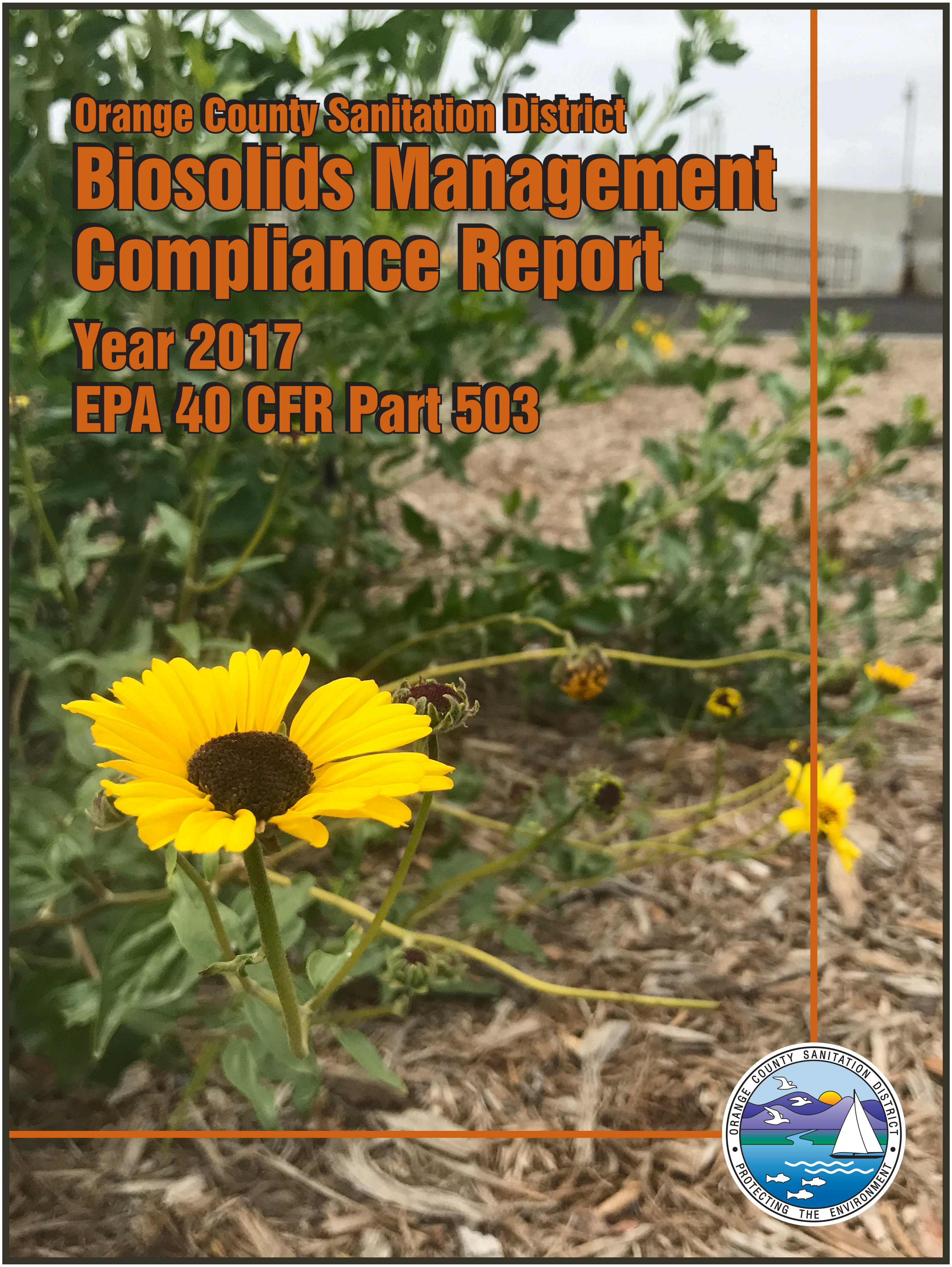
Orange County Sanitation District

Biosolids Management Compliance Report

Year 2017

EPA 40 CFR Part 503



OCSD Composted Biosolids Demonstration Planter, Plant No. 2 in Huntington Beach

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Serving:

Anaheim

Brea

Buena Park

Cypress

Fountain Valley

Fullerton

Garden Grove

Huntington Beach

Irvine

La Habra

La Palma

Los Alamitos

Newport Beach

Orange

Placentia

Santa Ana

Seal Beach

Stanton

Tustin

Villa Park

County of Orange

Costa Mesa Sanitary District

Midway City Sanitary District

Irvine Ranch Water District

Yorba Linda Water District

Orange County Sanitation District

10844 Ellis Avenue, Fountain Valley, CA 92708
714.962.2411 • www.ocsd.com

February 7, 2018

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 2017.

