24
										01/29/2019	ND	2.5	22
02/19/2019	ND	48	420										
02/26/2019	ND	2.2	20										
03/19/2019	ND	2.3	20										
03/26/2019	ND	2.5	22										
04/09/2019	ND	2.3	21										
04/16/2019	ND	2.6	23										
05/21/2019	ND	2.2	20										
05/28/2019	ND	2.5	22										
06/04/2019	ND	2.6	23										
06/11/2019	ND	2.2	20										
07/16/2019	ND	3.8	20										
07/23/2019	ND	3.9	21										
08/20/2019	ND	3.9	21										
08/27/2019	ND	3.7	20										
09/17/2019	ND	3.6	19										
09/24/2019	ND	3.6	19										
10/15/2019	ND	3.7	19										
10/22/2019	ND	3.9	20										
11/12/2019	ND	3.6	19										
11/19/2019	ND	3.6	19										
12/03/2019	ND	3.3	18										
12/10/2019	ND	3.8	20										
Annual Mean	<48												
Annual Max	<48												

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	ND	2.5	22
					01/29/2019	ND	2.8	25
					02/19/2019	ND	2.6	23
					02/26/2019	ND	2.8	25
					03/19/2019	ND	2.9	26
					03/26/2019	ND	2.7	24
					04/09/2019	ND	2.7	24
					Annual Mean	<2.9		
					Annual Max	<2.9		
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	ND	2.0	18
					05/22/2019	ND	2.4	22
					05/28/2019	ND	1.6	14
					06/04/2019	ND	2.3	20
					06/11/2019	ND	1.9	17
					07/16/2019	ND	3.8	20
					07/23/2019	ND	3.6	19
					08/20/2019	ND	3.8	20
					08/27/2019	ND	3.2	17
					09/17/2019	ND	3.4	18
					09/24/2019	ND	3.2	17
					10/15/2019	ND	3.3	18
					10/22/2019	ND	3.4	18
11/12/2019	ND	3.7	20					
11/19/2019	ND	3.4	18					
12/03/2019	ND	3.1	17					
12/10/2019	ND	3.2	17					
Annual Mean	<3.8							
Annual Max	<3.8							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Silver	EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	3.6 DNQ	0.67	12
					01/29/2019	5.0 DNQ	0.63	11
					02/19/2019	4.4 DNQ	0.60	11
					02/26/2019	3.5 DNQ	0.56	9.8
					03/19/2019	3.8 DNQ	0.57	10
					03/26/2019	2.4 DNQ	0.62	11
					04/09/2019	3.3 DNQ	0.59	10
					04/16/2019	4.1 DNQ	0.66	12
					05/21/2019	3.0 DNQ	0.56	9.8
					05/28/2019	2.7 DNQ	0.62	11
					06/04/2019	5.0 DNQ	0.65	12
					06/11/2019	4.8 DNQ	0.56	10
					07/16/2019	4.6 DNQ	0.47	10
					07/23/2019	4.6 DNQ	0.48	10
					08/20/2019	4.0 DNQ	0.48	10
					08/27/2019	3.9 DNQ	0.46	10
					09/17/2019	5.0 DNQ	0.45	9.7
					09/24/2019	4.1 DNQ	0.44	9.6
					10/15/2019	4.9 DNQ	0.45	9.7
					10/22/2019	4.3 DNQ	0.48	10
					11/12/2019	2.5 DNQ	0.45	9.6
					11/19/2019	3.7 DNQ	0.44	9.5
					12/03/2019	3.8 DNQ	0.41	8.8
		12/10/2019	2.4 DNQ	0.47	10			
		Annual Mean	3.9 DNQ					
		Annual Max	5.0 DNQ					
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	5.0 DNQ	0.63	11
					01/29/2019	5.7 DNQ	0.71	13
					02/19/2019	4.0 DNQ	0.66	12
					02/26/2019	4.0 DNQ	0.70	12
					03/19/2019	5.2 DNQ	0.73	13
					03/26/2019	2.6 DNQ	0.69	12
					04/09/2019	3.6 DNQ	0.67	12
			Annual Mean	4.3 DNQ				
			Annual Max	5.7 DNQ				

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	4.4 DNQ	0.51	8.9		
					05/22/2019	4.6 DNQ	0.61	11		
					05/28/2019	2.5 DNQ	0.40	7.0		
					06/04/2019	6.3 DNQ	0.58	10		
					06/11/2019	5.2 DNQ	0.48	8.6		
					07/16/2019	4.3 DNQ	0.47	10		
					07/23/2019	4.4 DNQ	0.45	9.6		
					08/20/2019	4.0 DNQ	0.47	10		
					08/27/2019	4.7 DNQ	0.39	8.4		
					09/17/2019	4.4 DNQ	0.41	8.9		
					09/24/2019	4.1 DNQ	0.40	8.6		
					10/15/2019	5.9 DNQ	0.41	8.8		
					10/22/2019	3.7 DNQ	0.42	9.0		
					11/12/2019	2.2 DNQ	0.46	9.9		
					11/19/2019	3.8 DNQ	0.41	8.9		
					12/03/2019	3.8 DNQ	0.38	8.3		
					12/10/2019	2.8 DNQ	0.39	8.4		
					Annual Mean	4.2 DNQ				
					Annual Max	6.3 DNQ				
					Thallium	EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	ND
04/09/2019	ND	1.4	21							
07/16/2019	ND	2.4	20							
10/15/2019	ND	2.3	19							
Annual Mean	<2.4									
Annual Max	<2.4									
EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	ND					1.4	22
			04/09/2019	ND					1.5	24
			Annual Mean	<1.5						
			Annual Max	<1.5						
EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	07/16/2019	ND		2.4	20			
			10/15/2019	ND		2.1	18			
			Annual Mean	<2.4						
			Annual Max	<2.4						
Vanadium	EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	18	2.5	4.7			
				04/09/2019	24	2.2	4.2			
				07/16/2019	29	0.20	4.1			
				Annual Mean	24					
				Annual Max	29					
				EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	67	2.3	4.4
							04/09/2019	78	2.5	4.8
							Annual Mean	72		
	Annual Max	78								
	EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	07/16/2019	95	0.20	4.1			
				Annual Mean	95					
				Annual Max	95					



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
Zinc	EPA 6010C	mg/kg dry weight	Plant 1 Dewatering Cake	01/22/2019	530	8.2	24	
				01/29/2019	680	7.7	22	
				02/19/2019	590	7.3	21	
				02/26/2019	550	6.8	20	
				03/19/2019	640	7.0	20	
				03/26/2019	490	7.6	22	
				04/09/2019	570	7.2	21	
				04/16/2019	700	8.1	23	
				05/21/2019	490	6.8	20	
				05/28/2019	540	7.6	22	
				06/04/2019	790	8.0	23	
				06/11/2019	820	6.9	20	
				07/16/2019	800	8.2	20	
				07/23/2019	800	8.3	21	
				08/20/2019	750	8.3	21	
				08/27/2019	770	8.0	20	
				09/17/2019	820	7.8	19	
				09/24/2019	750	7.7	19	
				10/15/2019	770	7.8	19	
				10/22/2019	720	8.2	20	
		11/12/2019	500	7.8	19			
		11/19/2019	780	7.7	19			
		12/03/2019	740	7.1	18			
		12/10/2019	700	8.1	20			
		Annual Mean	680					
		Annual Max	820					
		EPA 6010C	mg/kg dry weight	Plant 2 Cake	01/22/2019	690	7.7	22
					01/29/2019	820	8.7	25
					02/19/2019	630	8.1	23
					02/26/2019	690	8.6	25
					03/19/2019	910	8.9	26
					03/26/2019	550	8.4	24
04/09/2019	730				8.2	24		
Annual Mean	720							
Annual Max	910							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
		EPA 6010C	mg/kg dry weight	Plant 2 Dewatering Cake	04/16/2019	720	6.2	18			
					05/22/2019	630	7.5	22			
					05/28/2019	370	4.9	14			
					06/04/2019	770	7.1	20			
					06/11/2019	780	5.9	17			
					07/16/2019	740	8.2	20			
					07/23/2019	730	7.7	19			
					08/20/2019	720	8.2	20			
					08/27/2019	760	6.8	17			
					09/17/2019	720	7.2	18			
					09/24/2019	680	6.9	17			
					10/15/2019	720	7.1	18			
					10/22/2019	690	7.3	18			
					11/12/2019	450	7.9	20			
					11/19/2019	720	7.2	18			
					12/03/2019	700	6.6	17			
					12/10/2019	700	6.7	17			
						Annual Mean	680				
	Annual Max	780									
Volatile Organic Compounds	1,1,1,2-Tetrachloroethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120			
					04/09/2019	ND	20	100			
					10/15/2019	ND	880	2200			
					Annual Mean	<880					
					Annual Max	<880					
					EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110
								04/09/2019	ND	23	110
								Annual Mean	<23		
								Annual Max	<23		
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100				
				Annual Mean	<830						
				Annual Max	<830						
	1,1,1-Trichloroethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48			
					04/09/2019	ND	20	40			
					10/15/2019	ND	440	880			
					Annual Mean	<440					
					Annual Max	<440					
					EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
04/09/2019								ND	23	45	
Annual Mean								<23			
Annual Max								<23			
EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830					
			Annual Mean	<410							
			Annual Max	<410							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
1,1,2,2-Tetrachloroethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48				
				04/09/2019	ND	20	40				
				10/15/2019	ND	440	880				
				Annual Mean	<440						
				Annual Max	<440						
				EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
							04/09/2019	ND	23	45	
							Annual Mean	<23			
							Annual Max	<23			
				EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
	Annual Mean	<410									
	Annual Max	<410									
	1,1,2-Trichloroethane	EPA 8260B	µg/kg dry				Plant 1 Dewatering Cake	01/22/2019	ND	24	48
								04/09/2019	ND	20	40
				10/15/2019	ND	440		880			
Annual Mean				<440							
Annual Max				<440							
EPA 8260B				µg/kg dry	Plant 2 Cake	01/22/2019		ND	22	44	
						04/09/2019		ND	23	45	
						Annual Mean		<23			
						Annual Max		<23			
EPA 8260B				µg/kg dry	Plant 2 Dewatering Cake	10/15/2019		ND	410	830	
	Annual Mean	<410									
	Annual Max	<410									
	1,1-Dichloroethane	EPA 8260B	µg/kg dry			Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
							04/09/2019	ND	20	40	
10/15/2019				ND	440		880				
Annual Mean				<440							
Annual Max				<440							
EPA 8260B				µg/kg dry	Plant 2 Cake		01/22/2019	ND	22	44	
							04/09/2019	ND	23	45	
							Annual Mean	<23			
							Annual Max	<23			
EPA 8260B				µg/kg dry	Plant 2 Dewatering Cake		10/15/2019	ND	410	830	
	Annual Mean	<410									
	Annual Max	<410									
	1,1-Dichloroethene	EPA 8260B	µg/kg dry			Plant 1 Dewatering Cake	01/22/2019	ND	24	120	
							04/09/2019	ND	20	100	
10/15/2019				ND	880		2200				
Annual Mean				<880							
Annual Max				<880							
EPA 8260B				µg/kg dry	Plant 2 Cake		01/22/2019	ND	22	110	
							04/09/2019	ND	23	110	
							Annual Mean	<23			
							Annual Max	<23			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100
					Annual Mean	<830		
					Annual Max	<830		
	1,1-Dichloropropene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48
					04/09/2019	ND	20	40
					10/15/2019	ND	440	880
					Annual Mean	<440		
					Annual Max	<440		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
					Annual Max	<23		
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
				Annual Max	<410			
1,2,3-Trichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120	
				04/09/2019	ND	20	100	
				10/15/2019	ND	880	2200	
				Annual Mean	<880			
				Annual Max	<880			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110	
				04/09/2019	ND	23	110	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100	
				Annual Mean	<830			
				Annual Max	<830			
1,2,3-Trichloropropane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	240	
				04/09/2019	ND	20	200	
				Annual Mean	<24			
				Annual Max	<24			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	220	
				04/09/2019	ND	23	230	
				Annual Mean	<23			
				Annual Max	<23			
1,2,4-Trichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120	
				04/09/2019	ND	20	100	
				10/15/2019	ND	880	2200	
				Annual Mean	<880			
				Annual Max	<880			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110	
				04/09/2019	ND	23	110	
				Annual Mean	<23			
				Annual Max	<23			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
1,2,4-Trimethylbenzene	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100			
				Annual Mean	<830					
				Annual Max	<830					
	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48			
				04/09/2019	22 DNQ	20	40			
				Annual Mean	23 DNQ					
				Annual Max	23 DNQ					
				EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
							04/09/2019	ND	23	45
	Annual Mean	<23								
	Annual Max	<23								
	1,2-Dibromo-3-chloropropane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	48	120		
04/09/2019					ND	40	100			
10/15/2019					ND	880	2200			
Annual Mean					<880					
Annual Max					<880					
EPA 8260B					µg/kg dry	Plant 2 Cake	01/22/2019	ND	44	110
		04/09/2019	ND	45			110			
		Annual Mean	<45							
		Annual Max	<45							
		EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake			10/15/2019	ND	830	2100
							Annual Mean	<830		
Annual Max					<830					
1,2-Dibromoethane	EPA 8260B				µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48
							04/09/2019	ND	20	40
							10/15/2019	ND	440	880
		Annual Mean	<440							
		Annual Max	<440							
		EPA 8260B	µg/kg dry	Plant 2 Cake			01/22/2019	ND	22	44
04/09/2019	ND				23	45				
Annual Mean	<23									
Annual Max	<23									
EPA 8260B	µg/kg dry				Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
						Annual Mean	<410			
		Annual Max	<410							
		1,2-Dichlorobenzene	EPA 8260B	µg/kg dry		Plant 1 Dewatering Cake	01/22/2019	ND	24	48
							04/09/2019	ND	20	40
							10/15/2019	ND	440	880
Annual Mean	<440									
Annual Max	<440									
EPA 8260B	µg/kg dry				Plant 2 Cake		01/22/2019	ND	22	44
		04/09/2019	ND	23		45				
		Annual Mean	<23							
		Annual Max	<23							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	1,2-Dichloroethane	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830
					Annual Mean	<410		
					Annual Max	<410		
		EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48
					04/09/2019	ND	20	40
					10/15/2019	ND	440	880
					Annual Mean	<440		
					Annual Max	<440		
					Annual Mean	<23		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830		
			Annual Mean	<410				
			Annual Max	<410				
1,2-Dichloropropane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	440	880	
				Annual Mean	<440			
				Annual Max	<440			
				Annual Mean	<23			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
				Annual Max	<410			
1,3,5-Trichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	880	1800	
				Annual Mean	<880			
				Annual Max	<880			
				Annual Mean	<23			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	1700	
				Annual Mean	<830			
				Annual Max	<830			
1,3,5-Trimethylbenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				Annual Mean	<24			
				Annual Max	<24			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
					Annual Max	<23		
	1,3-Dichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48
					04/09/2019	ND	20	40
					10/15/2019	ND	440	880
					Annual Mean	<440		
		Annual Max	<440					
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
	Annual Max				<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
				Annual Max	<410			
1,3-Dichloropropane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	440	880	
				Annual Mean	<440			
	Annual Max	<440						
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
				Annual Max	<410			
1,4-Dichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	440	880	
				Annual Mean	<440			
	Annual Max	<440						
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
				Annual Max	<410			
2,2-Dichloropropane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	880	1800	
				Annual Mean	<880			
	Annual Max	<880						

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
		Annual Max	<23					
		EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	1700
					Annual Mean	<830		
	Annual Max				<830			
	2-Chlorotoluene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120
					04/09/2019	ND	20	100
					10/15/2019	ND	880	2200
					Annual Mean	<880		
					Annual Max	<880		
EPA 8260B		µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110	
	04/09/2019			ND	23	110		
	Annual Mean			<23				
EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100		
			Annual Mean	<830				
			Annual Max	<830				
2-Hexanone	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	120	610	
				04/09/2019	ND	100	500	
				Annual Mean	<120			
				Annual Max	<120			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	110	550	
				04/09/2019	ND	110	560	
				Annual Mean	<110			
				Annual Max	<110			
4-Chlorotoluene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120	
				04/09/2019	ND	20	100	
				10/15/2019	ND	440	2200	
				Annual Mean	<440			
				Annual Max	<440			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110	
				04/09/2019	ND	23	110	
				Annual Mean	<23			
				Annual Max	<23			
				EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND
Annual Mean	<410							
Annual Max	<410							
Acrolein	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	240	2400	
				04/09/2019	ND	200	2000	
				10/15/2019	ND	18000	44000	
				Annual Mean	<18000			
				Annual Max	<18000			



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	220	2200
					04/09/2019	ND	230	2300
					Annual Mean	<230		
		Annual Max	<230					
		EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	17000	41000
					Annual Mean	<17000		
	Annual Max				<17000			
	Acrylonitrile	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	480	2400
					04/09/2019	ND	400	2000
					10/15/2019	ND	8800	44000
		Annual Mean	<8800					
		Annual Max	<8800					
EPA 8260B		µg/kg dry	Plant 2 Cake	01/22/2019	ND	440	2200	
	04/09/2019			ND	450	2300		
	Annual Mean			<450				
EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	8300	41000		
			Annual Mean	<8300				
			Annual Max	<8300				
Benzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	440	880	
				Annual Mean	<440			
				Annual Max	<440			
				EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND
	04/09/2019	ND	23				45	
	Annual Mean	<23						
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
				Annual Max	<410			
	Bromobenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120
04/09/2019					ND	20	100	
10/15/2019					ND	880	2200	
Annual Mean					<880			
Annual Max					<880			
EPA 8260B					µg/kg dry	Plant 2 Cake	01/22/2019	ND
		04/09/2019	ND	23			110	
		Annual Mean	<23					
EPA 8260B		µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100	
				Annual Mean	<830			
				Annual Max	<830			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
Bromochloromethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120	
				04/09/2019	ND	20	100	
				10/15/2019	ND	880	2200	
				Annual Mean	<880			
				Annual Max	<880			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110	
				04/09/2019	ND	23	110	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100	
				Annual Mean	<830			
Annual Max				<830				
Bromodichloromethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	440	880	
				Annual Mean	<440			
				Annual Max	<440			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
Annual Max				<410				
Bromoform	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	48	120	
				04/09/2019	ND	40	100	
				10/15/2019	ND	880	2200	
				Annual Mean	<880			
				Annual Max	<880			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	44	110	
				04/09/2019	ND	45	110	
				Annual Mean	<45			
				Annual Max	<45			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100	
				Annual Mean	<830			
Annual Max				<830				
Bromomethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120	
				04/09/2019	ND	20	100	
				10/15/2019	ND	880	2200	
				Annual Mean	<880			
				Annual Max	<880			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110	
				04/09/2019	ND	23	110	
				Annual Mean	<23			
				Annual Max	<23			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL				
Carbon tetrachloride	Carbon tetrachloride	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100				
					Annual Mean	<830						
					Annual Max	<830						
	Carbon tetrachloride	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120				
					04/09/2019	ND	20	100				
					10/15/2019	ND	880	2200				
					Annual Mean	<880						
					Annual Max	<880						
					Carbon tetrachloride	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110
									04/09/2019	ND	23	110
	Annual Mean	<23										
	Annual Max	<23										
	Carbon tetrachloride	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100				
					Annual Mean	<830						
					Annual Max	<830						
Chlorobenzene	Chlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48				
					04/09/2019	ND	20	40				
					10/15/2019	ND	440	880				
					Annual Mean	<440						
					Annual Max	<440						
	Chlorobenzene	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44				
					04/09/2019	ND	23	45				
					Annual Mean	<23						
					Annual Max	<23						
	Chlorobenzene	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830				
					Annual Mean	<410						
					Annual Max	<410						
Chloroethane	Chloroethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	48	120				
					04/09/2019	ND	40	100				
					10/15/2019	ND	880	2200				
					Annual Mean	<880						
					Annual Max	<880						
	Chloroethane	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	44	110				
					04/09/2019	ND	45	110				
					Annual Mean	<45						
					Annual Max	<45						
	Chloroethane	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100				
					Annual Mean	<830						
					Annual Max	<830						
Chloroform	Chloroform	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48				
					04/09/2019	ND	20	40				
					10/15/2019	ND	440	880				
					Annual Mean	<440						
					Annual Max	<440						

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
				Annual Mean	<23			
				Annual Max	<23			
		EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830
					Annual Mean	<410		
			Annual Max	<410				
	Chloromethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120
					04/09/2019	ND	20	100
					10/15/2019	ND	880	2200
					Annual Mean	<880		
				Annual Max	<880			
EPA 8260B		µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110	
	04/09/2019			ND	23	110		
		Annual Mean	<23					
		Annual Max	<23					
EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100		
			Annual Mean	<830				
		Annual Max	<830					
cis-1,2-Dichloroethene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	440	880	
				Annual Mean	<440			
			Annual Max	<440				
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
			Annual Max	<410				
cis-1,3-Dichloropropene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	440	880	
				Annual Mean	<440			
			Annual Max	<440				
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
			Annual Max	<410				

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
Dibromochloromethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	440	880	
				Annual Mean	<440			
				Annual Max	<440			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
Annual Max				<410				
Dibromomethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	440	880	
				Annual Mean	<440			
				Annual Max	<440			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
Annual Max				<410				
Dichlorodifluoromethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	48	120	
				04/09/2019	ND	40	100	
				10/15/2019	ND	880	2200	
				Annual Mean	<880			
				Annual Max	<880			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	44	110	
				04/09/2019	ND	45	110	
				Annual Mean	<45			
				Annual Max	<45			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100	
				Annual Mean	<830			
Annual Max				<830				
Ethylbenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				10/15/2019	ND	440	880	
				Annual Mean	<440			
				Annual Max	<440			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
				Annual Max	<23			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Hexachlorobutadiene	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830
					Annual Mean	<410		
					Annual Max	<410		
		EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120
					04/09/2019	ND	20	100
					10/15/2019	ND	880	2200
					Annual Mean	<880		
					Annual Max	<880		
					EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019
		04/09/2019	ND	23	110			
		Annual Mean	<23					
		Annual Max	<23					
		EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100
					Annual Mean	<830		
					Annual Max	<830		
Isobutyl alcohol	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	610	1200	
				04/09/2019	ND	500	1000	
				Annual Mean	<610			
				Annual Max	<610			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	550	1100	
				04/09/2019	ND	560	1100	
				Annual Mean	<560			
				Annual Max	<560			
Isopropylbenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				Annual Mean	<24			
				Annual Max	<24			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
				Annual Max	<23			
m,p-Xylenes	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	48	97	
				04/09/2019	ND	40	80	
				Annual Mean	<48			
				Annual Max	<48			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	44	89	
				04/09/2019	ND	45	90	
				Annual Mean	<45			
				Annual Max	<45			
Methyl ethyl ketone	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	6300	120	240	
				04/09/2019	4000	100	200	
				10/15/2019	ND	4400	8800	
				Annual Mean	4900 DNQ			
				Annual Max	6300			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	110	220			
					04/09/2019	ND	110	230			
				Annual Mean	<110						
				Annual Max	<110						
		EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	4100	8300			
					Annual Mean	<4100					
			Annual Max	<4100							
	Methylene Chloride	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	120	480			
					04/09/2019	ND	100	400			
					10/15/2019	ND	4400	8800			
					Annual Mean	<4400					
				Annual Max	<4400						
EPA 8260B		µg/kg dry	Plant 2 Cake	01/22/2019	ND	110	440				
	04/09/2019			ND	110	450					
		Annual Mean	<110								
		Annual Max	<110								
MIBK	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	83 DNQ	61	120				
				04/09/2019	62 DNQ	50	100				
				Annual Mean	72 DNQ						
				Annual Max	83 DNQ						
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	55	110				
				04/09/2019	ND	56	110				
		Annual Mean	<56								
		Annual Max	<56								
Naphthalene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	48	120				
				04/09/2019	ND	40	100				
				10/15/2019	ND	880	2200				
				Annual Mean	<880						
						Annual Max	<880				
				EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	44	110	
	04/09/2019	ND	45				110				
	Annual Mean	<45									
	Annual Max	<45									
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100				
				Annual Mean	<830						
			Annual Max	<830							
n-Butylbenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120				
				04/09/2019	ND	20	100				
				Annual Mean	<24						
				Annual Max	<24						

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110
					04/09/2019	ND	23	110
					Annual Mean	<23		
					Annual Max	<23		
	n-Propylbenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48
					04/09/2019	ND	20	40
					Annual Mean	<24		
					Annual Max	<24		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
					Annual Max	<23		
o-Xylene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				Annual Mean	<24			
				Annual Max	<24			
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
					Annual Max	<23		
sec-Butylbenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120	
				04/09/2019	ND	20	100	
				Annual Mean	<24			
				Annual Max	<24			
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110
					04/09/2019	ND	23	110
					Annual Mean	<23		
					Annual Max	<23		
Styrene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48	
				04/09/2019	ND	20	40	
				Annual Mean	<24			
				Annual Max	<24			
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
					Annual Max	<23		
tert-Butylbenzene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120	
				04/09/2019	ND	20	100	
				Annual Mean	<24			
				Annual Max	<24			
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110
					04/09/2019	ND	23	110
					Annual Mean	<23		
					Annual Max	<23		



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Tetrachloroethene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48
					04/09/2019	ND	20	40
					10/15/2019	ND	440	880
					Annual Mean	<440		
					Annual Max	<440		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
					Annual Max	<23		
EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830		
			Annual Mean	<410				
			Annual Max	<410				
	Toluene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	37 DNQ	24	48
					04/09/2019	77	20	40
					10/15/2019	ND	440	880
					Annual Mean	180 DNQ		
					Annual Max	77		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
					Annual Max	<23		
EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830		
			Annual Mean	<410				
			Annual Max	<410				
	trans-1,2-Dichloroethene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48
					04/09/2019	ND	20	40
					10/15/2019	ND	440	880
					Annual Mean	<440		
					Annual Max	<440		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
					Annual Max	<23		
EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830		
			Annual Mean	<410				
			Annual Max	<410				
	trans-1,3-Dichloropropene	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48
					04/09/2019	ND	20	40
					10/15/2019	ND	440	880
					Annual Mean	<440		
					Annual Max	<440		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44
					04/09/2019	ND	23	45
					Annual Mean	<23		
					Annual Max	<23		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Trichloroethene	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830
					Annual Mean	<410		
					Annual Max	<410		
		EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	48
					04/09/2019	ND	20	40
					10/15/2019	ND	440	880
					Annual Mean	<440		
					Annual Max	<440		
					Annual Mean	<440		
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	44	
				04/09/2019	ND	23	45	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	410	830	
				Annual Mean	<410			
				Annual Max	<410			
	Trichlorofluoromethane	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120
					04/09/2019	ND	20	100
					10/15/2019	ND	880	2200
					Annual Mean	<880		
					Annual Max	<880		
					Annual Max	<880		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110
					04/09/2019	ND	23	110
Annual Mean					<23			
Annual Max					<23			
EPA 8260B		µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100	
				Annual Mean	<830			
	Annual Max			<830				
Vinyl chloride	EPA 8260B	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	120	
				04/09/2019	ND	20	100	
				10/15/2019	ND	880	2200	
				Annual Mean	<880			
				Annual Max	<880			
				Annual Max	<880			
	EPA 8260B	µg/kg dry	Plant 2 Cake	01/22/2019	ND	22	110	
				04/09/2019	ND	23	110	
				Annual Mean	<23			
				Annual Max	<23			
	EPA 8260B	µg/kg dry	Plant 2 Dewatering Cake	10/15/2019	ND	830	2100	
				Annual Mean	<830			
				Annual Max	<830			
				Annual Max	<830			
				Annual Max	<830			
Semi-Volatile Organic Compounds	1,2,4-Trichlorobenzene	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	4800
					04/09/2019	ND	3000	7500
					07/16/2019	ND	4900	15000
					10/22/2019	ND	3300	8300
					Annual Mean	<4900		
					Annual Max	<4900		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1800	4500		
					04/09/2019	ND	3600	9100		
					Annual Mean	<3600				
					Annual Max	<3600				
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5100	16000		
					10/22/2019	ND	2900	7300		
					Annual Mean	<5100				
					Annual Max	<5100				
	1,2-Dichlorobenzene	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	990	4800		
					04/09/2019	ND	1600	7500		
					07/16/2019	ND	4600	31000		
					10/22/2019	ND	1700	8300		
Annual Mean					<4600					
Annual Max					<4600					
EPA 8270C		µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500			
				04/09/2019	ND	1900	9100			
				Annual Mean	<1900					
				Annual Max	<1900					
				EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4900	32000
							10/22/2019	ND	1500	7300
Annual Mean	<4900									
Annual Max	<4900									
1,2-DIPHENYLHYDRAZINE	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	07/16/2019	ND	4400	15000			
				Annual Mean	<4400					
				Annual Max	<4400					
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4700	16000			
				Annual Mean	<4700					
				Annual Max	<4700					
1,3-Dichlorobenzene	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	4800			
				04/09/2019	ND	3000	7500			
				07/16/2019	ND	4000	15000			
				10/22/2019	ND	3300	8300			
				Annual Mean	<4000					
				Annual Max	<4000					
				EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1800	4500
							04/09/2019	ND	3600	9100
	Annual Mean	<3600								
	Annual Max	<3600								
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake				07/16/2019	ND	4200	16000
							10/22/2019	ND	2900	7300
				Annual Mean	<4200					
				Annual Max	<4200					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
1,4-Dichlorobenzene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	4800			
					04/09/2019	ND	3000	7500			
					07/16/2019	ND	3800	15000			
					10/22/2019	ND	3300	8300			
					Annual Mean	<3800					
					Annual Max	<3800					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1800	4500			
					04/09/2019	ND	3600	9100			
					Annual Mean	<3600					
					Annual Max	<3600					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4000	16000
								10/22/2019	ND	2900	7300
		Annual Mean	<4000								
		Annual Max	<4000								
		2,4,5-Trichlorophenol		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	3800	9500	
04/09/2019	ND						6000	15000			
07/16/2019	ND						4900	15000			
10/22/2019	ND						6600	17000			
Annual Mean	<6600										
Annual Max	<6600										
EPA 8270C	µg/kg dry			Plant 2 Cake	01/22/2019	ND	3600	8900			
					04/09/2019	ND	7300	18000			
					Annual Mean	<7300					
					Annual Max	<7300					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5200	16000
								10/22/2019	ND	5800	15000
Annual Mean	<5800										
Annual Max	<5800										
2,4,6-Trichlorophenol				EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	3000	9500	
		04/09/2019	ND				4800	15000			
		07/16/2019	ND				6100	15000			
		10/22/2019	ND				5300	17000			
		Annual Mean	<6100								
		Annual Max	<6100								
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	2900	8900			
					04/09/2019	ND	5800	18000			
					Annual Mean	<5800					
					Annual Max	<5800					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	6400	16000
								10/22/2019	ND	4600	15000
		Annual Mean	<6400								
		Annual Max	<6400								

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
2,4-Dichlorophenol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	950	4800	
				04/09/2019	ND	1500	7500	
				07/16/2019	ND	4800	15000	
				10/22/2019	ND	1700	8300	
				Annual Mean	<4800			
				Annual Max	<4800			
				Plant 2 Cake	01/22/2019	ND	890	4500
					04/09/2019	ND	1800	9100
					Annual Mean	<1800		
					Annual Max	<1800		
				Plant 2 Dewatering Cake	07/16/2019	ND	5100	16000
					10/22/2019	ND	1500	7300
					Annual Mean	<5100		
					Annual Max	<5100		
				2,4-Dimethylphenol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019
04/09/2019	ND	2900	7500					
07/16/2019	ND	4600	15000					
10/22/2019	ND	3300	8300					
Annual Mean	<4600							
Annual Max	<4600							
Plant 2 Cake	01/22/2019	ND	1700					4500
	04/09/2019	ND	3600					9100
	Annual Mean	<3600						
	Annual Max	<3600						
Plant 2 Dewatering Cake	07/16/2019	ND	4900					16000
	10/22/2019	ND	2800					7300
	Annual Mean	<4900						
	Annual Max	<4900						
2,4-Dinitrophenol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake					01/22/2019
				04/09/2019	ND	23000	30000	
				07/16/2019	ND	42000	150000	
				10/22/2019	ND	25000	33000	
				Annual Mean	<42000			
				Annual Max	<42000			
				Plant 2 Cake	01/22/2019	ND	13000	18000
					04/09/2019	ND	27000	36000
					Annual Mean	<27000		
					Annual Max	<27000		
				Plant 2 Dewatering Cake	07/16/2019	ND	44000	160000
					10/22/2019	ND	22000	29000
					Annual Mean	<44000		
					Annual Max	<44000		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
2,4-Dinitrotoluene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1100	4800
					04/09/2019	ND	1800	7500
					07/16/2019	ND	5600	15000
					10/22/2019	ND	2000	8300
					Annual Mean	<5600		
					Annual Max	<5600		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1100	4500
					04/09/2019	ND	2200	9100
					Annual Mean	<2200		
					Annual Max	<2200		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5900	16000
					10/22/2019	ND	1700	7300
					Annual Mean	<5900		
					Annual Max	<5900		
		2,6-Dinitrotoluene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND
04/09/2019	ND						2100	7500
07/16/2019	ND						5500	15000
10/22/2019	ND						2400	8300
Annual Mean	<5500							
Annual Max	<5500							
EPA 8270C	µg/kg dry			Plant 2 Cake	01/22/2019	ND	1300	4500
					04/09/2019	ND	2600	9100
					Annual Mean	<2600		
					Annual Max	<2600		
EPA 8270C	µg/kg dry			Plant 2 Dewatering Cake	07/16/2019	ND	5800	16000
					10/22/2019	ND	2100	7300
					Annual Mean	<5800		
					Annual Max	<5800		
2-Chloronaphthalene				EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND
		04/09/2019	ND				1500	7500
		07/16/2019	ND				5300	15000
		10/22/2019	ND				1700	8300
		Annual Mean	<5300					
		Annual Max	<5300					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	890	4500
					04/09/2019	ND	1800	9100
					Annual Mean	<1800		
					Annual Max	<1800		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5600	16000
					10/22/2019	ND	1500	7300
					Annual Mean	<5600		
					Annual Max	<5600		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
2-Chlorophenol		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	990	4800
					04/09/2019	ND	1600	7500
					07/16/2019	ND	3900	15000
					10/22/2019	ND	1700	8300
					Annual Mean	<3900		
					Annual Max	<3900		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500
					04/09/2019	ND	1900	9100
					Annual Mean	<1900		
					Annual Max	<1900		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4100	16000
					10/22/2019	ND	1500	7300
					Annual Mean	<4100		
					Annual Max	<4100		
		2-Methylnaphthalene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND
04/09/2019	ND						1600	7500
07/16/2019	ND						4300	31000
10/22/2019	ND						1700	8300
Annual Mean	<4300							
Annual Max	<4300							
EPA 8270C	µg/kg dry			Plant 2 Cake	01/22/2019	ND	930	4500
					04/09/2019	ND	1900	9100
					Annual Mean	<1900		
					Annual Max	<1900		
EPA 8270C	µg/kg dry			Plant 2 Dewatering Cake	07/16/2019	ND	4500	32000
					10/22/2019	ND	1500	7300
					Annual Mean	<4500		
					Annual Max	<4500		
2-Methylphenol				EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND
		04/09/2019	ND				1800	7500
		07/16/2019	ND				4800	15000
		10/22/2019	ND				2000	8300
		Annual Mean	<4800					
		Annual Max	<4800					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1100	4500
					04/09/2019	ND	2200	9100
					Annual Mean	<2200		
					Annual Max	<2200		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5000	16000
					10/22/2019	ND	1700	7300
					Annual Mean	<5000		
					Annual Max	<5000		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
	2-Nitroaniline	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	3200	4800			
					04/09/2019	ND	5100	7500			
					07/16/2019	ND	4600	15000			
					10/22/2019	ND	5600	8300			
					Annual Mean	<5600					
					Annual Max	<5600					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	3000	4500			
					04/09/2019	ND	6200	9100			
					Annual Mean	<6200					
					Annual Max	<6200					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4800	16000
								10/22/2019	ND	4900	7300
		Annual Mean	<4900								
		Annual Max	<4900								
		2-Nitrophenol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	4800		
04/09/2019	ND					3000	7500				
07/16/2019	ND					4400	15000				
10/22/2019	ND					3300	8300				
Annual Mean	<4400										
Annual Max	<4400										
EPA 8270C	µg/kg dry		Plant 2 Cake	01/22/2019	ND	1800	4500				
				04/09/2019	ND	3600	9100				
				Annual Mean	<3600						
				Annual Max	<3600						
				EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4600	16000	
							10/22/2019	ND	2900	7300	
Annual Mean	<4600										
Annual Max	<4600										
3 & 4 METHYLPHENOL	EPA 8270C		µg/kg dry	Plant 1 Dewatering Cake	07/16/2019	ND	4600	31000			
		Annual Mean			<4600						
		Annual Max			<4600						
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	8500 DNQ	4800	32000				
				Annual Mean	8500 DNQ						
				Annual Max	8500 DNQ						
3,3- Dichlorobenzidine	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2100	9500				
				04/09/2019	ND	3300	15000				
				07/16/2019	ND	4200	15000				
				10/22/2019	ND	3700	17000				
				Annual Mean	<4200						
				Annual Max	<4200						
	EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	2000	8900				
				04/09/2019	ND	4000	18000				
				Annual Mean	<4000						
				Annual Max	<4000						



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4400	16000
					10/22/2019	ND	3200	15000
					Annual Mean	<4400		
					Annual Max	<4400		
	3-Nitroaniline	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	4800
					04/09/2019	ND	3000	7500
					07/16/2019	ND	5000	15000
					10/22/2019	ND	3300	8300
					Annual Mean	<5000		
					Annual Max	<5000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1800	4500
					04/09/2019	ND	3600	9100
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5300	16000	
				10/22/2019	ND	2900	7300	
				Annual Mean	<5300			
				Annual Max	<5300			
4,6-Dinitro-2-methylphenol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	8000	
				04/09/2019	ND	3000	13000	
				07/16/2019	ND	32000	150000	
				10/22/2019	ND	3300	14000	
				Annual Mean	<32000			
				Annual Max	<32000			
	EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1800	7500	
				04/09/2019	ND	3600	15000	
				Annual Mean	<3600			
				Annual Max	<3600			
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	34000	160000	
				10/22/2019	ND	2900	12000	
Annual Mean				<34000				
Annual Max				<34000				
4-Bromophenyl phenyl ether	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1100	4800	
				04/09/2019	ND	1700	7500	
				07/16/2019	ND	5500	15000	
				10/22/2019	ND	1900	8300	
				Annual Mean	<5500			
				Annual Max	<5500			
	EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1000	4500	
				04/09/2019	ND	2000	9100	
				Annual Mean	<2000			
				Annual Max	<2000			
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5800	16000	
				10/22/2019	ND	1600	7300	
Annual Mean				<5800				
Annual Max				<5800				

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
4-Chloro-3-methylphenol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2900	7600			
				04/09/2019	ND	4500	12000			
				07/16/2019	ND	4500	15000			
				10/22/2019	ND	5000	13000			
				Annual Mean	<5000					
				Annual Max	<5000					
				01/22/2019	ND	2700	7100			
				04/09/2019	ND	5500	15000			
				Annual Mean	<5500					
				Annual Max	<5500					
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4700	16000			
				10/22/2019	ND	4400	12000			
				Annual Mean	<4700					
				Annual Max	<4700					
				EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2900	9500
04/09/2019							ND	4500	15000	
07/16/2019	ND	3100	31000							
10/22/2019	ND	5000	17000							
Annual Mean	<5000									
Annual Max	<5000									
EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019				ND	2700	8900	
			04/09/2019				ND	5500	18000	
			Annual Mean				<5500			
			Annual Max				<5500			
EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	3300	32000				
			10/22/2019	ND	4400	15000				
			Annual Mean	<4400						
			Annual Max	<4400						
			4-Chlorophenyl phenyl ether	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	3800	9500
							04/09/2019	ND	6000	15000
07/16/2019	ND	4900					15000			
10/22/2019	ND	6600					17000			
Annual Mean	<6600									
Annual Max	<6600									
EPA 8270C	µg/kg dry	Plant 2 Cake					01/22/2019	ND	3600	8900
							04/09/2019	ND	7300	18000
							Annual Mean	<7300		
							Annual Max	<7300		
EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake		07/16/2019	ND	5100	16000			
				10/22/2019	ND	5800	15000			
				Annual Mean	<5800					
				Annual Max	<5800					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
4-Methylphenol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	2500 DNQ	1900	4800	
				04/09/2019	3900 DNQ	3000	7500	
				10/22/2019	ND	3300	8300	
				Annual Mean	3200 DNQ			
				Annual Max	3900 DNQ			
				01/22/2019	ND	1800	4500	
				04/09/2019	ND	3600	9100	
				Annual Mean	<3600			
				Annual Max	<3600			
				10/22/2019	ND	2900	7300	
	Annual Mean	<2900						
	Annual Max	<2900						
	4-Nitroaniline	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	9500
					04/09/2019	ND	3000	15000
07/16/2019					ND	5000	15000	
10/22/2019					ND	3300	17000	
Annual Mean					<5000			
Annual Max					<5000			
01/22/2019					ND	1800	8900	
04/09/2019					ND	3600	18000	
Annual Mean					<3600			
Annual Max					<3600			
07/16/2019		ND	5300	16000				
10/22/2019		ND	2900	15000				
Annual Mean		<5300						
Annual Max		<5300						
4-Nitrophenol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	9500	19000	
				04/09/2019	ND	15000	30000	
				07/16/2019	ND	11000	31000	
				10/22/2019	ND	17000	33000	
				Annual Mean	<17000			
				Annual Max	<17000			
				01/22/2019	ND	8900	18000	
				04/09/2019	ND	18000	36000	
				Annual Mean	<18000			
				Annual Max	<18000			
	07/16/2019	ND	11000	32000				
	10/22/2019	ND	15000	29000				
	Annual Mean	<15000						
	Annual Max	<15000						
Acenaphthene	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2500	4800	
				04/09/2019	ND	3900	7500	
				07/16/2019	ND	4600	15000	
				10/22/2019	ND	4300	8300	
				Annual Mean	<4600			
				Annual Max	<4600			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	2300	4500			
					04/09/2019	ND	4700	9100			
					Annual Mean	<4700					
					Annual Max	<4700					
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4900	16000			
					10/22/2019	ND	3800	7300			
					Annual Mean	<4900					
					Annual Max	<4900					
		Acenaphthylene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	990	4800	
							04/09/2019	ND	1600	7500	
							07/16/2019	ND	4900	15000	
							10/22/2019	ND	1700	8300	
Annual Mean	<4900										
Annual Max	<4900										
EPA 8270C	µg/kg dry			Plant 2 Cake	01/22/2019	ND	930	4500			
					04/09/2019	ND	1900	9100			
					Annual Mean	<1900					
					Annual Max	<1900					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5200	16000
								10/22/2019	ND	1500	7300
Annual Mean	<5200										
Annual Max	<5200										
Aniline		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2700	9500			
					04/09/2019	ND	4200	15000			
					10/22/2019	ND	4600	17000			
					Annual Mean	<4600					
					Annual Max	<4600					
					EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	2500	8900
		04/09/2019	ND	5100				18000			
		Annual Mean	<5100								
		Annual Max	<5100								
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake				10/22/2019	ND	4100	15000
								Annual Mean	<4100		
					Annual Max	<4100					
Anthracene					EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1100	4800
		04/09/2019	ND	1800				7500			
		07/16/2019	ND	5100				15000			
		10/22/2019	ND	2000				8300			
		Annual Mean	<5100								
		Annual Max	<5100								
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1100	4500			
					04/09/2019	ND	2200	9100			
					Annual Mean	<2200					
					Annual Max	<2200					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
Azobenzene/1,2-Diphenylhydrazine	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5300	16000			
				10/22/2019	ND	1700	7300			
				Annual Mean	<5300					
				Annual Max	<5300					
	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	990	4800			
				04/09/2019	ND	1600	7500			
				10/22/2019	ND	1700	8300			
				Annual Mean	<1700					
	EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500			
				04/09/2019	ND	1900	9100			
				Annual Mean	<1900					
				Annual Max	<1900					
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	10/22/2019	ND	1500	7300			
				Annual Mean	<1500					
				Annual Max	<1500					
				Benz(a)anthracene				EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake
EPA 8270C	µg/kg dry	04/09/2019	ND	1600	7500					
		07/16/2019	ND	5200	15000					
		10/22/2019	ND	1700	8300					
		Annual Mean	<5200							
EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500				
			04/09/2019	ND	1900	9100				
			Annual Mean	<1900						
			Annual Max	<1900						
EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5500	16000				
			10/22/2019	ND	1500	7300				
			Annual Mean	<5500						
			Annual Max	<5500						
Benzidine	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	3200	25000			
				04/09/2019	ND	5100	39000			
				07/16/2019	ND	36000	92000			
				10/22/2019	ND	5600	43000			
	EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	3000	23000			
				04/09/2019	ND	6200	47000			
				Annual Mean	<6200					
				Annual Max	<6200					
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	38000	97000			
				10/22/2019	ND	4900	38000			
				Annual Mean	<38000					
				Annual Max	<38000					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
Benzo(a)pyrene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	950	4800
					04/09/2019	ND	1500	7500
					07/16/2019	ND	5300	15000
					10/22/2019	ND	1700	8300
					Annual Mean	<5300		
					Annual Max	<5300		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	890	4500
					04/09/2019	ND	1800	9100
					Annual Mean	<1800		
					Annual Max	<1800		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5600	16000
					10/22/2019	ND	1500	7300
					Annual Mean	<5600		
					Annual Max	<5600		
Benzo(b)fluoranthene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	990	4800
					04/09/2019	ND	1600	7500
					07/16/2019	ND	4800	15000
					10/22/2019	ND	1700	8300
					Annual Mean	<4800		
					Annual Max	<4800		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500
					04/09/2019	ND	1900	9100
					Annual Mean	<1900		
					Annual Max	<1900		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5100	16000
					10/22/2019	ND	1500	7300
					Annual Mean	<5100		
					Annual Max	<5100		
Benzo(g,h,i)perylene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1600	4800
					04/09/2019	ND	2500	7500
					07/16/2019	ND	5300	15000
					10/22/2019	ND	2700	8300
					Annual Mean	<5300		
					Annual Max	<5300		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1500	4500
					04/09/2019	ND	3000	9100
					Annual Mean	<3000		
					Annual Max	<3000		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5500	16000
					10/22/2019	ND	2400	7300
					Annual Mean	<5500		
					Annual Max	<5500		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
Benzo(k)fluoranthene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	990	4800
					04/09/2019	ND	1600	7500
					07/16/2019	ND	5600	15000
					10/22/2019	ND	1700	8300
					Annual Mean	<5600		
					Annual Max	<5600		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500
					04/09/2019	ND	1900	9100
					Annual Mean	<1900		
					Annual Max	<1900		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5900	16000
					10/22/2019	ND	1500	7300
					Annual Mean	<5900		
					Annual Max	<5900		
		Benzoic acid		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND
04/09/2019	ND						11000	23000
07/16/2019	ND						17000	61000
10/22/2019	ND						12000	25000
Annual Mean	<17000							
Annual Max	<17000							
EPA 8270C	µg/kg dry			Plant 2 Cake	01/22/2019	ND	6400	13000
					04/09/2019	ND	13000	27000
					Annual Mean	<13000		
					Annual Max	<13000		
EPA 8270C	µg/kg dry			Plant 2 Dewatering Cake	07/16/2019	ND	18000	65000
					10/22/2019	ND	10000	22000
					Annual Mean	<18000		
					Annual Max	<18000		
Benzyl alcohol				EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND
		04/09/2019	ND				12000	39000
		07/16/2019	ND				4700	15000
		10/22/2019	ND				14000	43000
		Annual Mean	<14000					
		Annual Max	<14000					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	7300	23000
					04/09/2019	ND	15000	47000
					Annual Mean	<15000		
					Annual Max	<15000		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5000	16000
					10/22/2019	ND	12000	38000
					Annual Mean	<12000		
					Annual Max	<12000		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
Bis(2-chloroethoxy)methane		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	4800			
					04/09/2019	ND	3000	7500			
					07/16/2019	ND	4400	15000			
					10/22/2019	ND	3300	8300			
					Annual Mean	<4400					
					Annual Max	<4400					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1800	4500			
					04/09/2019	ND	3600	9100			
					Annual Mean	<3600					
					Annual Max	<3600					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4700	16000
								10/22/2019	ND	2900	7300
		Annual Mean	<4700								
		Annual Max	<4700								
Bis(2-chloroethyl)ether		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	990	4800			
					04/09/2019	3500 DNQ	1600	7500			
					07/16/2019	ND	5300	15000			
					10/22/2019	3800 DNQ	1700	8300			
					Annual Mean	3400 DNQ					
					Annual Max	3800 DNQ					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500			
					04/09/2019	ND	1900	9100			
					Annual Mean	<1900					
					Annual Max	<1900					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5500	16000
								10/22/2019	ND	1500	7300
		Annual Mean	<5500								
		Annual Max	<5500								
Bis(2-chloroisopropyl)ether		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	4800			
					04/09/2019	ND	3000	7500			
					07/16/2019	ND	4700	15000			
					10/22/2019	ND	3300	8300			
					Annual Mean	<4700					
					Annual Max	<4700					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1800	4500			
					04/09/2019	ND	3600	9100			
					Annual Mean	<3600					
					Annual Max	<3600					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4900	16000
								10/22/2019	ND	2900	7300
		Annual Mean	<4900								
		Annual Max	<4900								



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
Bis(2-ethylhexyl)phthalate	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	15000	1300	4800			
				04/09/2019	23000	2000	7500			
				07/16/2019	42000	5500	15000			
				10/22/2019	34000	2300	8300			
				Annual Mean	28000					
				Annual Max	42000					
				01/22/2019	26000	1200	4500			
				04/09/2019	44000	2500	9100			
				Annual Mean	35000					
				Annual Max	44000					
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	41000	5800	16000			
				10/22/2019	28000	2000	7300			
				Annual Mean	34000					
				Annual Max	41000					
				Butyl benzyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1100
Butyl benzyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	ND	1800	7500			
				07/16/2019	ND	5100	15000			
				10/22/2019	ND	2000	8300			
				Annual Mean	<5100					
				Annual Max	<5100					
				EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1100	4500
							04/09/2019	ND	2200	9100
							Annual Mean	<2200		
							Annual Max	<2200		
							EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019
	10/22/2019	ND	1700	7300						
	Annual Mean	<5400								
	Annual Max	<5400								
	Chrysene	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND				1100
					04/09/2019	ND	1700	7500		
07/16/2019					ND	5400	15000			
10/22/2019					ND	1900	8300			
Annual Mean					<5400					
Annual Max					<5400					
EPA 8270C					µg/kg dry	Plant 2 Cake	01/22/2019	ND	1000	4500
							04/09/2019	ND	2000	9100
							Annual Mean	<2000		
							Annual Max	<2000		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake			07/16/2019	ND	5700	16000
10/22/2019					ND	1600	7300			
Annual Mean					<5700					
Annual Max					<5700					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
Dibenz(a,h)anthracene	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1400	4800			
				04/09/2019	ND	2300	7500			
				07/16/2019	ND	15000	15000			
				10/22/2019	ND	2500	8300			
				Annual Mean	<15000					
				Annual Max	<15000					
				01/22/2019	ND	1300	4500			
				04/09/2019	ND	2700	9100			
				Annual Mean	<2700					
				Annual Max	<2700					
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	15000	16000			
				10/22/2019	ND	2200	7300			
				Annual Mean	<15000					
				Annual Max	<15000					
EPA 8270C				µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2700	4800	
						04/09/2019	ND	4200	7500	
	07/16/2019	ND	5000			15000				
	10/22/2019	ND	4600			8300				
	Annual Mean	<5000								
	Annual Max	<5000								
	EPA 8270C	µg/kg dry	Plant 2 Cake			01/22/2019	ND	2500	4500	
						04/09/2019	ND	5100	9100	
						Annual Mean	<5100			
						Annual Max	<5100			
EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5300	16000				
			10/22/2019	ND	4100	7300				
			Annual Mean	<5300						
			Annual Max	<5300						
Diethyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1400	4800			
				04/09/2019	ND	2100	7500			
				07/16/2019	ND	4800	15000			
				10/22/2019	ND	2400	8300			
				Annual Mean	<4800					
				Annual Max	<4800					
				EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1300	4500
							04/09/2019	ND	2600	9100
							Annual Mean	<2600		
							Annual Max	<2600		
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5000	16000			
				10/22/2019	ND	2100	7300			
				Annual Mean	<5000					
				Annual Max	<5000					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
Dimethyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	950	4800	
				04/09/2019	ND	1500	7500	
				07/16/2019	ND	4700	15000	
				10/22/2019	ND	1700	8300	
				Annual Mean	<4700			
				Annual Max	<4700			
				Plant 2 Cake	01/22/2019	ND	890	4500
					04/09/2019	ND	1800	9100
					Annual Mean	<1800		
					Annual Max	<1800		
				Plant 2 Dewatering Cake	07/16/2019	ND	5000	16000
					10/22/2019	ND	1500	7300
					Annual Mean	<5000		
					Annual Max	<5000		
				Di-n-butyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019
04/09/2019	ND	2000	7500					
07/16/2019	ND	5200	15000					
10/22/2019	ND	2300	8300					
Annual Mean	<5200							
Annual Max	<5200							
Plant 2 Cake	01/22/2019	ND	1200					4500
	04/09/2019	ND	2500					9100
	Annual Mean	<2500						
	Annual Max	<2500						
Plant 2 Dewatering Cake	07/16/2019	ND	5500					16000
	10/22/2019	ND	2000					7300
	Annual Mean	<5500						
	Annual Max	<5500						
Di-n-octyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake					01/22/2019
				04/09/2019	ND	2000	7500	
				07/16/2019	ND	4900	15000	
				10/22/2019	ND	2300	8300	
				Annual Mean	<4900			
				Annual Max	<4900			
				Plant 2 Cake	01/22/2019	ND	1200	4500
					04/09/2019	ND	2500	9100
					Annual Mean	<2500		
					Annual Max	<2500		
				Plant 2 Dewatering Cake	07/16/2019	ND	5100	16000
					10/22/2019	ND	2000	7300
					Annual Mean	<5100		
					Annual Max	<5100		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
Fluoranthene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	3000	6300
					04/09/2019	ND	4800	9900
					07/16/2019	ND	5000	15000
					10/22/2019	ND	5300	11000
					Annual Mean	<5300		
					Annual Max	<5300		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	2900	5900
					04/09/2019	ND	5800	12000
					Annual Mean	<5800		
					Annual Max	<5800		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5200	16000
					10/22/2019	ND	4600	9600
					Annual Mean	<5200		
					Annual Max	<5200		
		Fluorene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND
04/09/2019	ND						1600	7500
07/16/2019	ND						5100	15000
10/22/2019	ND						1700	8300
Annual Mean	<5100							
Annual Max	<5100							
EPA 8270C	µg/kg dry			Plant 2 Cake	01/22/2019	ND	930	4500
					04/09/2019	ND	1900	9100
					Annual Mean	<1900		
					Annual Max	<1900		
EPA 8270C	µg/kg dry			Plant 2 Dewatering Cake	07/16/2019	ND	5300	16000
					10/22/2019	ND	1500	7300
					Annual Mean	<5300		
					Annual Max	<5300		
Hexachlorobenzene				EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND
		04/09/2019	ND				1600	7500
		07/16/2019	ND				4500	15000
		10/22/2019	ND				1700	8300
		Annual Mean	<4500					
		Annual Max	<4500					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500
					04/09/2019	ND	1900	9100
					Annual Mean	<1900		
					Annual Max	<1900		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4700	16000
					10/22/2019	ND	1500	7300
					Annual Mean	<4700		
					Annual Max	<4700		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
Hexachlorobutadiene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	4800			
					04/09/2019	ND	3000	7500			
					07/16/2019	ND	6300	15000			
					10/22/2019	ND	3300	8300			
					Annual Mean	<6300					
					Annual Max	<6300					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1800	4500			
					04/09/2019	ND	3600	9100			
					Annual Mean	<3600					
					Annual Max	<3600					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	6600	16000
								10/22/2019	ND	2900	7300
		Annual Mean	<6600								
		Annual Max	<6600								
Hexachlorocyclopentadiene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	5900	14000			
					04/09/2019	ND	9300	23000			
					07/16/2019	ND	8700	31000			
					10/22/2019	ND	10000	25000			
					Annual Mean	<10000					
					Annual Max	<10000					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	5500	13000			
					04/09/2019	ND	11000	27000			
					Annual Mean	<11000					
					Annual Max	<11000					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	9100	32000
								10/22/2019	ND	9000	22000
		Annual Mean	<9100								
		Annual Max	<9100								
Hexachloroethane		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1300	4800			
					04/09/2019	ND	2100	7500			
					07/16/2019	ND	4000	31000			
					10/22/2019	ND	2300	8300			
					Annual Mean	<4000					
					Annual Max	<4000					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1200	4500			
					04/09/2019	ND	2500	9100			
					Annual Mean	<2500					
					Annual Max	<2500					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4200	32000
								10/22/2019	ND	2000	7300
		Annual Mean	<4200								
		Annual Max	<4200								