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

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Serving:
Anaheim
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Midway City Sanitary District
Irvine Ranch Water District
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February 7, 2018

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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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 2017.

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

2017 BIOSOLIDS MANAGEMENT COMPLIANCE REPORT

2017 BIOSOLIDS MANAGEMENT COMPLIANCE REPORT

Introduction

The Orange County Sanitation District's (OCSD) Biosolids Program is responsible for the treatment and management of OCSD's biosolids. OCSD recognizes the importance of building strong relationships throughout its biosolids value chain, including with interested parties and regulators. OCSD practices continuous improvement in all areas of its Biosolids Program through our internal biosolids management system. The following sections summarize OCSD's activities and performance for the compliance-reporting period of January 1 to December 31, 2017.

Organization and Function

OCSD is a public agency that provides wastewater collection, treatment, and disposal services for approximately 2.5 million people in central and northwest Orange County. OCSD is a special district that is governed by a Board of Directors consisting of 25 board members appointed from 20 cities, two sanitary districts, two water districts and one representative from the Orange County Board of Supervisors. OCSD has two operating facilities (Fountain Valley and Huntington Beach) that treat wastewater from residential, commercial and industrial sources.

Through this last calendar year while operating under National Pollutant Discharge Elimination System (NPDES) Permit No. CA0110604:

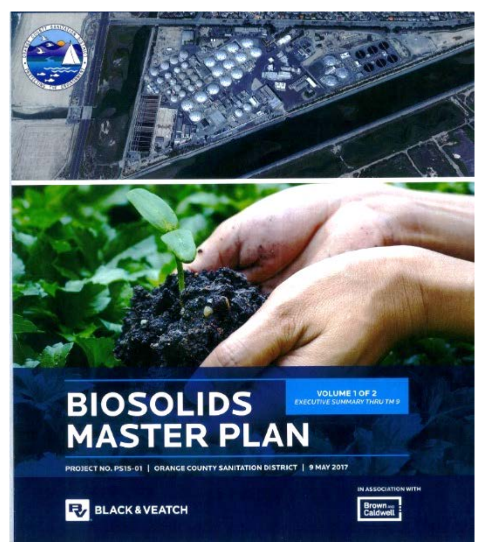
- OCSD treated an average daily sewage influent flow of **190 million gallons per day (MGD)**, up slightly from last year.
- OCSD produced approximately **287,697 wet tons of biosolids (49,119 dry metric tons)**, which equates to an average of **788 wet tons per day of biosolids**, including digester cleanings managed as biosolids (784 tons per day excluding digester cleanings).

2017 Accomplishments

This year's accomplishments of the Biosolids Program include:

- Recycled of 100% of OCSD's biosolids.

- OCSD completed a comprehensive Biosolids Master Plan (ocsd.com/BMP) that is providing a long-term framework for a sustainable, cost-effective biosolids management program. The Plan recommended building two-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 plans to install a food waste receiving station at Plant No. 2. The food waste facility will support state and local organics recycling goals including the Year 2020 requirement to divert all organic (recyclable material) from landfills. Food waste will be co-digested to create more biogas 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 page 8 for a list of the tenets and OCSD’s performance relative to them.

- Project P1-100 was completed. This project cleaned and rehabilitated each of the Plant No. 1 digesters. Now maintenance has a target of follow-up cleaning every five years. The first follow-up cleaning was performed on Digester 7 in 2017.

- OCSD issued a new dry-ton based bid that was awarded to Synagro to clean digesters at both plants.

- Ongoing quarterly research meetings with sister agencies to evaluate new technologies that could be considered by OCSD. OCSD has piloted several of the technologies featured at these quarterly presentations.

- OCSD established a biosolids compost demonstration planter at Plant No. 2 as part of an existing landscaping project (cover photo). 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.

Treatment Plants and Program Updates

Reclamation Plant No. 1, located in the city of Fountain Valley, treated an average of 113 MGD of wastewater. Treatment Plant No. 2, located in the City of Huntington Beach, treated an average of 77 MGD of wastewater during the reporting period.