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
Indeno(1,2,3-cd)pyrene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	4800			
					04/09/2019	ND	2900	7500			
					07/16/2019	ND	6300	15000			
					10/22/2019	ND	3300	8300			
					Annual Mean	<6300					
					Annual Max	<6300					
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	1700	4500			
					04/09/2019	ND	3600	9100			
					Annual Mean	<3600					
					Annual Max	<3600					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	6700	16000
								10/22/2019	ND	2800	7300
		Annual Mean	<6700								
		Annual Max	<6700								
		Isophorone		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	950	4800	
04/09/2019	ND						1500	7500			
07/16/2019	ND						5400	15000			
10/22/2019	ND						1700	8300			
Annual Mean	<5400										
Annual Max	<5400										
EPA 8270C	µg/kg dry			Plant 2 Cake	01/22/2019	ND	890	4500			
					04/09/2019	ND	1800	9100			
					Annual Mean	<1800					
					Annual Max	<1800					
					EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5700	16000
								10/22/2019	ND	1500	7300
Annual Mean	<5700										
Annual Max	<5700										
Kepone <sup>2</sup>				EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	14000	76000	
		04/09/2019	ND				23000	120000			
		10/22/2019	ND				25000	130000			
		Annual Mean	<25000								
		Annual Max	<25000								
		EPA 8270C	µg/kg dry				Plant 2 Cake	01/22/2019	ND	13000	71000
				04/09/2019	ND	27000		150000			
				Annual Mean	<27000						
				Annual Max	<27000						
				EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake		10/22/2019	ND	22000	120000
								Annual Mean	<22000		
		Annual Max	<22000								
		Naphthalene		EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	950	4800	
							04/09/2019	ND	1500	7500	
							07/16/2019	ND	5000	31000	
10/22/2019	ND						1700	8300			
Annual Mean	<5000										
Annual Max	<5000										

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	890	4500		
					04/09/2019	ND	1800	9100		
					Annual Mean	<1800				
					Annual Max	<1800				
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5300	32000		
					10/22/2019	ND	1500	7300		
					Annual Mean	<5300				
					Annual Max	<5300				
	Nitrobenzene	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	990	4800		
					04/09/2019	ND	1600	7500		
					07/16/2019	ND	5200	15000		
					10/22/2019	ND	1700	8300		
Annual Mean					<5200					
Annual Max					<5200					
EPA 8270C		µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500			
				04/09/2019	ND	1900	9100			
				Annual Mean	<1900					
				Annual Max	<1900					
				EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5500	16000
							10/22/2019	ND	1500	7300
Annual Mean	<5500									
Annual Max	<5500									
N-Nitrosodimethylamine	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	990	4800			
				04/09/2019	ND	1600	7500			
				07/16/2019	ND	8200	15000			
				10/22/2019	ND	1700	8300			
				Annual Mean	<8200					
				Annual Max	<8200					
	EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500			
				04/09/2019	ND	1900	9100			
				Annual Mean	<1900					
				Annual Max	<1900					
				EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	8600	16000
							10/22/2019	ND	1500	7300
Annual Mean	<8600									
Annual Max	<8600									
N-Nitroso-di-n-propylamine	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	990	4800			
				04/09/2019	ND	1600	7500			
				07/16/2019	ND	4400	31000			
				10/22/2019	ND	1700	8300			
				Annual Mean	<4400					
				Annual Max	<4400					
	EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	930	4500			
				04/09/2019	ND	1900	9100			
				Annual Mean	<1900					
				Annual Max	<1900					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	4700	32000
					10/22/2019	ND	1500	7300
					Annual Mean	<4700		
					Annual Max	<4700		
	N-Nitrosodiphenylamine	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	3000	9500
					04/09/2019	ND	4800	15000
					07/16/2019	ND	4900	15000
					10/22/2019	ND	5300	17000
					Annual Mean	<5300		
					Annual Max	<5300		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	2900	8900
					04/09/2019	ND	5800	18000
					Annual Mean	<5800		
					Annual Max	<5800		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5200	16000
					10/22/2019	ND	4600	15000
	Annual Mean				<5200			
	Annual Max				<5200			
	Pentachlorophenol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	4900	9500
					04/09/2019	ND	7800	15000
07/16/2019					ND	30000	61000	
10/22/2019					ND	8600	17000	
Annual Mean					<30000			
Annual Max					<30000			
EPA 8270C		µg/kg dry	Plant 2 Cake	01/22/2019	ND	4600	8900	
				04/09/2019	ND	9500	18000	
				Annual Mean	<9500			
				Annual Max	<9500			
EPA 8270C		µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	32000	65000	
				10/22/2019	ND	7600	15000	
	Annual Mean			<32000				
	Annual Max			<32000				
Phenanthrene	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2900	6300	
				04/09/2019	ND	4500	9900	
				07/16/2019	ND	4800	15000	
				10/22/2019	ND	5000	11000	
				Annual Mean	<5000			
				Annual Max	<5000			
	EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	ND	2700	5900	
				04/09/2019	ND	5500	12000	
				Annual Mean	<5500			
				Annual Max	<5500			
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	5100	16000	
				10/22/2019	ND	4400	9600	
Annual Mean				<5100				
Annual Max				<5100				



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
Phenol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	2700 DNQ	1300	4800	
				04/09/2019	2000 DNQ	2000	7500	
				07/16/2019	27000 DNQ	4800	31000	
				10/22/2019	62000	2300	8300	
				Annual Mean	23000 DNQ			
				Annual Max	62000			
				01/22/2019	ND	1200	4500	
				04/09/2019	ND	2500	9100	
				Annual Mean	<2500			
				Annual Max	<2500			
				07/16/2019	18000 DNQ	5000	32000	
				10/22/2019	ND	2000	7300	
				Annual Mean	10000 DNQ			
				Annual Max	18000 DNQ			
				Pyrene	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019
04/09/2019	ND	3000	7500					
07/16/2019	ND	5400	15000					
10/22/2019	ND	3300	8300					
Annual Mean	<5400							
Annual Max	<5400							
01/22/2019	ND	1800	4500					
04/09/2019	ND	3600	9100					
Annual Mean	<3600							
Annual Max	<3600							
07/16/2019	ND	5700	16000					
10/22/2019	ND	2900	7300					
Annual Mean	<5700							
Annual Max	<5700							
Pyridine	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake					01/22/2019
				04/09/2019	ND	3300	10000	
				07/16/2019	ND	5100	31000	
				10/22/2019	ND	3700	11000	
				Annual Mean	<5100			
				Annual Max	<5100			
				01/22/2019	ND	2000	6100	
				04/09/2019	ND	4000	12000	
				Annual Mean	<4000			
				Annual Max	<4000			
				07/16/2019	ND	5300	32000	
				10/22/2019	ND	3200	9900	
				Annual Mean	<5300			
				Annual Max	<5300			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
Organochlorine Pesticides	Aldrin	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1200	8200		
					04/09/2019	ND	420	2900		
					07/16/2019	ND	410	2800		
					10/15/2019	ND	200	1300		
					12/03/2019	ND	110	350		
					Annual Mean	<1200				
					Annual Max	<1200				
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	110	750		
					04/09/2019	ND	480	3200		
					Annual Mean	<480				
					Annual Max	<480				
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	410	2800		
					10/15/2019	ND	180	1200		
					12/03/2019	ND	100	330		
					Annual Mean	<410				
	Annual Max				<410					
	alpha-BHC	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1000	8200		
					04/09/2019	ND	360	2900		
					07/16/2019	ND	350	2800		
					10/15/2019	ND	170	1300		
					12/03/2019	ND	110	350		
Annual Mean					<1000					
Annual Max					<1000					
EPA 8081A					µg/kg dry	Plant 2 Cake	01/22/2019	ND	95	750
							04/09/2019	ND	410	3200
							Annual Mean	<410		
							Annual Max	<410		
EPA 8081A					µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	350	2800
		10/15/2019	ND	150			1200			
		12/03/2019	ND	100			330			
		Annual Mean	<350							
Annual Max				<350						
beta-BHC	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	3200	8200			
				04/09/2019	ND	470	2900			
				07/16/2019	1400 DNQ	1100	2800			
				10/15/2019	ND	520	1300			
				12/03/2019	ND	110	350			
				Annual Mean	1100 DNQ					
				Annual Max	1400 DNQ					
				EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	290	750
							04/09/2019	ND	530	3200
							Annual Mean	<530		
	Annual Max	<530								

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	2600 DNQ	1100	2800
					10/15/2019	ND	470	1200
					12/03/2019	ND	100	330
					Annual Mean	1100 DNQ		
					Annual Max	2600 DNQ		
	Chlordane <sup>2</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	38000	120000
					04/09/2019	ND	13000	42000
					07/16/2019	ND	13000	41000
					10/15/2019	ND	6100	19000
					12/03/2019	ND	1100	3500
					Annual Mean	<38000		
		Annual Max	<38000					
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	3400	11000
					04/09/2019	ND	15000	48000
					Annual Mean	<15000		
					Annual Max	<15000		
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	13000	40000
					10/15/2019	ND	5500	18000
					12/03/2019	ND	1000	3300
					Annual Mean	<13000		
Annual Max	<13000							
delta-BHC	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1900	8200	
				04/09/2019	ND	680	2900	
				07/16/2019	ND	660	2800	
				10/15/2019	ND	310	1300	
				12/03/2019	ND	110	710	
				Annual Mean	<1900			
	Annual Max	<1900						
	EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	180	750	
				04/09/2019	ND	770	3200	
				Annual Mean	<770			
				Annual Max	<770			
	EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	650	2800	
				10/15/2019	ND	280	1200	
				12/03/2019	ND	100	670	
				Annual Mean	<650			
Annual Max				<650				
Dieldrin	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1000	8200	
				04/09/2019	ND	350	2900	
				07/16/2019	ND	340	2800	
				10/15/2019	ND	160	1300	
				12/03/2019	ND	110	350	
				Annual Mean	<1000			
				Annual Max	<1000			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	93	750
					04/09/2019	ND	400	3200
					Annual Mean	<400		
					Annual Max	<400		
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	340	2800
					10/15/2019	ND	150	1200
					12/03/2019	ND	100	330
					Annual Mean	<340		
	Endosulfan 1	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	850	8200
					04/09/2019	ND	300	2900
					07/16/2019	ND	290	2800
					10/15/2019	ND	140	1300
					12/03/2019	ND	110	350
					Annual Mean	<850		
EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	78	750		
			04/09/2019	ND	340	3200		
			Annual Mean	<340				
			Annual Max	<340				
	EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	280	2800	
				10/15/2019	ND	120	1200	
				12/03/2019	ND	100	330	
				Annual Mean	<280			
Endosulfan 2 <sup>3</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1400	8200	
				04/09/2019	ND	480	2900	
				07/16/2019	4400	470	2800	
				10/15/2019	ND	220	1300	
				12/03/2019	ND	110	350	
				Annual Mean	1300 DNQ			
				Annual Max	4400			
				EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND
	04/09/2019	ND	550				3200	
	Annual Mean	<550						
	Annual Max	<550						
	EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	460	2800	
				10/15/2019	ND	200	1200	
				12/03/2019	ND	100	330	
Annual Mean				<460				
Annual Max				<460				

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
Endosulfan Sulfate	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1300	8200			
				04/09/2019	ND	470	2900			
				07/16/2019	ND	450	2800			
				10/15/2019	ND	210	1300			
				12/03/2019	ND	140	710			
				Annual Mean	<1300					
				Annual Max	<1300					
				01/22/2019	ND	120	750			
				04/09/2019	ND	530	3200			
				Annual Mean	<530					
				Annual Max	<530					
				EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	450	2800
	10/15/2019	ND	190	1200						
	12/03/2019	ND	130	670						
	Annual Mean	<450								
	Annual Max	<450								
	Endrin <sup>2</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1500	8200		
					04/09/2019	ND	520	2900		
07/16/2019					ND	500	2800			
10/15/2019					ND	240	1300			
12/03/2019					ND	110	350			
Annual Mean					<1500					
Annual Max					<1500					
EPA 8081A					µg/kg dry	Plant 2 Cake	01/22/2019	ND	140	750
04/09/2019					ND	580	3200			
Annual Mean					<580					
Annual Max					<580					
EPA 8081A					µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	500	2800
10/15/2019		ND	210	1200						
12/03/2019		ND	100	330						
Annual Mean		<500								
Annual Max		<500								
Endrin Aldehyde		EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	830	8200		
					04/09/2019	ND	290	2900		
	07/16/2019				ND	280	2800			
	10/15/2019				ND	130	1300			
	12/03/2019				ND	110	350			
	Annual Mean				<830					
	Annual Max				<830					
	EPA 8081A				µg/kg dry	Plant 2 Cake	01/22/2019	ND	76	750
	04/09/2019				ND	330	3200			
	Annual Mean				<330					
	Annual Max				<330					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	280	2800
					10/15/2019	ND	120	1200
					12/03/2019	ND	100	330
					Annual Mean	<280		
					Annual Max	<280		
	Endrin Ketone	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2400	8200
					04/09/2019	ND	820	2900
					07/16/2019	ND	330	2800
					10/15/2019	ND	160	1300
					12/03/2019	ND	140	350
					Annual Mean	<2400		
		Annual Max	<2400					
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	220	750
					04/09/2019	ND	930	3200
					Annual Mean	<930		
					Annual Max	<930		
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	330	2800
					10/15/2019	ND	140	1200
					12/03/2019	ND	130	330
					Annual Mean	<330		
Annual Max	<330							
gamma-BHC	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2200	8200	
				04/09/2019	ND	780	2900	
				07/16/2019	ND	320	2800	
				10/15/2019	ND	150	1300	
				12/03/2019	ND	110	350	
				Annual Mean	<2200			
	Annual Max	<2200						
	EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	210	750	
				04/09/2019	ND	890	3200	
				Annual Mean	<890			
				Annual Max	<890			
	EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	320	2800	
				10/15/2019	ND	140	1200	
				12/03/2019	ND	100	330	
				Annual Mean	<320			
Annual Max				<320				
Heptachlor	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1000	8200	
				04/09/2019	ND	360	2900	
				07/16/2019	ND	350	2800	
				10/15/2019	ND	170	1300	
				12/03/2019	ND	140	350	
				Annual Mean	<1000			
				Annual Max	<1000			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	95	750			
					04/09/2019	ND	410	3200			
					Annual Mean	<410					
					Annual Max	<410					
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	350	2800			
					10/15/2019	ND	150	1200			
					12/03/2019	ND	130	330			
					Annual Mean	<350					
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	Annual Max	<350					
					EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2100	8200
								04/09/2019	ND	720	2900
								07/16/2019	ND	700	2800
		10/15/2019	ND	330				1300			
		12/03/2019	ND	140				350			
Annual Mean	<2100										
Annual Max	<2100										
EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	190	750					
			04/09/2019	ND	810	3200					
			Annual Mean	<810							
			Annual Max	<810							
EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	690	2800					
			10/15/2019	ND	300	1200					
			12/03/2019	ND	130	330					
			Annual Mean	<690							
Annual Max	<690										
Kepone <sup>2</sup>		EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	120000	360000			
					04/09/2019	ND	42000	130000			
					07/16/2019	ND	41000	120000			
					10/15/2019	ND	19000	58000			
					Annual Mean	<120000					
					Annual Max	<120000					
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	11000	33000			
					04/09/2019	ND	48000	140000			
					Annual Mean	<48000					
					Annual Max	<48000					
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	40000	120000			
					10/15/2019	ND	18000	53000			
					Annual Mean	<40000					
					Annual Max	<40000					
Methoxychlor		EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2200	16000			
					04/09/2019	ND	760	5600			
					07/16/2019	ND	740	5400			
					10/15/2019	ND	350	2600			
					12/03/2019	ND	110	350			
					Annual Mean	<2200					
					Annual Max	<2200					

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	200	1500		
					04/09/2019	ND	860	6300		
					Annual Mean	<860				
					Annual Max	<860				
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	730	5300		
					10/15/2019	ND	320	2300		
					12/03/2019	ND	100	330		
					Annual Mean	<730				
		Annual Max	<730							
		Mirex <sup>2</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1300	8200	
	04/09/2019					ND	450	2900		
	07/16/2019					ND	440	2800		
	10/15/2019					ND	210	1300		
	Annual Mean					<1300				
Annual Max	<1300									
EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	120	750				
			04/09/2019	ND	510	3200				
			Annual Mean	<510						
			Annual Max	<510						
			EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	430	2800	
						10/15/2019	ND	190	1200	
Annual Mean	<430									
Annual Max	<430									
o,p'-DDD <sup>2</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	870	8200			
				04/09/2019	ND	300	2900			
				07/16/2019	ND	590	2800			
				10/15/2019	ND	280	1300			
				12/03/2019	ND	110	350			
				Annual Mean	<870					
				Annual Max	<870					
				EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	80	750
							04/09/2019	ND	340	3200
							Annual Mean	<340		
	Annual Max	<340								
	EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	580	2800			
				10/15/2019	ND	250	1200			
				12/03/2019	ND	100	330			
Annual Mean				<580						
Annual Max				<580						
EPA 8081A				µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1600	8200	
	04/09/2019	ND	550			2900				
	07/16/2019	ND	1100			2800				
	10/15/2019	ND	510			1300				
	12/03/2019	ND	110			350				
	Annual Mean	<1600								
Annual Max	<1600									



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	140	750
					04/09/2019	ND	620	3200
					Annual Mean	<620		
					Annual Max	<620		
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	1100	2800
					10/15/2019	ND	460	1200
					12/03/2019	ND	100	330
					Annual Mean	<1100		
	o,p'-DDT <sup>2</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1300	8200
					04/09/2019	ND	450	2900
					07/16/2019	ND	870	2800
					10/15/2019	ND	410	1300
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	120	750
					04/09/2019	ND	510	3200
					Annual Mean	<510		
					Annual Max	<510		
EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	860	2800		
			10/15/2019	ND	370	1200		
			12/03/2019	ND	100	330		
			Annual Mean	<860				
p,p'-DDD <sup>2</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2600	8200	
				04/09/2019	ND	920	2900	
				07/16/2019	ND	890	2800	
				10/15/2019	ND	420	1300	
				12/03/2019	ND	110	350	
				Annual Mean	<2600			
				Annual Max	<2600			
				EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND
	04/09/2019	ND	1000				3200	
	Annual Mean	<1000						
	Annual Max	<1000						
	EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	880	2800	
				10/15/2019	ND	380	1200	
				12/03/2019	ND	100	330	
				Annual Mean	<880			
	Annual Max	<880						

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL		
	p,p'-DDE <sup>2</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1100	8200		
					04/09/2019	ND	400	2900		
					07/16/2019	ND	390	2800		
					10/15/2019	ND	190	1300		
					12/03/2019	ND	110	350		
					Annual Mean	<1100				
		Annual Max	<1100							
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	110	750		
					04/09/2019	ND	450	3200		
					Annual Mean	<450				
					Annual Max	<450				
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	390	2800		
	10/15/2019				ND	170	1200			
	12/03/2019				ND	100	330			
	Annual Mean				<390					
	Annual Max			<390						
				<390						
				<390						
		<390								
		<390								
		<390								
p,p'-DDT <sup>2</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2800	8200			
				04/09/2019	ND	990	2900			
				07/16/2019	ND	960	2800			
				10/15/2019	ND	460	1300			
				12/03/2019	ND	110	350			
				Annual Mean	<2800					
				Annual Max	<2800					
				EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	260	750
							04/09/2019	ND	1100	3200
							Annual Mean	<1100		
							Annual Max	<1100		
				EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	960	2800
	10/15/2019	ND	410				1200			
	12/03/2019	ND	100				330			
	Annual Mean	<960								
	Annual Max			<960						
				<960						
	Total DDTs <sup>2</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	0.0	--	--		
04/09/2019					0.0	--	--			
07/16/2019					0.0	--	--			
10/15/2019					0.0	--	--			
12/03/2019					0.0	--	--			
Annual Mean					0.0					
Annual Max		0.0								
EPA 8081A		µg/kg dry	Plant 2 Cake	01/22/2019	0.0	--	--			
				04/09/2019	0.0	--	--			
				Annual Mean	0.0					
				Annual Max	0.0					
EPA 8081A		µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	0.0	--	--			
	10/15/2019			0.0	--	--				
	12/03/2019			0.0	--	--				
	Annual Mean			0.0						
Annual Max			0.0							
			0.0							

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL	
	Toxaphene <sup>2</sup>	EPA 8081A	µg/kg dry	Plant 1 Dewatering Cake	Annual Mean	0.0			
					Annual Max	0.0			
					01/22/2019	ND	76000	320000	
					04/09/2019	ND	27000	110000	
					07/16/2019	ND	26000	110000	
					10/15/2019	ND	12000	52000	
					12/03/2019	ND	3500	14000	
		Annual Mean	<76000						
		Annual Max	<76000						
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	7000	30000	
					04/09/2019	ND	30000	130000	
					Annual Mean	<30000			
					Annual Max	<30000			
		EPA 8081A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	26000	110000	
					10/15/2019	ND	11000	47000	
					12/03/2019	ND	3300	13000	
					Annual Mean	<26000			
Annual Max	<26000								
PCBs	PCB 1016	EPA 8082	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1600	4800	
					04/09/2019	ND	140	430	
					07/16/2019	ND	97	200	
					10/15/2019	ND	900	1900	
					Annual Mean	<1600			
					Annual Max	<1600			
		EPA 8082	µg/kg dry	Plant 2 Cake	01/22/2019	ND	75	220	
					04/09/2019	ND	160	480	
					Annual Mean	<160			
					Annual Max	<160			
		EPA 8082	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	480	1000	
					10/15/2019	ND	830	1700	
					Annual Mean	<830			
					Annual Max	<830			
		PCB 1221	EPA 8082	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1600	4800
						04/09/2019	ND	140	430
						07/16/2019	ND	120	200
10/15/2019	ND					1100	1900		
Annual Mean	<1600								
Annual Max	<1600								
EPA 8082	µg/kg dry		Plant 2 Cake	01/22/2019	ND	75	220		
				04/09/2019	ND	160	480		
				Annual Mean	<160				
				Annual Max	<160				
EPA 8082	µg/kg dry		Plant 2 Dewatering Cake	07/16/2019	ND	580	1000		
				10/15/2019	ND	1000	1700		
				Annual Mean	<1000				
				Annual Max	<1000				

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
PCB 1232		EPA 8082	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1600	4800			
					04/09/2019	ND	140	430			
					07/16/2019	ND	130	200			
					10/15/2019	ND	1200	1900			
					Annual Mean	<1600					
					Annual Max	<1600					
		EPA 8082	µg/kg dry	Plant 2 Cake	01/22/2019	ND	75	220			
					04/09/2019	ND	160	480			
					Annual Mean	<160					
					Annual Max	<160					
					EPA 8082	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	640	1000
								10/15/2019	ND	1100	1700
		Annual Mean	<1100								
		Annual Max	<1100								
		PCB 1242		EPA 8082	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1600	4800	
04/09/2019	ND						140	430			
07/16/2019	ND						62	200			
10/15/2019	ND						580	1900			
Annual Mean	<1600										
Annual Max	<1600										
EPA 8082	µg/kg dry			Plant 2 Cake	01/22/2019	ND	75	220			
					04/09/2019	ND	160	480			
					Annual Mean	<160					
					Annual Max	<160					
					EPA 8082	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	310	1000
								10/15/2019	ND	530	1700
Annual Mean	<530										
Annual Max	<530										
PCB 1248				EPA 8082	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1600	4800	
		04/09/2019	ND				140	430			
		07/16/2019	ND				65	200			
		10/15/2019	ND				600	1900			
		Annual Mean	<1600								
		Annual Max	<1600								
		EPA 8082	µg/kg dry	Plant 2 Cake	01/22/2019	ND	75	220			
					04/09/2019	ND	160	480			
					Annual Mean	<160					
					Annual Max	<160					
					EPA 8082	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	320	1000
								10/15/2019	ND	550	1700
		Annual Mean	<550								
		Annual Max	<550								

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL				
PCB 1254	PCB 1254	EPA 8082	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1600	4800				
					04/09/2019	ND	140	430				
					07/16/2019	ND	63	200				
					10/15/2019	ND	580	1900				
					Annual Mean	<1600						
					Annual Max	<1600						
		EPA 8082	µg/kg dry	Plant 2 Cake	01/22/2019	ND	75	220				
					04/09/2019	ND	160	480				
					Annual Mean	<160						
					Annual Max	<160						
		EPA 8082	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	310	1000				
					10/15/2019	ND	530	1700				
					Annual Mean	<530						
					Annual Max	<530						
		PCB 1260	PCB 1260	EPA 8082	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1600	4800		
04/09/2019	ND						140	430				
07/16/2019	ND						63	200				
10/15/2019	ND						580	1900				
Annual Mean	<1600											
Annual Max	<1600											
EPA 8082	µg/kg dry			Plant 2 Cake	01/22/2019	ND	75	220				
					04/09/2019	ND	160	480				
					Annual Mean	<160						
					Annual Max	<160						
EPA 8082	µg/kg dry			Plant 2 Dewatering Cake	07/16/2019	ND	310	1000				
					10/15/2019	ND	530	1700				
					Annual Mean	<530						
					Annual Max	<530						
PCB_HR_DM	PCB_HR_DM			EPA 8082	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	1600	4800		
		04/09/2019	ND				140	430				
		Annual Mean	<1600									
		Annual Max	<1600									
		EPA 8082	µg/kg dry	Plant 2 Cake	01/22/2019	ND	75	220				
					04/09/2019	ND	160	480				
					Annual Mean	<160						
					Annual Max	<160						
					Total PCBs	EPA 8082	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	0	--	--
									04/09/2019	0	--	--
07/16/2019	0	--	--									
10/15/2019	0	--	--									
Annual Mean	0											
Annual Max	0											
EPA 8082	µg/kg dry	Plant 2 Cake	01/22/2019	0	--	--						
			04/09/2019	0	--	--						
			Annual Mean	0								
			Annual Max	0								

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
		EPA 8082	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	0	--	--			
					10/15/2019	0	--	--			
					Annual Mean	0					
					Annual Max	0					
Herbicides	2,4,5-T	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	ND	49	180			
					Annual Mean	<49					
					Annual Max	<49					
					EPA 8151A	µg/kg dry	Plant 2 Cake	04/09/2019	ND	11	39
								Annual Mean	<11		
								Annual Max	<11		
	2,4,5-TP (Silvex)	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	7.6	40			
					04/09/2019	ND	34	180			
					07/16/2019	ND	780	1570			
					Annual Mean	<780					
					Annual Max	<780					
					EPA 8151A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	710	3700
04/09/2019		ND	7.5	39							
Annual Mean		<710									
Annual Max		<710									
EPA 8151A		µg/kg dry	Plant 2 Dewatering Cake	07/16/2019				ND	670	1340	
				Annual Mean				<670			
				Annual Max	<670						
	2,4-D			EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	24	40	
							04/09/2019	ND	110	180	
							07/16/2019	ND	100000	20900	
Annual Mean		<100000									
Annual Max		<100000									
EPA 8151A		µg/kg dry	Plant 2 Cake				01/22/2019	ND	2200	3700	
				04/09/2019	ND	23	39				
				Annual Mean	<2200						
				Annual Max	<2200						
				EPA 8151A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	8900	17800	
							Annual Mean	<8900			
Annual Max		<8900									
4-Nitrophenol	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake				04/09/2019	ND	66	710	
							Annual Mean	<66			
							Annual Max	<66			
				EPA 8151A	µg/kg dry	Plant 2 Cake	04/09/2019	ND	14	150	
							Annual Mean	<14			
							Annual Max	<14			
Dalapon	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	ND	62	2100				
				Annual Mean	<62						
				Annual Max	<62						
				EPA 8151A	µg/kg dry	Plant 2 Cake	04/09/2019	ND	14	470	
							Annual Mean	<14			
							Annual Max	<14			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
Dicamba	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	ND	41	180	
				Annual Mean	<41			
				Annual Max	<41			
	EPA 8151A	µg/kg dry	Plant 2 Cake	04/09/2019	ND	8.9	39	
				Annual Mean	<8.9			
				Annual Max	<8.9			
Dichlorprop (2,4-DP)	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	310	24	180	
				Annual Mean	310			
				Annual Max	310			
	EPA 8151A	µg/kg dry	Plant 2 Cake	04/09/2019	ND	5.1	39	
				Annual Mean	<5.1			
				Annual Max	<5.1			
Dinoseb (DNBP)	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	ND	99	1100	
				Annual Mean	<99			
				Annual Max	<99			
	EPA 8151A	µg/kg dry	Plant 2 Cake	04/09/2019	ND	22	230	
				Annual Mean	<22			
				Annual Max	<22			
MCPA	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	ND	4100	43000	
				Annual Mean	<4100			
				Annual Max	<4100			
	EPA 8151A	µg/kg dry	Plant 2 Cake	04/09/2019	ND	890	9400	
				Annual Mean	<890			
				Annual Max	<890			
MCPP	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	ND	3600	43000	
				Annual Mean	<3600			
				Annual Max	<3600			
	EPA 8151A	µg/kg dry	Plant 2 Cake	04/09/2019	ND	790	9400	
				Annual Mean	<790			
				Annual Max	<790			
Pentachlorophenol	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	ND	2.0	40	
				04/09/2019	ND	9.0	180	
				07/16/2019	ND	1000	2090	
				Annual Mean	<1000			
				Annual Max	<1000			
				Annual Max	<1000			
	EPA 8151A	µg/kg dry	Plant 2 Cake	01/22/2019	ND	190	3700	
				04/09/2019	ND	2.0	39	
				Annual Mean	<190			
				Annual Max	<190			
				Annual Max	<190			
				Annual Max	<190			
EPA 8151A	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	ND	890	1780		
			Annual Mean	<890				
			Annual Max	<890				
			Annual Max	<890				
			Annual Max	<890				
			Annual Max	<890				
Picloram	EPA 8151A	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	ND	39	180	
				Annual Mean	<39			
				Annual Max	<39			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL			
		EPA 8151A	µg/kg dry	Plant 2 Cake	04/09/2019	ND	8.4	39			
					Annual Mean	<8.4					
					Annual Max	<8.4					
Dioxins/Furans	2,3,7,8-TCDD	EPA 1613B	pg/g dry	Plant 1 Dewatering Cake	01/22/2019	4.2 DNQ	1.2	48			
					04/09/2019	ND	2.3	21			
					07/16/2019	ND	2.1	21			
					10/15/2019	ND	0.87	7.8			
					Annual Mean	2.4 DNQ					
					Annual Max	4.2 DNQ					
		EPA 1613B	pg/g dry	Plant 2 Cake	01/22/2019	11 DNQ	1.3	45			
					04/09/2019	ND	2.9	24			
					Annual Mean	7.0 DNQ					
					Annual Max	11 DNQ					
					EPA 1613B	pg/g dry	Plant 2 Dewatering Cake	07/16/2019	ND	2.3	21
								10/15/2019	ND	0.74	7.1
Annual Mean	<2.3										
Annual Max	<2.3										
Other	Asbestos	EPA/600/R-93/116	%	Plant 1 Dewatering Cake	07/16/2019	ND	--	1			
					10/15/2019	ND	--	1			
					Annual Mean	ND					
					Annual Max	ND					
					% dry weight	Plant 1 Dewatering Cake	01/22/2019	ND	--	--	
							04/09/2019	ND	--	--	
				Annual Mean			ND				
				Annual Max			ND				
				EPA/600/R-93/116	% dry weight	Plant 2 Cake	01/22/2019	ND	--	--	
							04/09/2019	ND	--	--	
							Annual Mean	ND			
							Annual Max	ND			
		EPA/600/R-93/116	%				Plant 2 Dewatering Cake	07/16/2019	ND	--	1
								10/15/2019	ND	--	1
				Annual Mean	ND						
				Annual Max	ND						
		Total Volatile Solids	SM 2540G	%	Plant 2 Dewatering Cake	04/09/2019	13	0.050	0.050		
						Annual Mean	13				
Annual Max	13										
SM 2540G	%					Plant 2 Cake	04/15/2019	11	0.050	0.050	
							Annual Mean	11			
							Annual Max	11			
Tentatively Identified Compounds	.GAMMA.-SITOSTEROL	EPA 8270C	µg/kg dry	Plant 2 Cake	04/09/2019	330000	--	18000			
					Annual Mean	330000					
					Annual Max	330000					
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	10/22/2019	530000	--	15000			
					Annual Mean	530000					
					Annual Max	530000					



## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	1000147-77-7	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	780000	--	15000
					Annual Mean	780000		
					Annual Max	780000		
	17-(1,5-DIMETHYLHEXYL)-10,13-DIMETHYL-4-	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	190000	--	9500
					Annual Mean	190000		
					Annual Max	190000		
	2,6,10,14,18,22-TETRACOSAHEXANE, 2,6,10	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	150000	--	9500
					07/16/2019	280000	--	--
					Annual Mean	220000		
					Annual Max	280000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	04/09/2019	250000	--	18000
					Annual Mean	250000		
					Annual Max	250000		
EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	68000	--	--		
			Annual Mean	68000				
			Annual Max	68000				
	2-HYDROXY-6-HEPTADEC-8Z,11Z,14Z-TRIENYLB	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	10/22/2019	460000	--	17000
					Annual Mean	460000		
					Annual Max	460000		
	3-Penten-2-one, 4-methyl-	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	270000	--	9500
					Annual Mean	270000		
					Annual Max	270000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	280000	--	8900
	5-Cholestene-3-ol, 24-methyl-	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	07/16/2019	190000	--	--
					Annual Mean	190000		
					Annual Max	190000		
	6-OCTADECENOIC ACID, (Z)-	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	07/16/2019	160000	--	--
					Annual Mean	160000		
					Annual Max	160000		
	9-OCTADECENOIC ACID, (E)-	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	130000	--	--
					Annual Mean	130000		
					Annual Max	130000		
	Cholest-4-en-3-one	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	240000	--	9500
					04/09/2019	180000	--	15000
					07/16/2019	210000	--	--
					Annual Mean	210000		
					Annual Max	240000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	570000	--	8900
					04/09/2019	420000	--	18000
				Annual Mean	500000			
				Annual Max	570000			

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	10/22/2019	570000	--	15000
					Annual Mean	570000		
					Annual Max	570000		
	CHOLESTA-3,5-DIENE	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	10/22/2019	220000	--	17000
					Annual Mean	220000		
					Annual Max	220000		
	Cholestan-3-ol	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	07/16/2019	210000	--	--
					Annual Mean	210000		
					Annual Max	210000		
	CHOLESTAN-3-OL, (3.BETA.,5.BETA.)-	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	390000	--	--
					Annual Mean	390000		
					Annual Max	390000		
	Cholestan-3-one, (5.beta.)-	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	07/16/2019	1500000	--	--
					Annual Mean	1500000		
					Annual Max	1500000		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	390000	--	--
					Annual Mean	390000		
					Annual Max	390000		
	CHOLESTANE, 3-ETHOXY-, (3.BETA.,5.ALPHA.	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	300000	--	9500
					Annual Mean	300000		
					Annual Max	300000		
	CHOLESTANOL	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	07/16/2019	1500000	--	--
					Annual Mean	1500000		
					Annual Max	1500000		
	DODECANE, 2,6,10-TRIMETHYL-	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	77000	--	--
					Annual Mean	77000		
					Annual Max	77000		
	Eicosane	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	10/22/2019	200000	--	17000
					Annual Max	200000		
	Heptadecane	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	230000	--	9500
					Annual Mean	230000		
					Annual Max	230000		
	HEXADECANE	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	89000	--	--
					Annual Mean	89000		
					Annual Max	89000		
	n-Hexadecanoic acid	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	210000	--	9500
					04/09/2019	240000	--	15000
					10/22/2019	420000	--	17000
					Annual Mean	290000		
					Annual Max	420000		

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL	
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	360000	--	8900	
					04/09/2019	370000	--	18000	
					Annual Mean	360000			
					Annual Max	370000			
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	290000	--	--	
					10/22/2019	250000	--	15000	
					Annual Mean	270000			
					Annual Max	290000			
		Octadec-9-Enoic Acid	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	150000	--	15000
						Annual Mean	150000		
Annual Max	150000								
OCTADECANOIC ACID	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	94000	--	--		
				Annual Mean	94000				
				Annual Max	94000				
PENTADECANE	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	71000	--	--		
				Annual Mean	71000				
				Annual Max	71000				
Squalene	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	160000	--	15000		
				10/22/2019	190000	--	17000		
				Annual Mean	180000				
				Annual Max	190000				
	EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	310000	--	8900		
				Annual Mean	310000				
				Annual Max	310000				
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	10/22/2019	450000	--	15000		
				Annual Mean	450000				
				Annual Max	450000				
Tetradecane	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	04/09/2019	160000	--	15000		
				07/16/2019	150000	--	--		
				Annual Mean	160000				
				Annual Max	160000				
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	160000	--	--		
				Annual Mean	160000				
TRIDECANE	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	07/16/2019	120000	--	--		
				Annual Mean	120000				
				Annual Max	120000				
	EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	110000	--	--		
				Annual Mean	110000				
				Annual Max	110000				
UNKNOWN	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	01/22/2019	850000	--	9500		
				04/09/2019	150000	--	15000		
				07/16/2019	380000	--	--		
				10/22/2019	420000	--	17000		
				Annual Mean	450000				
				Annual Max	850000				

## Appendix C: Summary of Priority Pollutants and Trace Constituents Analysis in Biosolids

Category	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/22/2019	350000	--	8900
					04/09/2019	460000	--	18000
					Annual Mean	400000		
					Annual Max	460000		
		EPA 8270C	µg/kg dry	Plant 2 Dewatering Cake	07/16/2019	120000	--	--
					10/22/2019	680000	--	15000
					Annual Mean	400000		
					Annual Max	680000		
	VITAMIN E	EPA 8270C	µg/kg dry	Plant 1 Dewatering Cake	07/16/2019	130000	--	--
					Annual Mean	130000		
Annual Max					130000			

**Definitions:**

ND = Not Detected

DNQ = Detected, Not Quantified; represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).

N/A = Not Applicable

**Annual Mean:**

If all results for a parameter were ND, the Annual Mean is reported as < the highest MDL for that parameter during the year.

If only some results for a parameter were ND, the ND is replaced by the MDL value for calculating the Annual Mean.

For any parameter that had a DNQ result, the Annual Mean is also designated as DNQ.

**Footnotes**

1. January and April 2019 8260 Volatile Organic Compounds used EPA Method 5030 instead of Method 5035 (different collection methods and shorter holding time). The discrepancy was corrected for October and December sampling.

2. In January and July 2019, OCSD’s contract laboratory analyzed the samples at a dilution that caused five constituents to have elevated method detection limits that were higher than the regulatory limits (see footnotes in Appendix C Biosolids Priority Pollutants). In response, OCSD corrected the issue by re-sampling in December 2019 and requested the contract laboratory to analyze at lower detection limits for December as well as into the future. For the 2019 reporting period, OCSD has at least one result with acceptable detection limits for each regulatorily-required constituent.

3. Endosulfan II was recovered at 68% in the laboratory control sample, whereas the lower limit is 69%. The matrix spike and its duplicate were also low, and there was no laboratory control sample duplicate. The control samples was so close to acceptable that no impact on the result was anticipated, and it was therefore reported.

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## Biosolids Annual Report Landing Page / ORANGE COUNTY SD #1

NPDES ID: CAL110604

Facility Status: Active

Facility Name: ORANGE COUNTY SD #1

10844 ELLIS AVENUE FOUNTAIN VALLEY, CA 92708-7018

# View Annual Report



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460  
BIOSOLIDS ANNUAL REPORT

FORM  
Approved OMB No.  
2040-0004

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.

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 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.

Furthermore, CWA section 308(b) and 40 CFR 122.7 require EPA to make effluent data available to the public. EPA's CWA CBI regulation defines "effluent data" as, "A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources..." See 40 CFR 2.302(a)(2)(C). Thus, effluent data will not be protected as CBI and will be made publicly available.

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

## Program Information

Please select at least one of the following options pertaining to your obligation to submit a Sewage Sludge (Biosolids) Annual Report in compliance with 40 CFR part 503. The facility is:

- a Class I Sludge Management Facility as defined in 40 CFR 503.9
- a POTW with a design flow rate equal to or greater than one million gallons per day
- a POTW that serves 10,000 people or more

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).

26420.5

Reporting Period Start Date: 01/01/2019

Reporting Period End Date: 12/31/2019

Treatment Processes

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

Aerobic Digestion

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

**Physical Treatment Options:**

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

Thickening (Gravity and/or Flotation Thickening, Centrifugation, Belt Filter Press, Vacuum Filter)

**Other Processes to Manage Sewage Sludge:**

Methane or Biogas Capture and Recovery

Analytical Methods

Did you use any analytical methods to analyze sewage sludge in the reporting period?  YES  NO

**Analytical Methods**

- EPA Method 6010 - Arsenic (ICP-OES)
- EPA Method 6010 - Cadmium (ICP-OES)
- EPA Method 6010 - Chromium (ICP-OES)
- EPA Method 6010 - Copper (ICP-OES)
- EPA Method 6010 - Lead (ICP-OES)
- EPA Method 7471 - Mercury (CVAA)
- EPA Method 6010 - Molybdenum (ICP-OES)
- EPA Method 6010 - Nickel (ICP-OES)
- EPA Method 6010 - Selenium (ICP-OES)
- EPA Method 6010 - Zinc (ICP-OES)
- EPA Method 6010 - Beryllium (ICP-OES)
- EPA Method 351.2 - Total Kjeldahl Nitrogen
- Standard Method 4500-N - Nitrogen
- Standard Method 2540 - Total Solids
- Standard Method 2540 - Volatile Solids
- EPA Method 9045 - pH (> 7% solids)

**Other Analytical Methods**

- Other Nitrate Nitrogen Analytical Method

**Other Analytical Methods Text Area:**

EPA 300.0, 8260B, 8270C, 8081B, 8082A, 9056A, 8290, 8290A, 7196A, 9010C, 9013A, 9014, 8151A,



## Sludge Management - Land Application

**ID:** 001**Amount:** 2526.4**Management Practice Detail:** Agricultural Land Application**Bulk or Bag/Container:** Bulk**Handler, Preparer, or Applier Type:** Off-Site Third-Party Handler or Applier**NPDES ID of handler:****Facility Information:**Tule Ranch / Ag-Tech  
4324 E. Ashlan Ave.  
Fresno, CA 93726**Contact Information:**Shaen      Maga  
Owner  
559-970-9432  
kurt@westexp.com**Pathogen Class:** Class B**Sewage Sludge or Biosolids Pathogen Reduction Options:**

- Class B-Alternative 2 PSRP 3: Anaerobic Digestion

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

- Option 1 - Volatile Solids Reduction
- Option 10 - Sewage Sludge Timely Incorporation into Land

**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. The number of compliance monitoring periods reported will correspond to the required frequency of monitoring (monthly, quarterly, semi-annually, or annually). For example, if monthly monitoring is required, you should report 12 compliance monitoring periods. The required frequency is determined by the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period for this SSUID (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))).

Compliance Monitoring Event No. 1 Compliance Monitoring Period Start Date: 01/01/2019 Compliance Monitoring Period End Date: 01/31/2019

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&rqn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rqn=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&rqn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rqn=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&rqn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rqn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	16	
Cadmium	J (Below RL but Above MDL)	1.8	
Copper	=	490	
Lead	=	14	
Mercury	=	0.63	
Molybdenum	=	14	
Nickel	=	31	
Selenium	<	2.6	
Zinc	=	680	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	16	
Cadmium	J (Below RL but Above MDL)	1.8	
Copper	=	420	
Lead	=	11	
Mercury	=	0.63	
Nickel	=	28	
Selenium	<	2.6	
Zinc	=	610	

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)	=	57500	

Compliance Monitoring Event No. 2      Compliance Monitoring Period Start Date: 02/01/2019      Compliance Monitoring Period End Date: 02/28/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	21	
Cadmium	J (Below RL but Above MDL)	1.6	
Copper	=	490	
Lead	=	11	
Mercury	=	0.91	
Molybdenum	=	17	
Nickel	=	36	
Selenium	<	48	
Zinc	=	590	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	20	
Cadmium	J (Below RL but Above MDL)	1.4	
Copper	=	450	
Lead	=	11	
Mercury	=	0.89	
Nickel	=	35	
Selenium	<	48	
Zinc	=	570	

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)	=	51500	

Compliance Monitoring Event No. 3      Compliance Monitoring Period Start Date: 03/01/2019      Compliance Monitoring Period End Date: 03/31/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	13	
Cadmium	J (Below RL but Above MDL)	1.5	
Copper	=	440	
Lead	=	12	
Mercury	=	1.4	
Molybdenum	=	15	
Nickel	=	34	
Selenium	<	2.5	
Zinc	=	640	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	11	
Cadmium	J (Below RL but Above MDL)	1.2	
Copper	=	390	
Lead	=	9.8	
Mercury	=	1.1	
Nickel	=	31	
Selenium	<	2.5	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Zinc	=	570	
<p>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.</p>			
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)	=	62000	



Compliance Monitoring Event No. 4      Compliance Monitoring Period Start Date: 04/01/2019      Compliance Monitoring Period End Date: 04/30/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	14	
Cadmium	J (Below RL but Above MDL)	1.4	
Copper	=	720	
Lead	=	11	
Mercury	=	1	
Molybdenum	=	18	
Nickel	=	32	
Selenium	<	2.6	
Zinc	=	700	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	58	

#### 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)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	13	
Cadmium	J (Below RL but Above MDL)	1.3	
Copper	=	560	
Lead	=	11	
Mercury	=	0.97	
Nickel	=	30	
Selenium	<	2.6	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Zinc	=	640	
<p>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.</p>			
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)	=	65000	

Compliance Monitoring Event No. 5      Compliance Monitoring Period Start Date: 05/01/2019      Compliance Monitoring Period End Date: 05/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	7.7	
Cadmium	J (Below RL but Above MDL)	1.2	
Copper	=	370	
Lead	=	11	
Mercury	=	0.83	
Molybdenum	=	14	
Nickel	=	23	
Selenium	<	2.5	
Zinc	=	540	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	68	

#### 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)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	7.3	
Cadmium	J (Below RL but Above MDL)	1.1	
Copper	=	360	
Lead	=	9.8	
Mercury	=	0.82	
Nickel	=	23	
Selenium	<	2.5	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Zinc	=	520	
<p>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.</p>			
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)	=	58500	

Compliance Monitoring Event No. 6      Compliance Monitoring Period Start Date: 06/01/2019      Compliance Monitoring Period End Date: 06/30/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	12	
Cadmium	=	2.2	
Copper	=	610	
Lead	=	13	
Mercury	=	1.3	
Molybdenum	=	21	
Nickel	=	38	
Selenium	<	2.6	
Zinc	=	820	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	63	

#### 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)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	8	
Cadmium	J (Below RL but Above MDL)	2	
Copper	=	600	
Lead	=	13	
Mercury	=	1	
Nickel	=	36	
Selenium	<	2.6	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Zinc	=	810	
<p>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.</p>			
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)	=	56500	

Compliance Monitoring Event No. 7      Compliance Monitoring Period Start Date: 07/01/2019      Compliance Monitoring Period End Date: 07/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6.4	
Cadmium	=	2.8	
Copper	=	580	
Lead	=	14	
Mercury	=	0.82	
Molybdenum	=	22	
Nickel	=	37	
Selenium	<	3.9	
Zinc	=	800	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	74	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6.4	
Cadmium	=	2.7	
Copper	=	560	
Lead	=	14	
Mercury	=	0.77	
Nickel	=	35	
Selenium	<	3.9	
Zinc	=	800	

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)	=	65500	



Compliance Monitoring Event No. 8      Compliance Monitoring Period Start Date: 08/01/2019      Compliance Monitoring Period End Date: 08/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6.4	
Cadmium	=	2	
Copper	=	520	
Lead	=	13	
Mercury	=	0.71	
Molybdenum	=	21	
Nickel	=	32	
Selenium	<	3.9	
Zinc	=	770	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	65	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6.4	
Cadmium	J (Below RL but Above MDL)	2	
Copper	=	440	
Lead	=	12	
Mercury	=	0.67	
Nickel	=	27	
Selenium	<	3.9	
Zinc	=	760	

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)	=	55500	

Compliance Monitoring Event No. 9      Compliance Monitoring Period Start Date: 09/01/2019      Compliance Monitoring Period End Date: 09/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6	
Cadmium	=	2.2	
Copper	=	550	
Lead	=	12	
Mercury	=	1	
Molybdenum	=	21	
Nickel	=	35	
Selenium	<	3.6	
Zinc	=	820	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	41	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6	
Cadmium	J (Below RL but Above MDL)	1.9	
Copper	=	530	
Lead	=	10	
Mercury	=	0.92	
Nickel	=	35	
Selenium	<	3.6	
Zinc	=	790	

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)	=	54000	

Compliance Monitoring Event No. 10      Compliance Monitoring Period Start Date: 10/01/2019      Compliance Monitoring Period End Date: 10/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6.3	
Cadmium	=	1.9	
Copper	=	560	
Lead	=	10	
Mercury	=	0.82	
Molybdenum	=	21	
Nickel	=	41	
Selenium	<	3.9	
Zinc	=	770	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	64	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6.3	
Cadmium	J (Below RL but Above MDL)	1.8	
Copper	=	550	
Lead	=	10	
Mercury	=	0.79	
Nickel	=	41	
Selenium	<	3.9	
Zinc	=	750	

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)	=	60500	

Compliance Monitoring Event No. 11 Compliance Monitoring Period Start Date: 11/01/2019 Compliance Monitoring Period End Date: 11/30/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6	
Cadmium	J (Below RL but Above MDL)	1.7	
Copper	=	510	
Lead	=	14	
Mercury	=	0.69	
Molybdenum	=	20	
Nickel	=	35	
Selenium	<	3.6	
Zinc	=	780	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6	
Cadmium	J (Below RL but Above MDL)	1.3	
Copper	=	510	
Lead	=	13	
Mercury	=	0.69	
Nickel	=	27	
Selenium	<	3.6	
Zinc	=	640	

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)	=	52500	



Compliance Monitoring Event No. 12      Compliance Monitoring Period Start Date: 12/01/2019      Compliance Monitoring Period End Date: 12/31/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6.2	
Cadmium	J (Below RL but Above MDL)	1.7	
Copper	=	520	
Lead	=	10	
Mercury	=	1	
Molybdenum	=	17	
Nickel	=	33	
Selenium	<	3.8	
Zinc	=	740	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	75	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6.2	
Cadmium	J (Below RL but Above MDL)	1.4	
Copper	=	520	
Lead	=	9.8	
Mercury	=	0.85	
Nickel	=	33	
Selenium	<	3.8	
Zinc	=	720	

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)	=	48500	

ID: 002

Amount: 17152.9

Management Practice Detail: Distribution and Marketing - Compost

Bulk or Bag/Container: Bulk

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

NPDES ID of handler:

**Facility Information:**

Synagro - Nursery Products  
PO Box 1439  
Helendale, CA 92342

**Contact Information:**

Venny Vasquez  
Site Manager  
760-265-5210  
vvasquez@synagro.com

Pathogen Class: Class A EQ

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

- Class A-Alternative 5: PFRP 1: Composting

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

- Option 1 - Volatile Solids Reduction
- Option 5 - Aerobic Processing (Thermophilic Aerobic Digestion/Composting)

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. The number of compliance monitoring periods reported will correspond to the required frequency of monitoring (monthly, quarterly, semi-annually, or annually). For example, if monthly monitoring is required, you should report 12 compliance monitoring periods. The required frequency is determined by the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period for this SSUID (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))).