Last year, OCSD provided an average of 124 MGD to the Ground Water Replenishment System (GWRS), which purifies OCSD's secondary treated water from Plant No. 1 to meet drinking water standards for reuse. GWRS is a joint project of OCSD and the Orange County Water District (OCWD).

Plant No. 1 diverted approximately 50,000 cubic feet or 0.37 MGD of primary sludge from Plant No. 1 to Plant No. 2 via the inter-plant sludge line. The diversion is anticipated to end in 2019 when Plant No. 1's solids-thickening centrifuges come online.

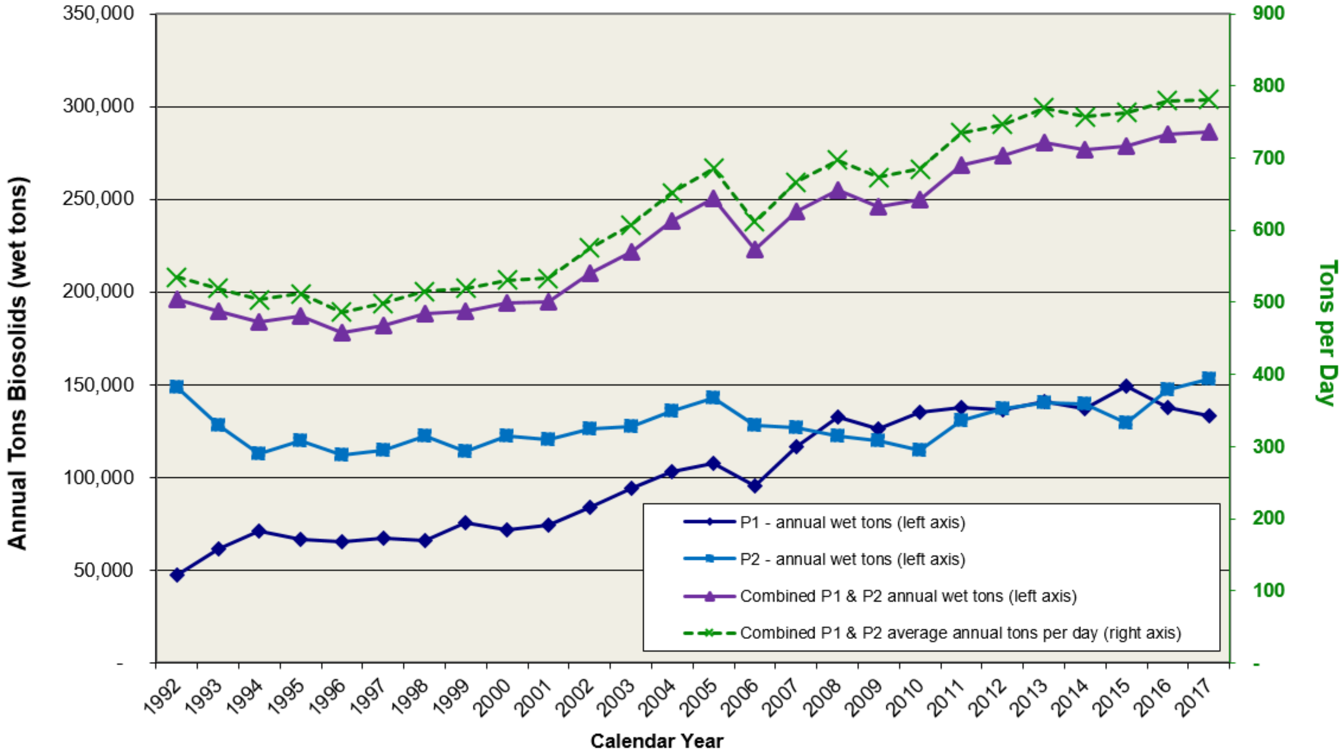
OCSD's plants both produce anaerobically digested biosolids to provide compliance with the "Class B Pathogen Reduction" and "Vector Attraction Reduction" definition for "Class B" biosolids as defined in 40 CFR Part 503.32(b)(3) (PSRP 3) and 503.33(b)(1), respectively. In addition, Tule Ranch/AgTech's standard operating procedure includes incorporation within 6 hours which meets 40 CFR Part 503.33(b)(10) requirement if OCSD's treatment plants fail to meet the Vector Attraction Reduction standard.