Compliance Monitoring Event No. 1 Compliance Monitoring Period Start Date: 01/01/2019 Compliance Monitoring Period End Date: 01/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.8	
Cadmium	=	3.2	
Copper	=	300	
Lead	=	15	
Mercury	<	1	
Molybdenum	=	15	
Nickel	=	27	
Selenium	=	11	
Zinc	=	630	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	55	
Salmonella	<	7.5	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	<	3	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.8	
Cadmium	=	3.2	
Copper	=	300	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	15	
Mercury	<	1	
Nickel	=	27	
Selenium	=	11	
Zinc	=	630	

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)	=	28000	

Compliance Monitoring Event No. 2 Compliance Monitoring Period Start Date: 02/01/2019 Compliance Monitoring Period End Date: 02/28/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.4	
Cadmium	=	3.2	
Copper	=	380	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	16	
Nickel	=	30	
Selenium	=	12	
Zinc	=	750	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	48	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.4	
Cadmium	=	3.2	
Copper	=	380	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	30	
Selenium	=	12	
Zinc	=	750	

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)	=	29000	

Compliance Monitoring Event No. 3 Compliance Monitoring Period Start Date: 03/01/2019 Compliance Monitoring Period End Date: 03/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.6	
Cadmium	=	3	
Copper	=	360	
Lead	=	16	
Mercury	<	1	
Molybdenum	=	16	
Nickel	=	29	
Selenium	=	12	
Zinc	=	790	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.6	
Cadmium	=	3	
Copper	=	360	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	<	1	
Nickel	=	29	
Selenium	=	12	
Zinc	=	790	

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)	=	30000	

Compliance Monitoring Event No. 4 Compliance Monitoring Period Start Date: 04/01/2019 Compliance Monitoring Period End Date: 04/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.8	
Cadmium	=	3.3	
Copper	=	330	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	17	
Nickel	=	29	
Selenium	=	12	
Zinc	=	650	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	58	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.8	
Cadmium	=	3.3	
Copper	=	330	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	29	
Selenium	=	12	
Zinc	=	650	

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)	=	31000	

Compliance Monitoring Event No. 5 Compliance Monitoring Period Start Date: 05/01/2019 Compliance Monitoring Period End Date: 05/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7	
Cadmium	=	3.4	
Copper	=	430	
Lead	=	16	
Mercury	=	1	
Molybdenum	=	16	
Nickel	=	29	
Selenium	=	11	
Zinc	=	750	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	68	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7	
Cadmium	=	3.4	
Copper	=	430	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	=	1	
Nickel	=	29	
Selenium	=	11	
Zinc	=	750	

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)	=	32000	

Compliance Monitoring Event No. 6 Compliance Monitoring Period Start Date: 06/01/2019 Compliance Monitoring Period End Date: 06/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.7	
Cadmium	=	3.5	
Copper	=	420	
Lead	=	18	
Mercury	<	1	
Molybdenum	=	17	
Nickel	=	33	
Selenium	=	12	
Zinc	=	880	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	63	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.7	
Cadmium	=	3.5	
Copper	=	420	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	<	1	
Nickel	=	33	
Selenium	=	12	
Zinc	=	880	

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)	=	28000	

Compliance Monitoring Event No. 7 Compliance Monitoring Period Start Date: 07/01/2019 Compliance Monitoring Period End Date: 07/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.3	
Cadmium	=	3.2	
Copper	=	370	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	16	
Nickel	=	29	
Selenium	=	11	
Zinc	=	810	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	74	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.3	
Cadmium	=	3.2	
Copper	=	370	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	29	
Selenium	=	11	
Zinc	=	810	

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)	=	29000	

Compliance Monitoring Event No. 8 Compliance Monitoring Period Start Date: 08/01/2019 Compliance Monitoring Period End Date: 08/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.3	
Cadmium	=	2.5	
Copper	=	330	
Lead	=	18	
Mercury	<	1	
Molybdenum	=	17	
Nickel	=	28	
Selenium	=	14	
Zinc	=	640	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	65	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.3	
Cadmium	=	2.5	
Copper	=	330	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	<	1	
Nickel	=	28	
Selenium	=	14	
Zinc	=	640	

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)	=	28000	

Compliance Monitoring Event No. 9 Compliance Monitoring Period Start Date: 09/01/2019 Compliance Monitoring Period End Date: 09/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.9	
Cadmium	=	2.8	
Copper	=	340	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	17	
Nickel	=	29	
Selenium	=	12	
Zinc	=	700	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	41	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.9	
Cadmium	=	2.8	
Copper	=	340	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	29	
Selenium	=	12	
Zinc	=	700	

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)	=	32000	

Compliance Monitoring Event No. 10 Compliance Monitoring Period Start Date: 10/01/2019 Compliance Monitoring Period End Date: 10/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.2	
Cadmium	=	2.5	
Copper	=	260	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	15	
Nickel	=	24	
Selenium	=	11	
Zinc	=	560	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	64	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.2	
Cadmium	=	2.5	
Copper	=	260	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	24	
Selenium	=	11	
Zinc	=	560	

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)	=	31000	

Compliance Monitoring Event No. 11 Compliance Monitoring Period Start Date: 11/01/2019 Compliance Monitoring Period End Date: 11/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.2	
Cadmium	=	2.7	
Copper	=	330	
Lead	=	20	
Mercury	<	1	
Molybdenum	=	18	
Nickel	=	29	
Selenium	=	15	
Zinc	=	650	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	7.9	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.2	
Cadmium	=	2.7	
Copper	=	330	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	20	
Mercury	<	1	
Nickel	=	29	
Selenium	=	15	
Zinc	=	650	

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)	=	32000	

Compliance Monitoring Event No. 12      Compliance Monitoring Period Start Date: 12/01/2019      Compliance Monitoring Period End Date: 12/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.1	
Cadmium	=	2.5	
Copper	=	330	
Lead	=	18	
Mercury	<	1	
Molybdenum	=	19	
Nickel	=	32	
Selenium	=	14	
Zinc	=	750	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	75	

**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)	If No Data, Select One Of The Following
Arsenic	=	7.1	
Cadmium	=	2.5	
Copper	=	330	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	<	1	
Nickel	=	32	
Selenium	=	14	
Zinc	=	750	

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)	=	30000	

ID: 003

Amount: 158.1

Management Practice Detail: Distribution and Marketing - Compost

Bulk or Bag/Container: Bulk

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

NPDES ID of handler:

Facility Information:  
Synagro - AZ Soils  
5615 S. 91st Avenue  
Tolleson, AZ 85353

Contact Information:  
Craig Geyer  
Senior Operations Manager  
623-936-6328  
Cgeyer@synagro.com

Pathogen Class: Class A EQ

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

- Class A-Alternative 5: PFRP 1: Composting

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

- Option 1 - Volatile Solids Reduction
- Option 5 - Aerobic Processing (Thermophilic Aerobic Digestion/Composting)

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. The number of compliance monitoring periods reported will correspond to the required frequency of monitoring (monthly, quarterly, semi-annually, or annually). For example, if monthly monitoring is required, you should report 12 compliance monitoring periods. The required frequency is determined by the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period for this SSUID (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))).

Compliance Monitoring Event No. 1      Compliance Monitoring Period Start Date: 01/01/2019      Compliance Monitoring Period End Date: 01/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.9	
Cadmium	=	1.9	
Copper	=	490	
Lead	=	25	
Mercury	=	1.7	
Molybdenum	=	15	
Nickel	=	22	
Selenium	=	6	
Zinc	=	740	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	630	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.9	
Cadmium	=	1.9	
Copper	=	490	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	25	
Mercury	=	1.7	
Nickel	=	22	
Selenium	=	6	
Zinc	=	740	

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)	=	32700	

Compliance Monitoring Event No. 2      Compliance Monitoring Period Start Date: 02/01/2019      Compliance Monitoring Period End Date: 02/28/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	5.6	
Cadmium	=	2.1	
Copper	=	430	
Lead	=	20	
Mercury	=	1.4	
Molybdenum	=	15	
Nickel	=	23	
Selenium	=	4.3	
Zinc	=	770	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	32	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	5.6	
Cadmium	=	2.1	
Copper	=	430	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	20	
Mercury	=	1.4	
Nickel	=	23	
Selenium	=	4.3	
Zinc	=	770	

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)	=	29800	



Compliance Monitoring Event No. 3 Compliance Monitoring Period Start Date: 03/01/2019 Compliance Monitoring Period End Date: 03/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.8	
Cadmium	=	1.9	
Copper	=	490	
Lead	=	17	
Mercury	=	1.4	
Molybdenum	=	12	
Nickel	=	23	
Selenium	=	6.7	
Zinc	=	770	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	850	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.8	
Cadmium	=	1.9	
Copper	=	490	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	=	1.4	
Nickel	=	23	
Selenium	=	6.7	
Zinc	=	770	

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)	=	42500	

Compliance Monitoring Event No. 4      Compliance Monitoring Period Start Date: 04/01/2019      Compliance Monitoring Period End Date: 04/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.5	
Cadmium	=	1.7	
Copper	=	460	
Lead	=	19	
Mercury	=	1.6	
Molybdenum	=	13	
Nickel	=	24	
Selenium	=	6.5	
Zinc	=	790	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	29	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	58	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.5	
Cadmium	=	1.7	
Copper	=	460	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	19	
Mercury	=	1.6	
Nickel	=	24	
Selenium	=	6.5	
Zinc	=	790	

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)	=	36700	

Compliance Monitoring Event No. 5      Compliance Monitoring Period Start Date: 05/01/2019      Compliance Monitoring Period End Date: 05/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.2	
Cadmium	=	1.7	
Copper	=	470	
Lead	=	18	
Mercury	=	1.2	
Molybdenum	=	14	
Nickel	=	22	
Selenium	=	7.4	
Zinc	=	850	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	28	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	68	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.2	
Cadmium	=	1.7	
Copper	=	470	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	=	1.2	
Nickel	=	22	
Selenium	=	7.4	
Zinc	=	850	

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)	=	41200	

Compliance Monitoring Event No. 6 Compliance Monitoring Period Start Date: 06/01/2019 Compliance Monitoring Period End Date: 06/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.5	
Cadmium	=	1.7	
Copper	=	470	
Lead	=	16	
Mercury	=	1.1	
Molybdenum	=	14	
Nickel	=	23	
Selenium	=	8.2	
Zinc	=	800	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	28	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	63	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.5	
Cadmium	=	1.7	
Copper	=	470	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	=	1.1	
Nickel	=	23	
Selenium	=	8.2	
Zinc	=	800	

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)	=	43600	



Compliance Monitoring Event No. 7      Compliance Monitoring Period Start Date: 07/01/2019      Compliance Monitoring Period End Date: 07/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.3	
Cadmium	=	2	
Copper	=	510	
Lead	=	17	
Mercury	=	1.2	
Molybdenum	=	14	
Nickel	=	26	
Selenium	=	9.3	
Zinc	=	920	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	27	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	74	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.3	
Cadmium	=	2	
Copper	=	510	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	=	1.2	
Nickel	=	26	
Selenium	=	9.3	
Zinc	=	920	

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)	=	49500	

Compliance Monitoring Event No. 8 Compliance Monitoring Period Start Date: 08/01/2019 Compliance Monitoring Period End Date: 08/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.8	
Cadmium	=	1.8	
Copper	=	440	
Lead	=	14	
Mercury	=	1.3	
Molybdenum	=	14	
Nickel	=	28	
Selenium	=	6.9	
Zinc	=	800	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	24	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	65	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.8	
Cadmium	=	1.8	
Copper	=	440	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	14	
Mercury	=	1.3	
Nickel	=	28	
Selenium	=	6.9	
Zinc	=	800	

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)	=	41700	

Compliance Monitoring Event No. 9 Compliance Monitoring Period Start Date: 09/01/2019 Compliance Monitoring Period End Date: 09/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	2.1	
Cadmium	=	0.54	
Copper	=	140	
Lead	=	5	
Mercury	=	1.2	
Molybdenum	=	4	
Nickel	=	7.5	
Selenium	=	2.3	
Zinc	=	260	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	30	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	41	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	2.1	
Cadmium	=	0.54	
Copper	=	140	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	5	
Mercury	=	1.2	
Nickel	=	7.5	
Selenium	=	2.3	
Zinc	=	260	

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)	=	48100	

Compliance Monitoring Event No. 10 Compliance Monitoring Period Start Date: 10/01/2019 Compliance Monitoring Period End Date: 10/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.2	
Cadmium	=	1.6	
Copper	=	510	
Lead	=	20	
Mercury	=	1.1	
Molybdenum	=	15	
Nickel	=	29	
Selenium	=	8.5	
Zinc	=	910	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	26	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	64	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.2	
Cadmium	=	1.6	
Copper	=	510	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	20	
Mercury	=	1.1	
Nickel	=	29	
Selenium	=	8.5	
Zinc	=	910	

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)	=	41800	



Compliance Monitoring Event No. 11      Compliance Monitoring Period Start Date: 11/01/2019      Compliance Monitoring Period End Date: 11/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.6	
Cadmium	=	1.8	
Copper	=	510	
Lead	=	17	
Mercury	=	1.7	
Molybdenum	=	16	
Nickel	=	27	
Selenium	=	7.5	
Zinc	=	800	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	26	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.6	
Cadmium	=	1.8	
Copper	=	510	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	=	1.7	
Nickel	=	27	
Selenium	=	7.5	
Zinc	=	800	

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)	=	38500	

Compliance Monitoring Event No. 12 Compliance Monitoring Period Start Date: 12/01/2019 Compliance Monitoring Period End Date: 12/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.3	
Cadmium	=	2.2	
Copper	=	480	
Lead	=	18	
Mercury	=	1.5	
Molybdenum	=	17	
Nickel	=	26	
Selenium	=	6.7	
Zinc	=	820	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	29	
Salmonella			F (No Sampling or Analysis Conducted - Other Reason)

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	75	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.3	
Cadmium	=	2.2	
Copper	=	480	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	=	1.5	
Nickel	=	26	
Selenium	=	6.7	
Zinc	=	820	

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)	=	39200	

ID: 004

Amount: 6583

Management Practice Detail: Distribution and Marketing - Compost

Bulk or Bag/Container: Bulk

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

NPDES ID of handler:

Facility Information:  
Liberty Compost  
12421 Holloway Road  
Lost Hills, CA 93249

Contact Information:  
Patrick McCarthy  
Site Manager  
661-797-2914  
patrickmccarthy@mccarthyfarms.com

Pathogen Class: Class A EQ

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

- Class A-Alternative 5: PFRP 1: Composting

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

- Option 1 - Volatile Solids Reduction
- Option 5 - Aerobic Processing (Thermophilic Aerobic Digestion/Composting)

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. The number of compliance monitoring periods reported will correspond to the required frequency of monitoring (monthly, quarterly, semi-annually, or annually). For example, if monthly monitoring is required, you should report 12 compliance monitoring periods. The required frequency is determined by the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period for this SSUID (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))).

Compliance Monitoring Event No. 1 Compliance Monitoring Period Start Date: 01/01/2019 Compliance Monitoring Period End Date: 01/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.7	
Cadmium	=	4.5	
Copper	=	440	
Lead	=	15	
Mercury	<	1	
Molybdenum	=	23	
Nickel	=	39	
Selenium	=	20	
Zinc	=	830	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.7	
Cadmium	=	4.5	
Copper	=	440	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	15	
Mercury	<	1	
Nickel	=	39	
Selenium	=	20	
Zinc	=	830	

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)	=	4	

Compliance Monitoring Event No. 2 Compliance Monitoring Period Start Date: 02/01/2019 Compliance Monitoring Period End Date: 02/28/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.2	
Cadmium	=	4.3	
Copper	=	380	
Lead	=	15	
Mercury	<	1	
Molybdenum	=	23	
Nickel	=	36	
Selenium	=	18	
Zinc	=	780	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.2	
Cadmium	=	4.3	
Copper	=	380	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	15	
Mercury	<	1	
Nickel	=	36	
Selenium	=	18	
Zinc	=	780	

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)	=	3.8	

Compliance Monitoring Event No. 3      Compliance Monitoring Period Start Date: 03/01/2019      Compliance Monitoring Period End Date: 03/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	11	
Cadmium	=	4.3	
Copper	=	420	
Lead	=	19	
Mercury	<	1	
Molybdenum	=	25	
Nickel	=	41	
Selenium	=	21	
Zinc	=	800	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	11	
Cadmium	=	4.3	
Copper	=	420	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	19	
Mercury	<	1	
Nickel	=	41	
Selenium	=	21	
Zinc	=	800	

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)	=	4	

Compliance Monitoring Event No. 4      Compliance Monitoring Period Start Date: 04/01/2019      Compliance Monitoring Period End Date: 04/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.2	
Cadmium	=	4.4	
Copper	=	340	
Lead	=	16	
Mercury	<	1	
Molybdenum	=	23	
Nickel	=	35	
Selenium	=	19	
Zinc	=	690	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	58	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.2	
Cadmium	=	4.4	
Copper	=	340	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	<	1	
Nickel	=	35	
Selenium	=	19	
Zinc	=	690	

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)	=	3.8	

Compliance Monitoring Event No. 5      Compliance Monitoring Period Start Date: 05/01/2019      Compliance Monitoring Period End Date: 05/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.1	
Cadmium	=	4.5	
Copper	=	370	
Lead	=	16	
Mercury	=	1.1	
Molybdenum	=	22	
Nickel	=	32	
Selenium	=	16	
Zinc	=	720	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	68	

**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)	If No Data, Select One Of The Following
Arsenic	=	7.1	
Cadmium	=	4.5	
Copper	=	370	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	=	1.1	
Nickel	=	32	
Selenium	=	16	
Zinc	=	720	

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)	=	3.9	

Compliance Monitoring Event No. 6 Compliance Monitoring Period Start Date: 06/01/2019 Compliance Monitoring Period End Date: 06/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	9.3	
Cadmium	=	4.8	
Copper	=	480	
Lead	=	18	
Mercury	=	0.93	
Molybdenum	=	25	
Nickel	=	43	
Selenium	=	20	
Zinc	=	830	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	63	

**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)	If No Data, Select One Of The Following
Arsenic	=	9.3	
Cadmium	=	4.8	
Copper	=	480	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	=	0.93	
Nickel	=	43	
Selenium	=	20	
Zinc	=	830	

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)	=	4.1	

Compliance Monitoring Event No. 7 Compliance Monitoring Period Start Date: 07/01/2019 Compliance Monitoring Period End Date: 07/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.5	
Cadmium	=	4.4	
Copper	=	410	
Lead	=	16	
Mercury	<	1	
Molybdenum	=	24	
Nickel	=	40	
Selenium	=	20	
Zinc	=	750	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	74	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.5	
Cadmium	=	4.4	
Copper	=	410	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	<	1	
Nickel	=	40	
Selenium	=	20	
Zinc	=	750	

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)	=	4.4	

Compliance Monitoring Event No. 8      Compliance Monitoring Period Start Date: 08/01/2019      Compliance Monitoring Period End Date: 08/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	9.6	
Cadmium	=	4.9	
Copper	=	460	
Lead	=	18	
Mercury	=	0.9	
Molybdenum	=	27	
Nickel	=	41	
Selenium	=	21	
Zinc	=	890	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	65	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	9.6	
Cadmium	=	4.9	
Copper	=	460	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	=	0.9	
Nickel	=	41	
Selenium	=	21	
Zinc	=	890	

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)	=	4.4	

Compliance Monitoring Event No. 9      Compliance Monitoring Period Start Date: 09/01/2019      Compliance Monitoring Period End Date: 09/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	9.2	
Cadmium	=	2.5	
Copper	=	430	
Lead	=	20	
Mercury	=	0.94	
Molybdenum	=	26	
Nickel	=	43	
Selenium	=	20	
Zinc	=	790	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	41	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	9.2	
Cadmium	=	2.5	
Copper	=	430	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	20	
Mercury	=	0.94	
Nickel	=	43	
Selenium	=	20	
Zinc	=	790	

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)	=	4	

Compliance Monitoring Event No. 10 Compliance Monitoring Period Start Date: 10/01/2019 Compliance Monitoring Period End Date: 10/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	13	
Cadmium	=	8	
Copper	=	9.2	
Lead	=	28	
Mercury	<	1	
Molybdenum	=	41	
Nickel	=	64	
Selenium	=	32	
Zinc	=	1200	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	64	

**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)	If No Data, Select One Of The Following
Arsenic	=	13	
Cadmium	=	8	
Copper	=	9.2	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	28	
Mercury	<	1	
Nickel	=	64	
Selenium	=	32	
Zinc	=	1200	

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)	=	4.4	

Compliance Monitoring Event No. 11 Compliance Monitoring Period Start Date: 11/01/2019 Compliance Monitoring Period End Date: 11/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.8	
Cadmium	=	4.6	
Copper	=	460	
Lead	=	16	
Mercury	<	1	
Molybdenum	=	26	
Nickel	=	39	
Selenium	=	18	
Zinc	=	860	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.8	
Cadmium	=	4.6	
Copper	=	460	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	<	1	
Nickel	=	39	
Selenium	=	18	
Zinc	=	860	

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)	=	4.4	

Compliance Monitoring Event No. 12      Compliance Monitoring Period Start Date: 12/01/2019      Compliance Monitoring Period End Date: 12/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.5	
Cadmium	=	3.3	
Copper	=	470	
Lead	=	14	
Mercury	<	1	
Molybdenum	=	20	
Nickel	=	36	
Selenium	=	15	
Zinc	=	780	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	75	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.5	
Cadmium	=	3.3	
Copper	=	470	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	14	
Mercury	<	1	
Nickel	=	36	
Selenium	=	15	
Zinc	=	780	

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)	=	4.1	

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.

OCSD is attaching an abbreviated, electronic version of our annual biosolids compliance report because the file size is much larger than EPA's database limit of 3MB. The comprehensive report is available at [www.ocsd.com/503](http://www.ocsd.com/503). Monthly compliance reports are posted to [www.ocsd.com/nani](http://www.ocsd.com/nani) and low resolution versions are attached. Appendix A in the comprehensive report contains the certified monthly compliance reports that contain OCSD data that was uploaded to the EPA database. OCSD's contractors emailed data that was consolidated and uploaded to the EPA's database. Appendix C in the comprehensive report contains OCSD's Clean Water Act section 307(a) pollutant data required by our NPDES permit. Regarding SSIUD003, Compliance Monitoring Event 12, Salmonella No Sampling Code F: • The 503 regulations require either the density of fecal coliforms in the sewage sludge be less than 1,000 MPN per gram total solids (dry weight basis) or the density of Salmonella sp. bacteria in the sewage be less than 3 MPN per 4 grams of total solids (dry weight basis). • OCSD's composting contractor, Synagro Arizona Soils, normally samples for salmonella and fecal coliforms each month. In December 2019, the compost pile they tested for salmonella and fecal coliforms had normal salmonella, but elevated fecal coliforms. As a result, they restarted the pile, but did not retest the salmonella so there is no salmonella data for December. However, it is not required by 503 regulations, but the database requires a data code for both fecal coliform and salmonella.

## Additional Attachments

Name	Created Date	Size
2019_NANIs_scanned LOW RES - 07JULrev-12DEC.pdf	02/19/2020 10:49 AM	2.76 MB
2019_Biosolids_503_Annual_Report - EPA Abbreviated less than 3MB - REDO 2.pdf	02/18/2020 2:38 PM	2.09 MB
2019_NANIs_scanned LOW RES - 01JAN-06JUN.pdf	02/19/2020 10:44 AM	2.96 MB

## Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Signing an electronic document on behalf of another person is subject to criminal, civil, administrative, or other lawful action.

**Certified By:** Ronald J. Coss (CAL110604)

**Certified On:** 02/19/2020 1:00 PM

## Biosolids Annual Report Landing Page / ORANGE COUNTY SD #2

NPDES ID: CAL120604

Facility Status: Active

Facility Name: ORANGE COUNTY SD #2

10844 ELLIS AVENUE FOUNTAIN VALLEY, CA 92708-7018

# View Annual Report



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460  
BIOSOLIDS ANNUAL REPORT

FORM  
Approved OMB No.  
2040-0004

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.

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 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.

Furthermore, CWA section 308(b) and 40 CFR 122.7 require EPA to make effluent data available to the public. EPA's CWA CBI regulation defines "effluent data" as, "A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources..." See 40 CFR 2.302(a)(2)(C). Thus, effluent data will not be protected as CBI and will be made publicly available.

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

## Program Information

Please select at least one of the following options pertaining to your obligation to submit a Sewage Sludge (Biosolids) Annual Report in compliance with 40 CFR part 503. The facility is:

- a Class I Sludge Management Facility as defined in 40 CFR 503.9
- a POTW with a design flow rate equal to or greater than one million gallons per day
- a POTW that serves 10,000 people or more

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).

25582.3

Reporting Period Start Date: 01/01/2019

Reporting Period End Date: 12/31/2019

Treatment Processes

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

Anaerobic Digestion

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

**Physical Treatment Options:**

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

Thickening (Gravity and/or Flotation Thickening, Centrifugation, Belt Filter Press, Vacuum Filter)

**Other Processes to Manage Sewage Sludge:**

Methane or Biogas Capture and Recovery

Analytical Methods

Did you use any analytical methods to analyze sewage sludge in the reporting period?  YES  NO

**Analytical Methods**

- EPA Method 6010 - Arsenic (ICP-OES)
- EPA Method 6010 - Cadmium (ICP-OES)
- EPA Method 6010 - Chromium (ICP-OES)
- EPA Method 6010 - Copper (ICP-OES)
- EPA Method 6010 - Lead (ICP-OES)
- EPA Method 7471 - Mercury (CVAA)
- EPA Method 6010 - Molybdenum (ICP-OES)
- EPA Method 6010 - Nickel (ICP-OES)
- EPA Method 6010 - Selenium (ICP-OES)
- EPA Method 6010 - Zinc (ICP-OES)
- EPA Method 6010 - Beryllium (ICP-OES)
- EPA Method 7010 - Nickel (GF-AAS)
- EPA Method 351.2 - Total Kjeldahl Nitrogen
- Standard Method 4500-N - Nitrogen
- Standard Method 4500-NH3 - Ammonia Nitrogen
- Standard Method 2540 - Total Solids
- Standard Method 2540 - Volatile Solids
- EPA Method 9045 - pH (> 7% solids)

**Other Analytical Methods**

- Other Nitrate Nitrogen Analytical Method

**Other Analytical Methods Text Area:**

EPA 300.0, 8260, 8270, 8081, 8082, 9056, 8290, 7196, 9014,



## Sludge Management - Land Application

**ID:** 001**Amount:** 17782.3**Management Practice Detail:** Agricultural Land Application**Bulk or Bag/Container:** Bulk**Handler, Preparer, or Applier Type:** Off-Site Third-Party Handler or Applier**NPDES ID of handler:****Facility Information:**Tule Ranch / Ag-Tech  
4324 E. Ashlan Ave.  
Fresno, CA 93726**Contact Information:**Shaen Magan  
Owner  
559-970-9432  
kurt@westexp.com**Pathogen Class:** Class B**Sewage Sludge or Biosolids Pathogen Reduction Options:**

- Class B-Alternative 2 PSRP 1: Aerobic Digestion

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

- Option 1 - Volatile Solids Reduction
- Option 10 - Sewage Sludge Timely Incorporation into Land

**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. The number of compliance monitoring periods reported will correspond to the required frequency of monitoring (monthly, quarterly, semi-annually, or annually). For example, if monthly monitoring is required, you should report 12 compliance monitoring periods. The required frequency is determined by the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period for this SSUID (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))).

Compliance Monitoring Event No. 1 Compliance Monitoring Period Start Date: 01/01/2019 Compliance Monitoring Period End Date: 01/31/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	16	
Cadmium	J (Below RL but Above MDL)	1.8	
Copper	=	490	
Lead	=	14	
Mercury	=	0.63	
Molybdenum	=	14	
Nickel	=	31	
Selenium	<	2.6	
Zinc	=	680	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	16	
Cadmium	J (Below RL but Above MDL)	1.8	
Copper	=	420	
Lead	=	11	
Mercury	=	0.63	
Nickel	=	28	
Selenium	<	2.6	
Zinc	=	610	

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)	=	57500	

Compliance Monitoring Event No. 2      Compliance Monitoring Period Start Date: 02/01/2019      Compliance Monitoring Period End Date: 02/28/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	21	
Cadmium	J (Below RL but Above MDL)	1.6	
Copper	=	490	
Lead	=	11	
Mercury	=	0.91	
Molybdenum	=	17	
Nickel	=	36	
Selenium	<	48	
Zinc	=	590	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	20	
Cadmium	J (Below RL but Above MDL)	1.4	
Copper	=	450	
Lead	=	11	
Mercury	=	0.89	
Nickel	=	35	
Selenium	<	48	
Zinc	=	570	

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)	=	51500	

Compliance Monitoring Event No. 3      Compliance Monitoring Period Start Date: 03/01/2019      Compliance Monitoring Period End Date: 03/31/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	13	
Cadmium	J (Below RL but Above MDL)	1.5	
Copper	=	440	
Lead	=	12	
Mercury	=	1.4	
Molybdenum	=	15	
Nickel	=	34	
Selenium	<	2.5	
Zinc	=	640	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	11	
Cadmium	J (Below RL but Above MDL)	1.2	
Copper	=	390	
Lead	=	9.8	
Mercury	=	1.1	
Nickel	=	31	
Selenium	<	2.5	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Zinc	=	570	
<p>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.</p>			
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)	=	62000	



Compliance Monitoring Event No. 4 Compliance Monitoring Period Start Date: 04/01/2019 Compliance Monitoring Period End Date: 04/30/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	14	
Cadmium	J (Below RL but Above MDL)	1.4	
Copper	=	720	
Lead	=	11	
Mercury	=	1	
Molybdenum	=	18	
Nickel	=	32	
Selenium	<	2.6	
Zinc	=	700	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	58	

#### 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)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	13	
Cadmium	J (Below RL but Above MDL)	1.3	
Copper	=	560	
Lead	=	11	
Mercury	=	0.97	
Nickel	=	30	
Selenium	<	2.6	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Zinc	=	640	
<p>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.</p>			
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)	=	65000	

Compliance Monitoring Event No. 5      Compliance Monitoring Period Start Date: 05/01/2019      Compliance Monitoring Period End Date: 05/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	7.7	
Cadmium	J (Below RL but Above MDL)	1.2	
Copper	=	370	
Lead	=	11	
Mercury	=	0.83	
Molybdenum	=	14	
Nickel	=	23	
Selenium	<	2.5	
Zinc	=	540	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	68	

#### 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)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	7.3	
Cadmium	J (Below RL but Above MDL)	1.1	
Copper	=	360	
Lead	=	9.8	
Mercury	=	0.82	
Nickel	=	23	
Selenium	<	2.5	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Zinc	=	520	
<p>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.</p>			
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)	=	58500	

Compliance Monitoring Event No. 6 Compliance Monitoring Period Start Date: 06/01/2019 Compliance Monitoring Period End Date: 06/30/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	12	
Cadmium	=	2.2	
Copper	=	610	
Lead	=	13	
Mercury	=	1.3	
Molybdenum	=	21	
Nickel	=	38	
Selenium	<	2.6	
Zinc	=	820	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	63	

#### 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)	If No Data, Select One Of The Following
Arsenic	J (Below RL but Above MDL)	8	
Cadmium	J (Below RL but Above MDL)	2	
Copper	=	600	
Lead	=	13	
Mercury	=	1	
Nickel	=	36	
Selenium	<	2.6	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Zinc	=	810	
<p>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.</p>			
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)	=	56500	

Compliance Monitoring Event No. 7 Compliance Monitoring Period Start Date: 07/01/2019 Compliance Monitoring Period End Date: 07/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6.4	
Cadmium	=	2.8	
Copper	=	580	
Lead	=	14	
Mercury	=	0.82	
Molybdenum	=	22	
Nickel	=	37	
Selenium	<	3.9	
Zinc	=	800	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	74	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6.4	
Cadmium	=	2.7	
Copper	=	560	
Lead	=	14	
Mercury	=	0.63	
Nickel	=	35	
Selenium	<	3.9	
Zinc	=	800	

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)	=	65500	



Compliance Monitoring Event No. 8      Compliance Monitoring Period Start Date: 08/01/2019      Compliance Monitoring Period End Date: 08/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6.4	
Cadmium	=	2	
Copper	=	520	
Lead	=	13	
Mercury	=	0.71	
Molybdenum	=	21	
Nickel	=	32	
Selenium	<	3.9	
Zinc	=	770	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	65	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6.4	
Cadmium	J (Below RL but Above MDL)	2	
Copper	=	440	
Lead	=	12	
Mercury	=	0.67	
Nickel	=	27	
Selenium	<	3.9	
Zinc	=	760	

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)	=	55500	

Compliance Monitoring Event No. 9      Compliance Monitoring Period Start Date: 09/01/2019      Compliance Monitoring Period End Date: 09/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6	
Cadmium	=	2.2	
Copper	=	550	
Lead	=	12	
Mercury	=	1	
Molybdenum	=	21	
Nickel	=	35	
Selenium	<	3.6	
Zinc	=	820	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	41	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6	
Cadmium	J (Below RL but Above MDL)	1.9	
Copper	=	530	
Lead	=	10	
Mercury	=	0.92	
Nickel	=	35	
Selenium	<	3.6	
Zinc	=	790	

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)	=	54000	

Compliance Monitoring Event No. 10      Compliance Monitoring Period Start Date: 10/01/2019      Compliance Monitoring Period End Date: 10/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6.3	
Cadmium	=	1.9	
Copper	=	560	
Lead	=	10	
Mercury	=	0.82	
Molybdenum	=	21	
Nickel	=	41	
Selenium	<	3.9	
Zinc	=	770	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	64	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6.3	
Cadmium	J (Below RL but Above MDL)	1.8	
Copper	=	550	
Lead	=	10	
Mercury	=	0.79	
Nickel	=	41	
Selenium	<	3.9	
Zinc	=	750	

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)	=	60500	

Compliance Monitoring Event No. 11      Compliance Monitoring Period Start Date: 11/01/2019      Compliance Monitoring Period End Date: 11/30/2019

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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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&rtn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rtn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6	
Cadmium	J (Below RL but Above MDL)	1.7	
Copper	=	510	
Lead	=	14	
Mercury	=	0.69	
Molybdenum	=	20	
Nickel	=	35	
Selenium	<	3.6	
Zinc	=	780	

#### Pathogen And Vector Attraction Reduction

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	<	6	
Cadmium	J (Below RL but Above MDL)	1.3	
Copper	=	510	
Lead	=	13	
Mercury	=	0.69	
Nickel	=	27	
Selenium	<	3.6	
Zinc	=	640	

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)	=	52500	



Compliance Monitoring Event No. 12 Compliance Monitoring Period Start Date: 12/01/2019 Compliance Monitoring Period End Date: 12/31/2019

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&rqn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rqn=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&rqn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rqn=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&rqn=div5#se40.32.503\\_113](http://www.ecfr.gov/cgi-bin/text-idx?node=pt40.32.503&rqn=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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	<	6.2	
Cadmium	J (Below RL but Above MDL)	1.7	
Copper	=	520	
Lead	=	10	
Mercury	=	1	
Molybdenum	=	17	
Nickel	=	33	
Selenium	<	3.8	
Zinc	=	740	

**Pathogen And Vector Attraction Reduction**

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	75	

**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)	If No Data, Select One Of The Following
Arsenic	<	6.2	
Cadmium	J (Below RL but Above MDL)	1.4	
Copper	=	520	
Lead	=	9.8	
Mercury	=	0.85	
Nickel	=	33	
Selenium	<	3.8	
Zinc	=	720	

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)	=	48500	

ID: 003

Amount: 2754.9

Management Practice Detail: Distribution and Marketing - Compost

Bulk or Bag/Container: Bulk

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

NPDES ID of handler:

**Facility Information:**

Synagro - Nursery Products  
PO Box 1439  
Helendale, CA 92342

**Contact Information:**

Venny Vasquez  
Site Manager  
760-265-5210  
vvasquez@synagro.com

Pathogen Class: Class A EQ

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

- Class A-Alternative 5: PFRP 1: Composting

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

- Option 1 - Volatile Solids Reduction
- Option 5 - Aerobic Processing (Thermophilic Aerobic Digestion/Composting)

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. The number of compliance monitoring periods reported will correspond to the required frequency of monitoring (monthly, quarterly, semi-annually, or annually). For example, if monthly monitoring is required, you should report 12 compliance monitoring periods. The required frequency is determined by the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period for this SSUID (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))).

Compliance Monitoring Event No. 1 Compliance Monitoring Period Start Date: 01/01/2019 Compliance Monitoring Period End Date: 01/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.8	
Cadmium	=	3.2	
Copper	=	300	
Lead	=	15	
Mercury	<	1	
Molybdenum	=	15	
Nickel	=	27	
Selenium	=	11	
Zinc	=	630	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	55	
Salmonella	<	7.5	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	<	3	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.8	
Cadmium	=	3.2	
Copper	=	300	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	15	
Mercury	<	1	
Nickel	=	27	
Selenium	=	11	
Zinc	=	630	

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)	=	28000	

Compliance Monitoring Event No. 2 Compliance Monitoring Period Start Date: 02/01/2019 Compliance Monitoring Period End Date: 02/28/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.4	
Cadmium	=	3.2	
Copper	=	380	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	16	
Nickel	=	30	
Selenium	=	12	
Zinc	=	750	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	48	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.4	
Cadmium	=	3.2	
Copper	=	380	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	30	
Selenium	=	12	
Zinc	=	750	

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)	=	29000	

Compliance Monitoring Event No. 3      Compliance Monitoring Period Start Date: 03/01/2019      Compliance Monitoring Period End Date: 03/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.6	
Cadmium	=	3	
Copper	=	360	
Lead	=	16	
Mercury	<	1	
Molybdenum	=	16	
Nickel	=	29	
Selenium	=	12	
Zinc	=	790	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.6	
Cadmium	=	3	
Copper	=	360	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	<	1	
Nickel	=	29	
Selenium	=	12	
Zinc	=	790	

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)	=	30000	

Compliance Monitoring Event No. 4 Compliance Monitoring Period Start Date: 04/01/2019 Compliance Monitoring Period End Date: 04/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.8	
Cadmium	=	3.3	
Copper	=	330	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	17	
Nickel	=	29	
Selenium	=	12	
Zinc	=	650	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	58	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.8	
Cadmium	=	3.3	
Copper	=	330	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	29	
Selenium	=	12	
Zinc	=	650	

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)	=	31000	

Compliance Monitoring Event No. 5 Compliance Monitoring Period Start Date: 05/01/2019 Compliance Monitoring Period End Date: 05/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7	
Cadmium	=	3.4	
Copper	=	430	
Lead	=	16	
Mercury	=	1	
Molybdenum	=	16	
Nickel	=	29	
Selenium	=	11	
Zinc	=	750	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	68	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7	
Cadmium	=	3.4	
Copper	=	430	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	=	1	
Nickel	=	29	
Selenium	=	11	
Zinc	=	750	

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)	=	32000	

Compliance Monitoring Event No. 6 Compliance Monitoring Period Start Date: 06/01/2019 Compliance Monitoring Period End Date: 06/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.7	
Cadmium	=	3.5	
Copper	=	420	
Lead	=	18	
Mercury	<	1	
Molybdenum	=	17	
Nickel	=	33	
Selenium	=	12	
Zinc	=	880	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	63	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.7	
Cadmium	=	3.5	
Copper	=	420	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	<	1	
Nickel	=	33	
Selenium	=	12	
Zinc	=	880	

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)	=	28000	

Compliance Monitoring Event No. 7 Compliance Monitoring Period Start Date: 07/01/2019 Compliance Monitoring Period End Date: 07/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.3	
Cadmium	=	3.2	
Copper	=	370	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	16	
Nickel	=	29	
Selenium	=	11	
Zinc	=	810	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	74	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.3	
Cadmium	=	3.2	
Copper	=	370	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	29	
Selenium	=	11	
Zinc	=	810	

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)	=	29000	

Compliance Monitoring Event No. 8 Compliance Monitoring Period Start Date: 08/01/2019 Compliance Monitoring Period End Date: 08/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.3	
Cadmium	=	2.5	
Copper	=	330	
Lead	=	18	
Mercury	<	1	
Molybdenum	=	17	
Nickel	=	28	
Selenium	=	14	
Zinc	=	640	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	65	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.3	
Cadmium	=	2.5	
Copper	=	330	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	<	1	
Nickel	=	28	
Selenium	=	14	
Zinc	=	640	

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)	=	28000	

Compliance Monitoring Event No. 9      Compliance Monitoring Period Start Date: 09/01/2019      Compliance Monitoring Period End Date: 09/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.9	
Cadmium	=	2.8	
Copper	=	340	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	17	
Nickel	=	29	
Selenium	=	12	
Zinc	=	700	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	41	

**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)	If No Data, Select One Of The Following
Arsenic	=	6.9	
Cadmium	=	2.8	
Copper	=	340	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	29	
Selenium	=	12	
Zinc	=	700	

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)	=	32000	

**Compliance Monitoring Event No. 10**      **Compliance Monitoring Period Start Date:** 10/01/2019      **Compliance Monitoring Period End Date:** 10/31/2019

**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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.2	
Cadmium	=	2.5	
Copper	=	260	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	15	
Nickel	=	24	
Selenium	=	11	
Zinc	=	560	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	64	

**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)	If No Data, Select One Of The Following
Arsenic	=	6.2	
Cadmium	=	2.5	
Copper	=	260	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	24	
Selenium	=	11	
Zinc	=	560	

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)	=	31000	

Compliance Monitoring Event No. 11      Compliance Monitoring Period Start Date: 11/01/2019      Compliance Monitoring Period End Date: 11/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.2	
Cadmium	=	2.7	
Copper	=	330	
Lead	=	20	
Mercury	<	1	
Molybdenum	=	18	
Nickel	=	29	
Selenium	=	15	
Zinc	=	650	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	7.9	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.2	
Cadmium	=	2.7	
Copper	=	330	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	20	
Mercury	<	1	
Nickel	=	29	
Selenium	=	15	
Zinc	=	650	

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)	=	32000	

Compliance Monitoring Event No. 12      Compliance Monitoring Period Start Date: 12/01/2019      Compliance Monitoring Period End Date: 12/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.1	
Cadmium	=	2.5	
Copper	=	330	
Lead	=	18	
Mercury	<	1	
Molybdenum	=	19	
Nickel	=	32	
Selenium	=	14	
Zinc	=	750	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	75	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.1	
Cadmium	=	2.5	
Copper	=	330	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	<	1	
Nickel	=	32	
Selenium	=	14	
Zinc	=	750	

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)	=	30000	

ID: 006

Amount: 1129.2

Management Practice Detail: Distribution and Marketing - Compost

Bulk or Bag/Container: Bulk

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

NPDES ID of handler:

Facility Information:  
Synagro - AZ Soils  
5615 S. 91st Avenue  
Tolleson, AZ 85353

Contact Information:  
Craig Geyer  
Senior Operations Manager  
623-936-6328  
Cgeyer@synagro.com

Pathogen Class: Class A EQ

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

- Class A-Alternative 5: PFRP 1: Composting

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

- Option 1 - Volatile Solids Reduction
- Option 5 - Aerobic Processing (Thermophilic Aerobic Digestion/Composting)

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. The number of compliance monitoring periods reported will correspond to the required frequency of monitoring (monthly, quarterly, semi-annually, or annually). For example, if monthly monitoring is required, you should report 12 compliance monitoring periods. The required frequency is determined by the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period for this SSUID (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))).

Compliance Monitoring Event No. 1 Compliance Monitoring Period Start Date: 01/01/2019 Compliance Monitoring Period End Date: 01/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.9	
Cadmium	=	1.9	
Copper	=	490	
Lead	=	25	
Mercury	=	1.7	
Molybdenum	=	15	
Nickel	=	22	
Selenium	=	6	
Zinc	=	740	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	630	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.9	
Cadmium	=	1.9	
Copper	=	490	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	25	
Mercury	=	1.7	
Nickel	=	22	
Selenium	=	6	
Zinc	=	740	

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)	=	32700	

Compliance Monitoring Event No. 2      Compliance Monitoring Period Start Date: 02/01/2019      Compliance Monitoring Period End Date: 02/28/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	5.6	
Cadmium	=	2.1	
Copper	=	430	
Lead	=	20	
Mercury	=	1.4	
Molybdenum	=	15	
Nickel	=	23	
Selenium	=	4.3	
Zinc	=	770	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	32	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	5.6	
Cadmium	=	2.1	
Copper	=	430	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	20	
Mercury	=	1.4	
Nickel	=	23	
Selenium	=	4.3	
Zinc	=	770	

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)	=	29800	



Compliance Monitoring Event No. 3 Compliance Monitoring Period Start Date: 03/01/2019 Compliance Monitoring Period End Date: 03/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.8	
Cadmium	=	1.9	
Copper	=	490	
Lead	=	17	
Mercury	=	1.4	
Molybdenum	=	12	
Nickel	=	23	
Selenium	=	6.7	
Zinc	=	770	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	850	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.8	
Cadmium	=	1.9	
Copper	=	490	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	=	1.4	
Nickel	=	23	
Selenium	=	6.7	
Zinc	=	770	

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)	=	42500	

Compliance Monitoring Event No. 4      Compliance Monitoring Period Start Date: 04/01/2019      Compliance Monitoring Period End Date: 04/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.5	
Cadmium	=	1.7	
Copper	=	460	
Lead	=	19	
Mercury	=	1.6	
Molybdenum	=	13	
Nickel	=	24	
Selenium	=	6.5	
Zinc	=	790	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	29	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	58	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.5	
Cadmium	=	1.7	
Copper	=	460	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	19	
Mercury	=	1.6	
Nickel	=	24	
Selenium	=	6.5	
Zinc	=	790	

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)	=	36700	

Compliance Monitoring Event No. 5 Compliance Monitoring Period Start Date: 05/01/2019 Compliance Monitoring Period End Date: 05/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.2	
Cadmium	=	1.7	
Copper	=	470	
Lead	=	18	
Mercury	=	1.2	
Molybdenum	=	14	
Nickel	=	22	
Selenium	=	7.4	
Zinc	=	850	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	28	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	68	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.2	
Cadmium	=	1.7	
Copper	=	470	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	=	1.2	
Nickel	=	22	
Selenium	=	7.4	
Zinc	=	850	

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)	=	41200	

Compliance Monitoring Event No. 6      Compliance Monitoring Period Start Date: 06/01/2019      Compliance Monitoring Period End Date: 06/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.5	
Cadmium	=	1.7	
Copper	=	470	
Lead	=	16	
Mercury	=	1.1	
Molybdenum	=	14	
Nickel	=	23	
Selenium	=	8.2	
Zinc	=	800	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	28	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	63	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.5	
Cadmium	=	1.7	
Copper	=	470	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	=	1.1	
Nickel	=	23	
Selenium	=	8.2	
Zinc	=	800	

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)	=	43600	



Compliance Monitoring Event No. 7 Compliance Monitoring Period Start Date: 07/01/2019 Compliance Monitoring Period End Date: 07/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.3	
Cadmium	=	2	
Copper	=	510	
Lead	=	17	
Mercury	=	1.2	
Molybdenum	=	14	
Nickel	=	26	
Selenium	=	9.3	
Zinc	=	920	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	27	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	74	

**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)	If No Data, Select One Of The Following
Arsenic	=	8.3	
Cadmium	=	2	
Copper	=	510	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	=	1.2	
Nickel	=	26	
Selenium	=	9.3	
Zinc	=	920	

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)	=	49500	

Compliance Monitoring Event No. 8      Compliance Monitoring Period Start Date: 08/01/2019      Compliance Monitoring Period End Date: 08/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.8	
Cadmium	=	1.8	
Copper	=	440	
Lead	=	14	
Mercury	=	1.3	
Molybdenum	=	14	
Nickel	=	28	
Selenium	=	6.9	
Zinc	=	800	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	24	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	65	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.8	
Cadmium	=	1.8	
Copper	=	440	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	14	
Mercury	=	1.3	
Nickel	=	28	
Selenium	=	6.9	
Zinc	=	800	

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)	=	41700	

Compliance Monitoring Event No. 9 Compliance Monitoring Period Start Date: 09/01/2019 Compliance Monitoring Period End Date: 09/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	2.1	
Cadmium	=	0.54	
Copper	=	140	
Lead	=	5	
Mercury	=	1.2	
Molybdenum	=	4	
Nickel	=	7.5	
Selenium	=	2.3	
Zinc	=	260	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	30	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	41	

**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)	If No Data, Select One Of The Following
Arsenic	=	2.1	
Cadmium	=	0.54	
Copper	=	140	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	5	
Mercury	=	1.2	
Nickel	=	7.5	
Selenium	=	2.3	
Zinc	=	260	

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)	=	48100	

**Compliance Monitoring Event No. 10** **Compliance Monitoring Period Start Date:** 10/01/2019 **Compliance Monitoring Period End Date:** 10/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.2	
Cadmium	=	1.6	
Copper	=	510	
Lead	=	20	
Mercury	=	1.1	
Molybdenum	=	15	
Nickel	=	29	
Selenium	=	8.5	
Zinc	=	910	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	26	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	64	

**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)	If No Data, Select One Of The Following
Arsenic	=	7.2	
Cadmium	=	1.6	
Copper	=	510	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	20	
Mercury	=	1.1	
Nickel	=	29	
Selenium	=	8.5	
Zinc	=	910	

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)	=	41800	



Compliance Monitoring Event No. 11 Compliance Monitoring Period Start Date: 11/01/2019 Compliance Monitoring Period End Date: 11/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.6	
Cadmium	=	1.8	
Copper	=	510	
Lead	=	17	
Mercury	=	1.7	
Molybdenum	=	16	
Nickel	=	27	
Selenium	=	7.5	
Zinc	=	800	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	26	
Salmonella	<	1	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.6	
Cadmium	=	1.8	
Copper	=	510	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	=	1.7	
Nickel	=	27	
Selenium	=	7.5	
Zinc	=	800	

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)	=	38500	

Compliance Monitoring Event No. 12      Compliance Monitoring Period Start Date: 12/01/2019      Compliance Monitoring Period End Date: 12/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.3	
Cadmium	=	2.2	
Copper	=	480	
Lead	=	18	
Mercury	=	1.5	
Molybdenum	=	17	
Nickel	=	26	
Selenium	=	6.7	
Zinc	=	820	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	29	
Salmonella			F (No Sampling or Analysis Conducted - Other Reason)

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	75	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.3	
Cadmium	=	2.2	
Copper	=	480	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	=	1.5	
Nickel	=	26	
Selenium	=	6.7	
Zinc	=	820	

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)	=	39200	

ID: 008

Amount: 2007

Management Practice Detail: Distribution and Marketing - Compost

Bulk or Bag/Container: Bulk

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

NPDES ID of handler:

**Facility Information:**

Liberty Compost  
12421 Holloway Road  
Lost Hills, CA 93249

**Contact Information:**

Patrick McCarthy  
Site Manager  
661-797-2914  
patrickmccarthy@mccarthyfarms.com

Pathogen Class: Class A EQ

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

- Class A-Alternative 5: PFRP 1: Composting

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

- Option 1 - Volatile Solids Reduction
- Option 5 - Aerobic Processing (Thermophilic Aerobic Digestion/Composting)

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. The number of compliance monitoring periods reported will correspond to the required frequency of monitoring (monthly, quarterly, semi-annually, or annually). For example, if monthly monitoring is required, you should report 12 compliance monitoring periods. The required frequency is determined by the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period for this SSUID (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))).

Compliance Monitoring Event No. 1 Compliance Monitoring Period Start Date: 01/01/2019 Compliance Monitoring Period End Date: 01/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.7	
Cadmium	=	4.5	
Copper	=	440	
Lead	=	15	
Mercury	<	1	
Molybdenum	=	23	
Nickel	=	39	
Selenium	=	20	
Zinc	=	830	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.7	
Cadmium	=	4.5	
Copper	=	440	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	15	
Mercury	<	1	
Nickel	=	39	
Selenium	=	20	
Zinc	=	830	

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)	=	4	

Compliance Monitoring Event No. 2 Compliance Monitoring Period Start Date: 02/01/2019 Compliance Monitoring Period End Date: 02/28/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.2	
Cadmium	=	4.3	
Copper	=	380	
Lead	=	15	
Mercury	<	1	
Molybdenum	=	23	
Nickel	=	36	
Selenium	=	18	
Zinc	=	780	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.2	
Cadmium	=	4.3	
Copper	=	380	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	15	
Mercury	<	1	
Nickel	=	36	
Selenium	=	18	
Zinc	=	780	

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)	=	3.8	

Compliance Monitoring Event No. 3 Compliance Monitoring Period Start Date: 03/01/2019 Compliance Monitoring Period End Date: 03/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	11	
Cadmium	=	4.3	
Copper	=	420	
Lead	=	19	
Mercury	<	1	
Molybdenum	=	25	
Nickel	=	41	
Selenium	=	21	
Zinc	=	800	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

**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)	If No Data, Select One Of The Following
Arsenic	=	11	
Cadmium	=	4.3	
Copper	=	420	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	19	
Mercury	<	1	
Nickel	=	41	
Selenium	=	21	
Zinc	=	800	

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)	=	4	

Compliance Monitoring Event No. 4      Compliance Monitoring Period Start Date: 04/01/2019      Compliance Monitoring Period End Date: 04/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.2	
Cadmium	=	4.4	
Copper	=	340	
Lead	=	16	
Mercury	<	1	
Molybdenum	=	23	
Nickel	=	35	
Selenium	=	19	
Zinc	=	690	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	58	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.2	
Cadmium	=	4.4	
Copper	=	340	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	<	1	
Nickel	=	35	
Selenium	=	19	
Zinc	=	690	

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)	=	3.8	

Compliance Monitoring Event No. 5      Compliance Monitoring Period Start Date: 05/01/2019      Compliance Monitoring Period End Date: 05/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.1	
Cadmium	=	4.5	
Copper	=	370	
Lead	=	16	
Mercury	=	1.1	
Molybdenum	=	22	
Nickel	=	32	
Selenium	=	16	
Zinc	=	720	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	68	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	7.1	
Cadmium	=	4.5	
Copper	=	370	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	=	1.1	
Nickel	=	32	
Selenium	=	16	
Zinc	=	720	

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)	=	3.9	

Compliance Monitoring Event No. 6 Compliance Monitoring Period Start Date: 06/01/2019 Compliance Monitoring Period End Date: 06/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	9.3	
Cadmium	=	4.8	
Copper	=	480	
Lead	=	18	
Mercury	=	0.93	
Molybdenum	=	25	
Nickel	=	43	
Selenium	=	20	
Zinc	=	830	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	63	

**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)	If No Data, Select One Of The Following
Arsenic	=	9.3	
Cadmium	=	4.8	
Copper	=	480	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	=	0.93	
Nickel	=	43	
Selenium	=	20	
Zinc	=	830	

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)	=	4.1	

Compliance Monitoring Event No. 7      Compliance Monitoring Period Start Date: 07/01/2019      Compliance Monitoring Period End Date: 07/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	8.5	
Cadmium	=	4.4	
Copper	=	410	
Lead	=	16	
Mercury	<	1	
Molybdenum	=	24	
Nickel	=	40	
Selenium	=	20	
Zinc	=	750	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	74	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	8.5	
Cadmium	=	4.4	
Copper	=	410	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	<	1	
Nickel	=	40	
Selenium	=	20	
Zinc	=	750	

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)	=	4.4	

Compliance Monitoring Event No. 8 Compliance Monitoring Period Start Date: 08/01/2019 Compliance Monitoring Period End Date: 08/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	9.6	
Cadmium	=	4.9	
Copper	=	460	
Lead	=	18	
Mercury	=	0.9	
Molybdenum	=	27	
Nickel	=	41	
Selenium	=	21	
Zinc	=	890	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	65	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	9.6	
Cadmium	=	4.9	
Copper	=	460	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	18	
Mercury	=	0.9	
Nickel	=	41	
Selenium	=	21	
Zinc	=	890	

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)	=	4.4	

Compliance Monitoring Event No. 9 Compliance Monitoring Period Start Date: 09/01/2019 Compliance Monitoring Period End Date: 09/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	9.2	
Cadmium	=	2.5	
Copper	=	430	
Lead	=	20	
Mercury	=	0.94	
Molybdenum	=	26	
Nickel	=	43	
Selenium	=	20	
Zinc	=	790	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	41	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	9.2	
Cadmium	=	2.5	
Copper	=	430	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	20	
Mercury	=	0.94	
Nickel	=	43	
Selenium	=	20	
Zinc	=	790	

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)	=	4	

Compliance Monitoring Event No. 10 Compliance Monitoring Period Start Date: 10/01/2019 Compliance Monitoring Period End Date: 10/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	13	
Cadmium	=	8	
Copper	=	9.2	
Lead	=	28	
Mercury	<	1	
Molybdenum	=	41	
Nickel	=	64	
Selenium	=	32	
Zinc	=	1200	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	64	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	13	
Cadmium	=	8	
Copper	=	9.2	



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	28	
Mercury	<	1	
Nickel	=	64	
Selenium	=	32	
Zinc	=	1200	

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)	=	4.4	

Compliance Monitoring Event No. 11 Compliance Monitoring Period Start Date: 11/01/2019 Compliance Monitoring Period End Date: 11/30/2019

Do you have analytical results to report for this monitoring period? [X] YES [ ] NO

Are you reporting maximum pollutant concentrations that are equivalent to the monthly average pollutant concentrations for this compliance monitoring event? [ ] YES [X] 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)...

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

Table with 4 columns: Sewage Sludge or Biosolids Parameter, Value Qualifier, Parameter Concentration (mg/kg, dry-weight basis), If No Data, Select One Of The Following. Rows include Arsenic, Cadmium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, and Zinc.

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...

Table with 4 columns: Sewage Sludge or Biosolids Parameter, Value Qualifier, Value, If No Data, Select One Of The Following. Rows include Fecal Coliform and Salmonella.

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.

Table with 4 columns: Sewage Sludge or Biosolids Parameter, Value Qualifier, Value, If No Data, Select One Of The Following. Row includes Solids, total volatile percent removal.

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.

Table with 4 columns: Sewage Sludge or Biosolids Parameter, Value Qualifier, Parameter Concentration (mg/kg, dry-weight basis), If No Data, Select One Of The Following. Rows include Arsenic, Cadmium, and Copper.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	<	1	
Nickel	=	39	
Selenium	=	18	
Zinc	=	860	

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)	=	4.4	

Compliance Monitoring Event No. 12      Compliance Monitoring Period Start Date: 12/01/2019      Compliance Monitoring Period End Date: 12/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	7.5	
Cadmium	=	3.3	
Copper	=	470	
Lead	=	14	
Mercury	<	1	
Molybdenum	=	20	
Nickel	=	36	
Selenium	=	15	
Zinc	=	780	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	75	

**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)	If No Data, Select One Of The Following
Arsenic	=	7.5	
Cadmium	=	3.3	
Copper	=	470	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	14	
Mercury	<	1	
Nickel	=	36	
Selenium	=	15	
Zinc	=	780	

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)	=	4.1	

ID: 010

Amount: 1908.9

Management Practice Detail: Distribution and Marketing - Compost

Bulk or Bag/Container: Bulk

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

NPDES ID of handler:

**Facility Information:**  
Inland Empire Regional Composting Facility  
12645 6th Street  
Rancho Cucamonga, CA 91739

**Contact Information:**  
Jeff Ziegenbein  
Site Manager  
909-993-1981  
jziegenbein@ieua.org

Pathogen Class: Class A EQ

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

- Class A-Alternative 5: PFRP 1: Composting

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

- Option 1 - Volatile Solids Reduction
- Option 5 - Aerobic Processing (Thermophilic Aerobic Digestion/Composting)

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. The number of compliance monitoring periods reported will correspond to the required frequency of monitoring (monthly, quarterly, semi-annually, or annually). For example, if monthly monitoring is required, you should report 12 compliance monitoring periods. The required frequency is determined by the number of metric tons (dry weight basis) of sewage sludge or biosolids land applied in the reporting period for this SSUID (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))).

Compliance Monitoring Event No. 1 Compliance Monitoring Period Start Date: 01/01/2019 Compliance Monitoring Period End Date: 01/31/2019

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), 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)). 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) 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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	4.3	
Cadmium	=	3.2	
Copper	=	270	
Lead	=	11	
Mercury	<	1	
Molybdenum	=	15	
Nickel	=	27	
Selenium	=	17	
Zinc	=	620	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

**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)	If No Data, Select One Of The Following
Arsenic	=	4.2	
Cadmium	=	3	
Copper	=	245	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	9.8	
Mercury	<	1	
Nickel	=	25	
Selenium	=	14	
Zinc	=	535	

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)	=	3	



Compliance Monitoring Event No. 2      Compliance Monitoring Period Start Date: 02/01/2019      Compliance Monitoring Period End Date: 02/28/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	5.2	
Cadmium	=	2.7	
Copper	=	210	
Lead	=	12	
Mercury	<	1	
Molybdenum	=	14	
Nickel	=	24	
Selenium	=	13	
Zinc	=	480	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	11	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	5.2	
Cadmium	=	2.7	
Copper	=	210	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	12	
Mercury	<	1	
Nickel	=	24	
Selenium	=	13	
Zinc	=	480	

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)	=	3.6	

Compliance Monitoring Event No. 3 Compliance Monitoring Period Start Date: 03/01/2019 Compliance Monitoring Period End Date: 03/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	6.7	
Cadmium	=	2.7	
Copper	=	260	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	15	
Nickel	=	8	
Selenium	=	15	
Zinc	=	550	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	220	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	55	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	6.7	
Cadmium	=	2.7	
Copper	=	260	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	17	
Mercury	<	1	
Nickel	=	8	
Selenium	=	15	
Zinc	=	550	

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)	=	3.2	

Compliance Monitoring Event No. 4      Compliance Monitoring Period Start Date: 04/01/2019      Compliance Monitoring Period End Date: 04/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	5.5	
Cadmium	=	2.9	
Copper	=	260	
Lead	=	17	
Mercury	<	1	
Molybdenum	=	12	
Nickel	=	28	
Selenium	=	13	
Zinc	=	580	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	=	65	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	58	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	4.9	
Cadmium	=	2.6	
Copper	=	235	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	14	
Mercury	<	1	
Nickel	=	26	
Selenium	=	11	
Zinc	=	515	

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)	=	3	

Compliance Monitoring Event No. 5      Compliance Monitoring Period Start Date: 05/01/2019      Compliance Monitoring Period End Date: 05/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	5.4	
Cadmium	=	3.1	
Copper	=	250	
Lead	=	14	
Mercury	<	1	
Molybdenum	=	14	
Nickel	=	25	
Selenium	=	14	
Zinc	=	620	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	68	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	5.4	
Cadmium	=	3.1	
Copper	=	250	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	14	
Mercury	<	1	
Nickel	=	25	
Selenium	=	14	
Zinc	=	620	

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)	=	3.5	



Compliance Monitoring Event No. 6 Compliance Monitoring Period Start Date: 06/01/2019 Compliance Monitoring Period End Date: 06/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	5.4	
Cadmium	=	2.5	
Copper	=	270	
Lead	=	15	
Mercury	<	1	
Molybdenum	=	13	
Nickel	=	25	
Selenium	=	10	
Zinc	=	710	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	63	

**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)	If No Data, Select One Of The Following
Arsenic	=	5.4	
Cadmium	=	2.5	
Copper	=	270	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	15	
Mercury	<	1	
Nickel	=	25	
Selenium	=	10	
Zinc	=	710	

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)	=	3.5	

Compliance Monitoring Event No. 7      Compliance Monitoring Period Start Date: 07/01/2019      Compliance Monitoring Period End Date: 07/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	5.1	
Cadmium	=	2.3	
Copper	=	250	
Lead	=	14	
Mercury	<	1	
Molybdenum	=	14	
Nickel	=	23	
Selenium	=	12	
Zinc	=	530	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	74	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	5.1	
Cadmium	=	2.3	
Copper	=	250	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	14	
Mercury	<	1	
Nickel	=	23	
Selenium	=	12	
Zinc	=	530	

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)	=	3.2	

Compliance Monitoring Event No. 8      Compliance Monitoring Period Start Date: 08/01/2019      Compliance Monitoring Period End Date: 08/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	4	
Cadmium	=	2.2	
Copper	=	46	
Lead	=	14	
Mercury	<	1	
Molybdenum	=	13	
Nickel	=	23	
Selenium	=	11	
Zinc	=	600	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	65	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	4	
Cadmium	=	2.2	
Copper	=	46	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	14	
Mercury	<	1	
Nickel	=	23	
Selenium	=	11	
Zinc	=	600	

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)	=	3.4	

Compliance Monitoring Event No. 9 Compliance Monitoring Period Start Date: 09/01/2019 Compliance Monitoring Period End Date: 09/30/2019

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), 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)). 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) 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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	5.9	
Cadmium	=	3.2	
Copper	=	390	
Lead	=	21	
Mercury	=	0.91	
Molybdenum	=	16	
Nickel	=	34	
Selenium	=	15	
Zinc	=	660	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	41	

**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)	If No Data, Select One Of The Following
Arsenic	=	5.9	
Cadmium	=	3.2	
Copper	=	390	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	21	
Mercury	=	0.91	
Nickel	=	34	
Selenium	=	15	
Zinc	=	660	

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)	=	3.4	



Compliance Monitoring Event No. 10 Compliance Monitoring Period Start Date: 10/01/2019 Compliance Monitoring Period End Date: 10/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	4.4	
Cadmium	=	2.6	
Copper	=	230	
Lead	=	16	
Mercury	<	1	
Molybdenum	=	15	
Nickel	=	23	
Selenium	=	12	
Zinc	=	510	

**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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	64	

**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)	If No Data, Select One Of The Following
Arsenic	=	4.4	
Cadmium	=	2.6	
Copper	=	230	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	16	
Mercury	<	1	
Nickel	=	23	
Selenium	=	12	
Zinc	=	510	

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)	=	4	

Compliance Monitoring Event No. 11 Compliance Monitoring Period Start Date: 11/01/2019 Compliance Monitoring Period End Date: 11/30/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	4.4	
Cadmium	=	2.2	
Copper	=	230	
Lead	=	21	
Mercury	<	1	
Molybdenum	=	15	
Nickel	=	24	
Selenium	=	12	
Zinc	=	240	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	60	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	4.4	
Cadmium	=	2.2	
Copper	=	230	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	21	
Mercury	<	1	
Nickel	=	24	
Selenium	=	12	
Zinc	=	240	

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)	=	3.5	

Compliance Monitoring Event No. 12      Compliance Monitoring Period Start Date: 12/01/2019      Compliance Monitoring Period End Date: 12/31/2019

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.

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	=	5.5	
Cadmium	=	2.3	
Copper	=	230	
Lead	=	13	
Mercury	<	1	
Molybdenum	=	16	
Nickel	=	25	
Selenium	=	14	
Zinc	=	550	

#### 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	Value Qualifier	Value	If No Data, Select One Of The Following
Fecal Coliform	<	7.5	
Salmonella	<	3	

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	Value Qualifier	Value	If No Data, Select One Of The Following
Solids, total volatile percent removal	=	75	

#### 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)	If No Data, Select One Of The Following
Arsenic	=	5.5	
Cadmium	=	2.3	
Copper	=	230	

Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Lead	=	13	
Mercury	<	1	
Nickel	=	25	
Selenium	=	14	
Zinc	=	550	

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)	=	3.4	

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.

OCSD is attaching an abbreviated, electronic version of our annual biosolids compliance report because the file size is much larger than EPA's database limit of 3MB. The comprehensive report is available at [www.ocsd.com/503](http://www.ocsd.com/503). Monthly compliance reports are posted to [www.ocsd.com/nani](http://www.ocsd.com/nani) and low resolution versions are attached. Appendix A in the comprehensive report contains the certified monthly compliance reports that contain OCSD data that was uploaded to the EPA database. OCSD's contractors emailed data that was consolidated and uploaded to the EPA's database. Appendix C in the comprehensive report contains OCSD's Clean Water Act section 307(a) pollutant data required by our NPDES permit. Regarding SSIUD003, Compliance Monitoring Event 12, Salmonella No Sampling Code F: • The 503 regulations require either the density of fecal coliforms in the sewage sludge be less than 1,000 MPN per gram total solids (dry weight basis) or the density of Salmonella sp. bacteria in the sewage be less than 3 MPN per 4 grams of total solids (dry weight basis). • OCSD's composting contractor, Synagro Arizona Soils, normally samples for salmonella and fecal coliforms each month. In December 2019, the compost pile they tested for salmonella and fecal coliforms had normal salmonella, but elevated fecal coliforms. As a result, they restarted the pile, but did not retest the salmonella so there is no salmonella data for December. However, it is not required by 503 regulations, but the database requires a data code for both fecal coliform and salmonella.

Additional Attachments

Name	Created Date	Size
2019_NANIs_scanned LOW RES - 01JAN-06JUN.pdf	02/19/2020 10:53 AM	2.96 MB
2019_NANIs_scanned LOW RES - 07JULrev-12DEC.pdf	02/19/2020 10:54 AM	2.76 MB
2019_Biosolids_503_Annual_Report - EPA Abbreviated less than 3MB - REDO 2.pdf	02/18/2020 2:23 PM	2.09 MB

Certification Information

Form has not been certified yet.

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## **APPENDIX E**

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**ARIZONA**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
 AZPDES Individual Permits Unit  
 1110 W Washington Street  
 Phoenix, Arizona 85007  
 (602) 771-4689 (voicemail) (602) 771-4505 (fax)  
 Email to: biosolids@azdeq.gov

<b>BIOSOLIDS OR SEWAGE SLUDGE ANNUAL REPORT FORM</b>	
1. Program Information: All preparers (Generators) and Land Applicators Must complete the following.	
Reporting Start Date: <b>1/1/2019</b>	Reporting End Date: <b>12/31/2019</b>
Date: <b>2/5/2019</b>	AZPDES Permit # (if applicable ): <a href="#">Click here to enter text.</a>
Company name (Preparer / Applicator): <b>Orange County Sanitation District, Plant No. 1 and Plant No. 2</b>	
Contact Name: <b>Ron Coss</b>	Title: <b>Laboratory, Monitoring and Compliance Manager</b>
Address: <b>10844 Ellis Ave., Fountain Valley, CA 92708</b>	E-mail: <b>rcoss@ocsd.com</b>
Phone: <b>714-593-7508</b>	
Please select one of the following options pertaining to your obligation to submit a Biosolids Annual Report. My facility is a:	
<input checked="" type="checkbox"/> POTW with a design flow equal to or greater than 1 MGD Per Day <input checked="" type="checkbox"/> POTW that serves 10,000 people or more <input checked="" type="checkbox"/> Class I Sludge Management Facility as defined by 40 CFR 503.9 <input type="checkbox"/> Biosolids Applicator (Complete Section 5 only) <input type="checkbox"/> Other <a href="#">Click here to enter text.</a>	
What is the estimated total of volume of biosolids or sewage sludge generated at your facility (in dry metric tons)? <b>52,003</b>	
Were all biosolids removed from your facility sent to a landfill for disposal? <b>No</b>	
If yes, provide the name and address of the landfill(s). <a href="#">Click here to enter text.</a>	
<i>If all biosolids or sewage sludge was sent to a landfill for disposal, you do not need to complete the remainder of this form, as it is only applicable to facilities preparing biosolids or sewage sludge for land application.</i>	
Certification: I certify, under penalty of law, that the information and descriptions, have been made under my direction and supervision and under a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine whether the applicable biosolids requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.	
Signature: 	Date: <b>Feb 3, 2020</b>
Title:	

# BIOSOLIDS SEWAGE SLUDGE ANNUAL REPORT

## 2. Generator/Preparers - Biosolids Storage and Treatment Processes

2.1 Please check the box next to the following biosolids or sewage sludge storage practices and treatment processes used on the sewage sludge or biosolids generated or produced at your facility during the reporting period.

### Storage Practices

- Biosolids are stored in lined lagoons or impoundments
- Biosolids stored directly on the ground

### Physical Treatment Processes

- Preliminary Operations (e.g. sludge grinding, degritting, blending)
- Thickening (e.g. gravity floatation, centrifugation, belt filter press, vacuum filter)
- Sludge lagoon

### Pathogen Reduction Operations (PSRP)

- Aerobic Digestion
- Air Drying (or "sludge drying beds")
- Anaerobic Digestion
- Lower Temperature Composting
- Lime Stabilization

### Process to Further Reduce Pathogens (PFRP)

- Higher Temperature Composting
- Heat Drying (e.g. flash dryer, spray dryer, rotary dryer)
- Heat Treatment (Liquid sewage sludge is heated to temp of 356 °F (180 °C) or higher for 30 minutes)
- Thermophilic Aerobic Digestion
- Beta Ray Irradiation
- Gamma Ray Irradiation
- Pasteurization

## BIOSOLIDS SEWAGE SLUDGE ANNUAL REPORT

### 3. Generators/Preparers: Disposition of Biosolids or Sewage Treatment Sludge:

3.1 At the beginning of the year, did you have any biosolids or sewage sludge stored on site or remaining from previous years? Include any amount that is being stored anywhere. **No**

If yes provide the following information:

	CLASS A Biosolids	Class B Biosolids
Dry Ton Weight	Click here to enter text.	Click here to enter text.
Pathogen Testing	Choose an item.	<b>Not applicable</b>
Pathogen Reduction Method	Choose an item.	Choose an item.
Vector Attraction Reduction Method	Choose an item.	Choose an item.
Storage Locations	Click here to enter text.	Click here to enter text.

3.2 At the end of the year, are any biosolids or sewage sludge stored on site? **No**

If yes, provide the following information:

	CLASS A Biosolids	Class B Biosolids
Dry Ton Weight	Click here to enter text.	Click here to enter text.
Pathogen Testing	Choose an item.	<b>Not applicable</b>
Pathogen Reduction Method	Choose an item.	Choose an item.
Vector Attraction Reduction Method	Choose an item.	Choose an item.
Storage Locations	Click here to enter text.	Click here to enter text.

3.3 Were biosolids or sewage sludge received from another facility during the year, such as another wastewater treatment plant or another APP permitted facility for further processing? **No**

If yes provide the following information for each facility. Click the plus sign to create as many tables as needed.

Name of Facility		
Location:		
	CLASS A Biosolids	Class B Biosolids
Dry Ton Weight	Click here to enter text.	Click here to enter text.
Pathogen Testing	Choose an item.	<b>Not applicable</b>
Pathogen Reduction Method	Choose an item.	Choose an item.
Vector Attraction Reduction Method	Choose an item.	Choose an item.
Storage Locations	Click here to enter text.	Click here to enter text.

## BIOSOLIDS SEWAGE SLUDGE ANNUAL REPORT

3.4. Were biosolids removed from your facility for land application? Include all recipients, including haulers, name, phone number, land applicators, composters, drying facilities, EQB bagging facilities, bulk composting, etc.

Name of Facility	Tule Ranch / Ag-Tech	
Management Practice Type:	Agricultural Land application	
Handler or Preparer Type:	Off-Site Third-Party Handler or Preparer	
Management Practice Detail:	Agricultural Land application	
Bag or Bulk Container:	Bulk Container	
	CLASS A Biosolids	Class B Biosolids
Dry Ton Weight	Click here to enter text.	20,309
Pathogen Testing	Choose an item.	Not applicable
Pathogen Reduction Method	Choose an item.	Alternate 5 - anaerobic digestion
Vector Attraction Reduction Method	Choose an item.	Option 1 - mass reduction
Storage Locations	Click here to enter text.	Click here to enter text.

### 4. Generators/Preparers : Biosolids or Sewage Sludge Analytical Methods

Arizona regulations specify that representative samples of sewage sludge that is land applied, placed on a surface disposal site, or fired in a sewage sludge incinerator, must be collected and analyzed. These regulations specify the analytical methods that must be used to analyze samples of sewage sludge.

<i>Parameter</i>	<i>Method Number or Author</i>	<i>Results (if tested)</i>	<i>Comments (required if other)</i>
<b>Pathogens</b>			
Ascaris ova.	No Analytical Method Used	Click here to enter text.	Click here to enter text.
Fecal Coliform	No Analytical Methods Used	Click here to enter text.	Click here to enter text.
Helminth ova.	No Analytical Methods Used	Click here to enter text.	Click here to enter text.
Salmonella sp. Bacteria	No Analytical Methods Used	Click here to enter text.	Click here to enter text.
Total Cultural Viruses	No Analytical Methods Used	Click here to enter text.	Click here to enter text.
<b>Metals</b>			
Arsenic	EPA Method 6010 - Arsenic (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.

## BIOSOLIDS SEWAGE SLUDGE ANNUAL REPORT

Beryllium	Other Beryllium Analytical Method	See attached OCSD Biosolids Management Compliance Report, Appendix C.	EPA Method 6010 - Beryllium
Cadmium	EPA Method 6010 - Cadmium (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Chromium	EPA Method 6010 - Chromium (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, appendices A and C.	Click here to enter text.
Copper	EPA Method 6010 - Copper (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Lead	EPA Method 6010 - Lead (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Mercury	EPA Method 7471 - Mercury (CVAA)	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Molybdenum	EPA Method 6010 - Molybdenum (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Nickel	EPA Method 6010 - Nickel (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Selenium	EPA Method 6010 - Selenium (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Zinc	EPA Method 6010 - Zinc (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
<b>Nitrogen Compounds</b>			
Ammonia Nitrogen	Standard Method 4500-NH3 - Ammonia Nitrogen	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Nitrate Nitrogen	Other Nitrate Nitrogen Analytical Method	See attached OCSD Biosolids Management Compliance	EPA 300.0

## BIOSOLIDS SEWAGE SLUDGE ANNUAL REPORT

		Report, Appendices A, C, and D.	
Nitrogen	Standard Method 4500-N - Nitrogen	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Organic Nitrogen	Other Organic Nitrogen Analytical Method	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Calculation
Total Kjeldahl Nitrogen	EPA Method 351.2 - Total Kjeldahl Nitrogen	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
<b>Other Analytes</b>			
Fixed Solids	No Analytical Method Used	Click here to enter text.	Click here to enter text.
Paint Filter Test	No Analytical Method Used	Click here to enter text.	Click here to enter text.
pH	EPA Method 9045 - pH (> 7% solids)	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Specific Oxygen Uptake Rate	Choose an item.	Click here to enter text.	Click here to enter text.
TCLP	EPA Method 1311 - Toxicity Characteristic Leaching Procedure	See attached OCSD Biosolids Management Compliance Report, Appendix C.	Click here to enter text.
Temperature	No Analytical Method Used	See attached OCSD Biosolids Management Compliance Report, Appendix A.	Click here to enter text.
Total Solids	Standard Method 2540 - Total Solids	See attached OCSD Biosolids Management Compliance Report, Appendices A, C, and D.	Click here to enter text.
Volatile Solids	Standard Method 2540 - Volatile Solids	See attached OCSD Biosolids Management Compliance Report, Appendix A and D.	Click here to enter text.
No Analytical Methods Used	Choose an item.	Click here to enter text.	Click here to enter text.



**ARIZONA**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
 AZPDES Individual Permits Unit  
 1110 W Washington Street  
 Phoenix, Arizona 85007  
 (602) 771-4689 (voicemail) (602) 771-4505 (fax)  
 Email to: biosolids@azdeq.gov

**5. Land Applicators: Specific information to be completed by Land Applicators Only**

Application Site / Location	Field ID	Amount of Biosolids Applied (in dry tons)	Preparer	Pathogen Treatment Method	Vector Attraction Reduction Method	Loading Rate	Nitrogen Conc. (Organic + ammonium)	Type of Crop Grown After Application	Agronomic Rate of Crop Grown	The <u>Cumulative</u> Concentration of Pollutants (kilograms per hectare) in Soil				
<i>Example: ABC Farms, Aztec AZ</i>	<i>1A</i>	<i>350 tons</i>	<i>Aztec WWTP</i>	<i>Class B Alt. 2</i>	<i>Option 9</i>	<i>Tons or Kg/acre</i>		<i>Corn</i>						
1. Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	As=Click here to enter text.	Cd=Click here to enter text.	Cr=Click here to enter text.	Cu=Click here to enter text.	Pb=Click here to enter text.
										Hg=Click here to enter text.	Mo=Click here to enter text.	Ni=Click here to enter text.	Se=Click here to enter text.	Zn=Click here to enter text.
2. Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	As=Click here to enter text.	Cd=Click here to enter text.	Cr=Click here to enter text.	Cu=Click here to enter text.	Pb=Click here to enter text.
										Hg=Click here to enter text.	Mo=Click here to enter text.	Ni=Click here to enter text.	Se=Click here to enter text.	Zn=Click here to enter text.
	Click here									As=Click here to	Cd=Click here to	Cr=Click here to	Cu=Click here to	Pb=Click here to



## BIOSOLIDS SEWAGE SLUDGE ANNUAL REPORT

3. Click here to enter text.	to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	enter text.	enter text.	enter text.	enter text.	enter text.
											Hg=Click here to enter text.	Mo=Click here to enter text.	Ni=Click here to enter text.	Se=Click here to enter text.	Zn=Click here to enter text.
4. Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	As=Click here to enter text.	Cd=Click here to enter text.	Cr=Click here to enter text.	Cu=Click here to enter text.	Pb=Click here to enter text.
											Hg=Click here to enter text.	Mo=Click here to enter text.	Ni=Click here to enter text.	Se=Click here to enter text.	Zn=Click here to enter text.
5. Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	As=Click here to enter text.	Cd=Click here to enter text.	Cr=Click here to enter text.	Cu=Click here to enter text.	Pb=Click here to enter text.
											Hg=Click here to enter text.	Mo=Click here to enter text.	Ni=Click here to enter text.	Se=Click here to enter text.	Zn=

## **APPENDIX F**

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**Biosolids Program History**

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**The history of OCSD's Biosolids Program is important to understand as we plan for the future. In order to maintain the integrity of this information for future generations, the historical information is maintained in this appendix.**

### **Program History**

- In 1971, OCSD entered into a long-term contract with Goldenwest Fertilizer Co., Inc., a local fertilizer manufacturer, who hauled and composted the sludge off site. OCSD maintained contracts with Goldenwest Fertilizer Co. for several years until the firm lost their land lease for their composting operation in 1979. Contracts with other composting companies were also used during the 1970s.
- In 1978, after notification that their contract with Goldenwest Fertilizer Co. would be ending in 1979, OCSD presented a proposal to the County of Orange to co-dispose sludge with municipal solid waste at Orange County landfills. Following approval by Orange County and the California Regional Water Quality Control Board, Santa Ana Region (CRWQCB): OCSD established an air drying/composting site at Coyote Canyon landfill. OCSD used this site as a sludge-drying operation until 1981 when it was converted to an open-air composting facility. This was done to reduce odors and dry the sludge to the required 50% solids content prior to being blended with municipal solid waste.
- The 50% solids requirement was set by the CRWQCB, by Order No. 79-55. In December 1982, the requirements were modified by Order No. 82-299. The new order reduced the required average solids content to 22.5%. In addition to the solids content requirements, the volume of refuse to sludge incorporated into the landfill was required to be a 10:1 ratio. After the new Order was issued and the treatment plant belt press dewatering system was installed, the air drying process was no longer needed and its operation was discontinued.
- In 1974, OCSD began a cooperative regional sludge management study with the City of Los Angeles, the Los Angeles County Sanitation Districts, the Environmental Protection Agency (EPA), and the CRWQCB. By a joint powers agreement, the Regional Wastewater Solids Management Program' for the Los Angeles/Orange County Metropolitan Area (LA/OMA Project) had a separate staff and budget to develop a long-term solids reuse or disposal plan, including an implementation strategy for the Los Angeles/Orange County metropolitan areas. This extensive, six-year, \$4.0 million study, which covered all aspects of sludge processing and disposal, was completed in 1980. The conclusion was that each of the three entities would carry out its own sludge management program. For OCSD, land-based disposal and beneficial reuse were the study's preferred alternatives.

However, co-combustion and enclosed mechanical in-vessel composting alternatives at OCSD's Reclamation Plant No. 1 were added to OCSD's LA/OMA supplemental study when the recommended composting facilities were evaluated as being difficult to site.

- In 1978 and 1983, OCSD brought activated sludge facilities online at Plant No. 1 and Plant No. 2 respectively, which led to significant improvements of ocean water quality. By 1984, OCSD had replaced centrifuges that dewatered to about 20% with new belt presses at both plants. The new belt presses had to dewater to at least 22.5% in order to meet landfill requirements. As a result, waste activated secondary sludges were dewatered separately and sent to a private landfill. Clean Water Grant Funds aided in the construction of the important facilities improvements at Plant No. 2 including the activated sludge plant (\$45 million) and sludge handling/process facilities (\$30 million).
- In November 1983, OCSD's Boards of Directors submitted a new Residual, Solids Management Plan to the EPA. The plan included both short- and long-term compliance strategies. The short-term compliance plan involved the continued practice of trucking 22.5% solids to Coyote Canyon landfill for co-disposal with municipal waste until the landfill closed in March 1990. It also included hauling sludge to private landfills using OCSD's trucks or private contractors. The long-term plan included co-disposal at county landfills and off-site reuse/management by private contractors.
- In November 1984, OCSD approved an interim sludge disposal program due to the limitation of the amount of sludge this could be co-disposed at Coyote Canyon. As part of this program, an agreement was made with BKK Corporation to take the balance of the sludge to the BKK-owned and operated in West Covina (Los Angeles County). This contract expired in late 1991.
- In 1987, OCSD began a facilities master planning effort that culminated in July 1989. The 1989 30-year master plan, "2020 Vision," established 11 major objectives for maintaining our excellent record of environmental and public health protection including, "Sludge Reuse: OCSD will continue to promote multiple, beneficial reuse alternatives for sludge and strive to increase beneficial reuse from 60% to 100%. We will develop at least one in-county land disposal alternative as a backup to guarantee long-term reliability." The goals are summarized below:
  - Continue discussions with the County of Orange pertaining to landfill co-disposal options;
  - Pursue co-disposal options at out-of county landfills;
  - Continue and/or expand use of private contracts to reuse or dispose of sludge;
  - Pursue with Orange County Environmental Management Agency staff the use of sludge as the final cover for Coyote canyon's closure;

- Monitor the status of the proposed co-compost pilot project at Prima Deshecha landfill;
  - Initiate a regular status review of OCSD management program that would provide centralized information in one location; and
  - Hire a full-time sludge manager to coordinate OCSD' overall sludge reuse/disposal program (completed in August of 1989).
- The goals noted above led to a series of new recycling options starting in in 1988 using three separate contractors. Two contracts were created with compost contractors, and one was created with an agricultural land fertilization contractor. Using these three contractors, OCSD recycled about 50% of their sludge from 1988-1991.
  - 1990: About 50% of the sludge is processed into compost by L. Curti Truck & Equipment and by Recyc; Inc., or applied directly to agricultural land by Pima Gro Systems, Inc. The remaining 50% of the sludge is disposed in the BKK landfill in Los Angeles County. The dewatered sludge is hauled to the landfill and directly incorporated with municipal solid waste in conformance with operating requirements of the Regional Water Quality Control Board, Los Angeles.

Prior to March of 1990, landfill co-disposal was available at the Coyote Canyon landfill in Orange County and the BKK landfill. During this period 14% of the Districts' sludge went to Coyote Canyon and 36% went to BKK.

- On June 24, 1991 a new solids handling storage facility (truck loading) was placed in service. Plant No. 1 Belt Press Dewatering Building M was placed in service in February 1983. Belt Press Dewatering Building C was placed in service in October 1988. By 2018, the belt presses will be replaced by centrifuges, the DAFTs will be replaced by thickening centrifuges, and truck loading will be rehabilitated.
- Beginning in Beginning in November 1991, the Districts' Biosolids Management Program achieved a milestone of 100% beneficial reuse. Beneficial reuse allows the Districts to lower its management costs and eliminate the need to take up valuable landfill space. The program consisted of compost, direct land application, and a standby agreement to landfill the biosolids in the event of an emergency. Further benefits of switching to beneficial reuse was been a reduction in disposal costs. Beneficial reuse costed the Districts less than landfilling and was expected to become even more cost effective in the future as the market for compost material grows. About 73% of the biosolids are processed into compost by Pima Gro Systems, Inc. at the Riverside Recyc compost facility. The remaining 23% is applied directly to agricultural land by Ag Tech Company in Yuma, Arizona.
- During 1993-94, only one biosolids contractor was used to haul and manage the OCSD's biosolids produced by Plant No. 1. Pima Gro Systems, Inc.

hauled the biosolids to the Recyc processing site in Riverside County where it was composted. The biosolids based compost was then sold to nearby farmers as a nutrient rich soil amendment and fertilizer.

- In late 1994, the Ag Tech Company was contracted to use OCSD biosolids to enhance agricultural soils, reduce the amount of irrigation water needed, and provide a much needed source of organic humus. The biosolids were injected 6 inches to 15 inches beneath the surface (in the root zone) within hours of their arrival to permitted farm lands.
- In June 1995, Bio Gro, a division of Wheelabrator Clean Water Systems, Inc., was added as a biosolids contractor. Biosolids were recycled on agricultural land in Riverside County. Pima Gro used commercial fertilizer spreaders to distribute the biosolids prior to incorporation on agricultural land in Kern County, California.
- In March 1996, Tule Ranch was added as a biosolids contractor. Pima Gro was still recycling biosolids in Kern County, California, and Bio Gro was recycling biosolids in Riverside. No composting was reported.
- In 1997, continued 100% beneficial reuse with all biosolids recycled via direct land application in Kern, Riverside, and San Diego counties.

The Districts also entered into a one-year pilot project contract with Waste Conversion Industries, Inc. (WCI) to chemically treat and heat dry the Districts' biosolids at their Corona, California site. Due to mechanical difficulties, WCI was not able to process any of the Districts' biosolids.

During fiscal year 1996-97, the Districts' biosolids management cost was reduced by approximately \$1 million from that of fiscal year 1995-96. New and amended biosolids management contracts as well increased efficiency in the Districts' belt operation contributed to the decrease in biosolids management costs. Upon the expiration of the Ag Tech contract and the termination of the Hondo contract, the Districts maintained only two active biosolids management contractors, Bio Gro and Pima Gro. In August 1996, having only two active biosolids management contractors, and receiving numerous unsolicited lower cost biosolids management proposals Districts' staff prepared and issued a Request for Proposals for Biosolids Management (RFP). The RFP was necessary in order to increase biosolids management diversity and reliability while decreasing costs. Eight biosolids management firms submitted proposals. Bio Gro proposed to maintain their existing contract, but unilaterally offered a pricing amendment, while Pima Gro submitted a new proposal that provided the Districts with the option of accepting the entire proposal or modify the pricing structure of the existing contract.

After extensive review and ranking of the proposals by staff, new contracts were offered to Tule Ranch and Waste Conversion Industries, Inc., while Bio Gro's and Pima Gro's existing contracts were amended to reflect their new price schedules.

- In 1998 through 2000, continued 100% beneficial reuse with all biosolids recycled via direct land application in Kern, Kings, San Diego and Riverside counties. Pima Gro, Bio Gro, and Tule Ranch were OCSD's biosolids contractors. Small amounts of biosolids were composted at Pimo Gro's Riverside composting facility, Bio Gro's Arizona Soils facility in La Paz County, Arizona, and by Pima Gro for a UCR Extension research project in Imperial County.
- In June 2000, OCSD purchased 1,800 acres of Tule Ranch's farm in Kings County, California, to provide a reliable, long-term site for treatment and land application of biosolids. Tule Ranch contracted to manage OCSD's biosolids its farm at a reduced cost per ton.
- In 2001, Synagro purchased Pima Gro and Bio Gro, and OCSD added Yakima as a contractor. One-hundred percent beneficial reuse via direct land application in Kern, Kings, San Diego, and Riverside. Synagro also recycled biosolids to tribal land farms in San Bernardino County, California. Small amounts were composted in Riverside and tribal land.

In 2001, Riverside County issued an ordinance that banned the use of Class B biosolids for land application but allowed limited use of Class A biosolids. In 2003, the restrictions were expanded to address nuisance problems related to Class A biosolids. Kern County's Class A requirement (Class B ban) went into effect in early 2002, and King's County followed in 2003 with only composted biosolids allowed after 2006.

- In 2002, as staff began work on a large-scale long-range biosolids management plan and contentious local county Class B land application bans were on the rise, OCSD began increasing diversification away from land application and added more composting in Riverside County. Biosolids were also recycled on Fort Mohave tribal land in Mohave County, Arizona and Clark County, Nevada.
- October 28, 2002 Yakima Co. began operations at their new biosolids management site in La Paz County, Arizona. The operation involved biosolids air drying to achieve material greater than 50% total solids and use as alternative daily cover at La Paz Landfill. A total of 4,628.09 wet tons (881.7 dry metric tons) of biosolids were managed through this process through 2002. This amount represents about 2% of the total District's biosolids material beneficially reused in land application operations during 2002. The District discontinued its use of the Yakima Co. for management of its biosolids in early January 2003. The facility was later shut-down by the County of La



Paz and a lawsuit was won against the County by Yakima for \$9.2 million in damages.

- In 2002, OCSD's Board of Directors voted to increase the level of treatment to full-secondary treatment requirements, which produced significantly more biosolids, especially between 2002 to 2005, until the new dewatering centrifuges could be constructed and implemented at each plant (2018-2020). OCSD's focus through the 2000's was on building the water-side capital facilities to meet this increased level of service.
- In 2003, OCSD continued to encourage contractors to diversify its biosolids options, especially in Arizona and Nevada. OCSD started using Arizona Soils in La Paz County, Arizona on a regular basis. OCSD additionally piloted Tule Ranch's subcontractor, Universal, to utilize farms in Wellton and Dateland, Arizona for land application of about 6% of OCSD's biosolids. Tule Ranch's Class A lime stabilization process was started in order to continue recycling biosolids in Kern and Kings Counties. A small amount of biosolids was used in Maricopa County, Arizona.

In addition, OCSD started using Solid Solutions to recycle biosolids in Nye County, Nevada to further diversify the biosolids management program. Solid Solutions was a subcontractor to California Soils Products who had a 2002 contract with OCSD to render biosolids into a treated soil product.

By March 2004, OCSD pulled out of Nye because of a hearing with complaints from affected neighbors, local competition with dairy manure, and a letter from Nevada congressional representative, Harry Reid, whose brother was a local resident. This episode also captured the attention of the 2003-04 Orange County Grand Jury who performed an investigative study and published a report: <http://www.ocgrandjury.org/pdfs/biosolids.pdf>.

OCSD concluded its use of Solid Solutions in 2005 when it was clear that the Soil Products facility would not materialize.

- In December 2003, OCSD finalized a Long Range Biosolids Management Plan that set forth the following recommendations to ensure a sustainable biosolids management program. These recommendations were implemented over the following decade.
  - Maintain at least three different product-manufacturing options at any given time.
  - Optimize capital and operations and maintenance (O&M) costs at OCSD's treatment plants as part of implementation of the long-range plan.
  - Limit maximum participation for any market to one-half of the total biosolids production.

- Limit biosolids management contracts to a maximum of one-third of total biosolids production per merchant facility, and one-half per contractor (for contractors with multiple product manufacturing facilities).
  - For each OCSD-owned product manufacturing facility, limit the size to one-half of the total biosolids production.
  - Explore funding options for in-county facilities (private capital, OCSD capital, or both).
  - Allocate up to 10 percent of biosolids for participation in emerging markets.
  - Pursue Orange County-based product manufacturing facilities and maximize the use of horticultural products within the OCSD service area by member agencies and through developing public-private partnerships.
  - Maintain capacity and options at OCSD's Central Valley Ranch.
  - Pursue failsafe backup options (landfilling, alternative daily cover for landfills, and dedicated landfilling) to acquire a 100 percent contingency capacity.
- From **November 1991 through December 2004, OCSD achieved 100 percent beneficial reuse** of its biosolids mostly through the use of land application with some composting.
  - In 2004, OCSD started ramping up the land application in Arizona through Tule Ranch's Dateland operation, from about 10% in 2003 to 20% in 2004. OCSD also ramped up its use of compost sites in California and Arizona from about 7% in 2003 to 20% in 2004.
  - In January 2005 and 2006, OCSD sent a small fraction of its biosolids to two landfills in Arizona (Copper Mountain and South Yuma County Landfill) in order to increase the diversity of its biosolids management options, as well as address the operational needs caused by wet weather periods. The routes to these two landfills were not impacted by severe weather.
  - Starting in 2006, Synagro eliminated their last remaining OCSD land application (Maricopa County), as fuel prices hit record highs, and focused on composting services.

On December 27, 2006, Synagro's new composting facility (South Kern Compost Manufacturing Facility) came online. This was the first long-term contract to become operational as an outcome of the 2003 Long-Range Biosolids Management Plan.

- In 2007, with OCSD's contract that guaranteed at least 250 tons per day to Synagro's new facility, OCSD's biosolids allocation to compost facilities expanded to its current level of about 50% of its total biosolids production. These facilities have extensive permitting and regulatory oversight and reporting, improved public outreach with neighbors and local communities, and have more air quality and odor process controls. Today's framework is

more sophisticated than what was in place two decades ago.

Land application was also allocated about 50% of OCSD's portfolio with half of that as lime-stabilized Class A in Kern County and half as Class B in Yuma County, Arizona.

- In March 2007, OCSD stopped actively using landfills and maintained this option only as a failsafe backup. OCSD re-gained its **100 percent recycling performance from 2008 through 2012** (excluding some digester cleanings).
- In August 2007, the Orange County Water District's (OCWD) Advanced Water Purification Facility, later called the Ground Water Replenishment System (GWRS), started taking an average of 30 MGD of Plant No. 1's secondary treated water to test their facility in purifying the water to meet drinking water standards. OCWD uses microfiltration and reverse osmosis. The water is used as a barrier for salt water intrusion and to recharge groundwater basins starting in January 2008. About 100 MGD of OCSD's secondary effluent produced about 70 MGD of purified water for reuse. Secondary effluent not sent to OCSD is sent as usual to Plant No. 2 to blend with treated wastewater from Plant No. 2 prior to ocean discharge through OCSD's 120-inch, 5-mile outfall. In 2015, an additional 20 MGD of influent sewage was diverted from Plant No. 2 to Plant No. 1 to support the GWRS expansion. GWRS purifies OCSD's secondary treated water from Plant No. 1 to meet drinking water standards. OCSD provides GWRS about 120 MGD of secondary effluent to produce purified water for reuse.
- In October 2008, Synagro's Regional Compost Facility in Riverside County stopped receiving OCSD biosolids in order to prepare for the site's closure. The facility's conditional use permit was not renewed by the County of Riverside after homes were developed nearby and residents filed hundreds of odors complaints.
- In late 2008, OCSD stopped using Tule Ranch's Kern County. This change in strategy culminated when the EnerTech facility started commissioning their process and Kern County required additional costly environmental studies to continue utilizing that option. OCSD's Kings County property was sold in December 2011.
- As part of the 2003 Long Range Biosolids Management Plan implementation, OCSD issued a series of request for proposals in 2004. As a result, EnerTech Environmental, Inc. was awarded a 225-ton guaranteed-minimum contract in 2005, which was signed in May 2006. The Rialto facility was constructed and began commissioning on November 3, 2008. OCSD reallocated Tule Ranch's Kern County land application loads to EnerTech to meet contractual obligations. EnerTech's patented technology used heat and pressure to convert biosolids to a certified renewable energy pellet (E-fuel) that was burned as a replacement for coal in local cement kilns. EnerTech encountered a series of technical and permitting setbacks during the

commissioning process. During the start-up process, biosolids not processed at the Rialto facility were land-applied in Yuma County, Arizona by Terra Renewal (formerly Solid Solutions).

In November 2010, EnerTech began implementation of a Single Train Technical Plan that was anticipated to address the issues and finish the commissioning process by March 2012. After a final extension and failure to meet contractual performance requirements, OCSD terminated its contract with EnerTech effective July 2012. OCSD re-allocated the EnerTech loads to our two remaining contractors, Synagro (composting) and Tule Ranch (land application), at about 50% each.

- March 2009, OCSD began diverted settled sludge from Plant No. 1's primary clarifiers, along with about 2.5 MGD of belt press dewatering filtrate, to Plant No. 2's headworks, where they are mixed with the influent wastewater. OCSD built a new pump station at Plant No. 1, the Steve Anderson Lift Station, in order to bring more flow into Plant No. 1 to provide more flows to GWRS. However, the additional flows produced more solids than Plant No. 1 was equipped to handle during rehabilitation of its digesters and construction of its thickening and dewatering centrifuges, making the diversion of these solids to Plant No. 2 necessary. The routine diversion of primary sludge was ceased by June 2019 as part of the commissioning of the new sludge thickening and dewatering facility (P1-101) at Plant No. 1. OCSD continues to divert the cationic polymers contained in the thickening and dewatering filtrate to protect GWRS from these constituents of concern.
- In March 2010, OCSD sent a demonstration load to the City of Los Angeles Terminal Island Renewable Energy (TIRE) project via OCSD's contract with Tule Ranch. OCSD material was not compatible with their facility because the material required more screening than the City's biosolids.
- In April 2010, Tule Ranch permanently moved their land application operations from Dateland, AZ to Yuma, AZ.
- In January 2011, Tule Ranch formed an agreement with AgTech and managed OCSD biosolids at two sites (Desert Ridge and AgTech) in Yuma. The following year, Tule Ranch purchased the AgTech operations and integrated the two operations. Tule Ranch has continued land applying at both Yuma sites.
- In 2012, OCSD met the new NPDES ocean discharge permit's treatment requirements for secondary treatment standards. With full secondary treatment facilities operational, the focus is now on asset rehabilitation, including solids treatment facilities. The Capital Improvement Program Annual Report ([www.ocsd.com/CIPAnnual](http://www.ocsd.com/CIPAnnual)) summarizes the projects and their progress.

- In February and March 2012, OCSD's Plant No. 2 biosolids exceeded the Arsenic Table 3 Exceptional Quality Limit for fields 23110121, 2311013, 2311021, and 2311022, but were below Table 1 Ceiling Concentrations. OCSD's land application contractor, Tule Ranch, already reports Table 2 Cumulative Pollutant Loading Rates for all pollutants and all fields as part of their annual report to the Arizona Department of Environmental Quality.
- As directed by the Board's November 2011 Strategic Plan direction, OCSD executed an agreement with Orange County Waste and Recycling (OCWR) to manage up to 100 tons per day of OCSD's biosolids at the Prima Deshecha landfill located in the city of San Juan Capistrano, California. This alternative provides OCSD a local biosolids management option during projected peak biosolids production period until 2017.

As a result of the landfill start-up in 2013, OCSD is recycling about 94-97% of its biosolids, with the remaining biosolids going to the OCWR landfill. Landfill loads do not count towards recycling despite the indirect energy production from capturing methane onsite. OCSD sends the landfill about 1 truck per day of grit and screenings (non-recyclable material) and 3 trucks of biosolids per day (5 days per week when not impacted by rain) in order to keep some revenues and resources in-County (see also OCSD Biosolids Policy Board Resolution 13-03: [ocsd.com/policy](http://ocsd.com/policy)).

However, after residential complaints in late 2016, biosolids loads to the landfill were on hiatus until operations moved further away from the phase of the housing development that opened in Fall of 2016. With the heavy rains received December through February 2017, the landfill was operating in a different section, and OCSD remained on hiatus. In February 2017, OCSD received direction to cease disposal of biosolids to the landfill. The amount of biosolids landfilled impacted the city of Fountain Valley, which is one of OCSD member agency. The City is required by CalRecycle to divert 50% of its solids waste from the landfill. Since OCSD is located in the city of Fountain Valley (host city), the tonnage of biosolids being landfilled counted against the city's solids waste diversion goal of 50% diversion. In response, OCSD stop hauling biosolids to landfill for disposal.

- In November 2016, the Kern Measure E (2006) biosolids ban was struck down. A Tulare County Superior Court judge ruled that Kern County Measure E is invalid and unlawful. The Judge found that Measure E, the ordinance banning land application of biosolids in the unincorporated areas of the county, is preempted by state recycling laws and exceeded Kern's police powers. The judge granted a permanent injunction against enforcing Measure E. In September 2017, parties signed a settlement agreement allowing the City of Los Angeles to continue to land apply biosolids.
- In May 2017, OCSD completed a comprehensive Biosolids Master Plan ([ocsd.com/BMP](http://ocsd.com/BMP)) that is providing a long-term framework for a sustainable,

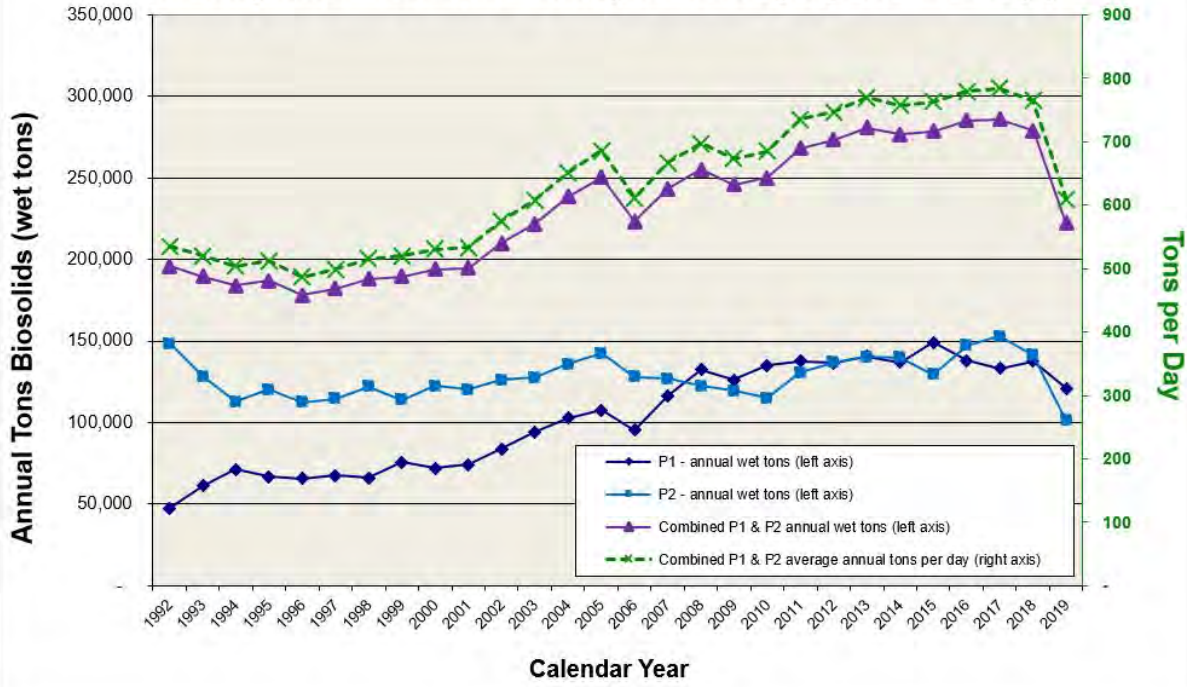
cost-effective biosolids management program. The Plan recommended building temperature-phased anaerobic digesters at Plant No. 2 to address seismic issues with existing digesters while creating an essentially pathogen-free biosolids product. In addition, OCSD will install a food waste receiving station at Plant No. 2. The food waste facility will support state and local organics recycling goals including diverting 50% of landfill-bound organic materials (carbon-based recyclables including biosolids) by 2020 and 75% by 2025. Food waste will be co-digested to create more gas and electricity, as well as a few additional biosolids trucks. The interim food waste facility is expected to be online in 2021, and the new digestion complex is expected to start-up in 2030.

The Master Plan also reviewed and updated the former program guiding principles. and formalized an updated set as the [“Ten Tenets of OCSD’s Biosolids Management Plan.”](#) See the report text for a list of the tenets and OCSD’s performance relative to them.

- In 2017, Project P1-100 was completed. This project cleaned and rehabilitated each of the Plant No. 1 digesters. Routine maintenance is now targeting to cleaning digesters every five years. To that end, OCSD issued a new dry-ton based bid (previous bids based on gallons) that was awarded to Synagro to clean digesters at both plants. The first 5-year cleaning was performed on Digester 7 in 2017.
- In 2017, OCSD established a biosolids compost demonstration planter at Plant No. 2 as part of an existing landscaping project. The planter uses the same native plants as nearby control planters that didn’t use biosolids. Five and ten percent biosolids compost were amended into the soil. The landscape architects and soil laboratories did not want to use biosolids compost because of the salinity analyses, so OCSD intends this demonstration will show the assimilative capacity of biosolids that is not reflected in the laboratory analysis. If successful, this demonstration will also show that the plants survive and thrive when the laboratory analyses counter-indicate biosolids because the analyses do not necessarily directly correlate to the actual field performance, and because biosolids is a more complicated blend of compounds that allow assimilative bonds that have remediating effects.
- Upon ceasing the use of the local landfill in late 2016, OCSD has subsequently achieved **100% beneficial recycling of all biosolids**, including digester cleanings.
- Between 2017 and 2019, OCSD’s cleaned record twenty (20) digesters using maintenance contracts. The contract is expected to be renewed and clean more digesters in 2019-2020:
  - Plant No. 1 – Digesters 5, 6, 7, 8, (partially 9).

- Plant No. 2 – Digesters C, E, F, G, H, J, I, L, M, N, O, P, R, S, and T.
- In 2019, OCSD finished commissioning new dewatering centrifuge facilities that replaced the dewatering belt filter presses at Plant No. 1 and at Plant No. 2. The total percent solids of dewatered biosolids increased significantly in 2019, resulting in approximately 25% less biosolids (wet weight) and trucks to manage (Figure 1 below). The Plant No. 1 project also installed pre-digestion centrifuges to thicken primary and secondary solids, so the existing dissolved air floatation thickening units are no longer in use. Additionally, Plant No. 1 truck loading facility was rehabilitated. With the commissioning of the centrifuges, the biosolids averaged about 24% total solids at Plant No. 1 and 25% total solids at Plant No. 2. More detailed data, including monthly averages, annual totals and analytical results, can be viewed in Figure 1 below, as well as in the Report body and Appendices A, B, C, and D.
- The Irvine Ranch Water District (IRWD) discharges its untreated solids (sludge) to OCSD. IRWD is currently commissioning its new solids treatment facility and plans to cease sending their solids to OCSD when the new facilities are ready to process its sludge, now estimated by 2021. This cessation is anticipated to reduce Plant No. 1's influent solids by 10 to 15 percent.
- As part of the implementation of the 2017 Biosolids Master Plan and as included in the General Manager's Work Plan goal for Fiscal Year 2017-18, OCSD has completed preliminary design of an interim food waste receiving facility. This project will be designed to receive approximately 150 wet tons of preprocessed food waste to be co-digested in OCSD's anaerobic digesters located at Plant No. 2. The added organic feedstock will account for a 10% increase of biogas production that will be used to generate electricity.
- OCSD's Board of Directors approved the 2019 Strategic Plan that includes Biosolids Management Policy initiatives to educate and advocate with the local, state, and federal agencies to assure biosolids will continue to be safely and legally used as a soil amendment and to monitor and research constituents of emerging concern such as PFAS and microplastics that may impact biosolids. In addition, OCSD will stay abreast of new technology options to convert organics to energy and other regional biosolids recycling and renewable energy partnerships within Southern California.

**Figure 1: Biosolids Production History**  
 January 1992 – December 2019 (not including digester cleanings)





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