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% (typically about 60%). The resulting biosolids average about 18% total solids at Plant No. 1 and 20% total solids at Plant No. 1. More detailed data, including monthly averages and annual totals, can be viewed in Figure 1 and Table 2 below, as well as in appendices A and D.

Plant No. 2's Digester E cleaning was completed at the beginning of 2017, and Plant No. 1's Digester 7 was cleaned in the Fall 2017.

Figure 1: Biosolids Production History

January 1992 – December 2017 (not including digester cleanings)



The Irvine Ranch Water District (IRWD) discharges its untreated solids (sludge) to OCSD. IRWD is currently constructing their own solids treatment facility and plans to cease sending their solids to OCSD when IRWD completes start-up of new solids handling facilities, now estimated for years 2020-2021. This cessation is anticipated to reduce Plant No. 1's influent solids by ten to fifteen percent.

OCSD is constructing new facilities that will replace the belt filter presses with new dewatering centrifuge facilities. The total percent solids of digested biosolids is anticipated to increase from 18% (Plant No. 1) and 20% (Plant No. 2) to 28-30%, resulting in approximately one-third fewer wet-weight solids and biosolids trucks to manage. This project is also installing pre-digestion thickening centrifuges to replace the dissolved air floatation thickening at Plant No. 1 and rehabilitating the Plant No. 1 truck loading facility. Projects at both plants are anticipated to be complete in 2019.

Biosolids Management

Biosolids produced at OCSD's two treatment facilities were managed by the contractors listed below in Table 1.

Table 1- Biosolids Management Contractors	
Tule Ranch / Ag-Tech 4324 E. Ashlan Ave. Fresno, CA 93726 Contact: Shaen Magan Phone: (559) 970-9432 Email: kurt@westexp.com	**Synagro - Nursery Products** PO Box 1439 Helendale, CA 92342 Contact: Fred Brutsche Phone: (661) 770-6861 Email: fbrutsche@SYNAGRO.com
Liberty Compost 12421 Holloway Rd. Lost Hills, CA 93249 Contact: Patrick McCarthy Phone: (661) 797-2914 Email: patrickmccarthy@mccarthyfarms.com	**Synagro – Arizona Soils** 5615 S. 91st Avenue Tolleson, AZ 85353 Contact: Craig Geyer Phone: (623) 936-6328 Email: CGeyer@SYNAGRO.com
Inland Empire Regional Composting Authority 12645 6th Street Rancho Cucamonga, CA 91739 Contact: Jeff Ziegenbein Phone: (909) 993-1981 Email: jziegenbein@ieua.org	

These biosolids management contractors provide OCSD with diversification and reliability and are therefore important partners in OCSD's biosolids management program. Contractors submit their annual compliance reports directly to EPA, as applicable and in accordance with OCSD's NPDES permit requirements. For this reporting period, OCSD's biosolids were beneficially reused in the areas following 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)	96,007	507	96,514	34%
Synagro - Nusery Products CA - (compost) (dry metric tons)	14,803	92	14,895	
Liberty Compost CA (wet tons)	34,867	7,317	42,183	15%
Liberty Compost CA (dry metric tons)	5,376	1,327	6,703	
Inland Empire Regional Composting (wet tons)	0	15,081	15,081	5%
Inland Empire Regional Composting (dry metric tons)	0	2,736	2,736	
Tule Ranch AZ (land application) (wet tons)	2,357	129,932	132,288	46%
Tule Ranch AZ (land application) (dry metric tons)	363	23,570	23,933	
Synagro AZ Soils (compost) (wet tons) (digester cleanings only)	914	716	1,630	0.6%
Synagro, AZ Soils (compost) (dry metric tons) (digester cleanings only)	475	377	852	
Total Wet Tons	**134,144**	**153,552**	**287,697**	**100%**
Total Dry Metric Tons	**21,018***	**28,101***	**49,119**	

* Note that there is a one ton difference in the value reported on EPA electronic report versus OCSD's annual report due to rounding.

Summary of Pollutants

Since 1976, OCSD's Pretreatment Program has been effective in lowering the average mass of metals discharged to the marine environment by 98% 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 of OCSD's Pretreatment Program Annual Report (ocsd.com/SCAnnual, Chapter 9).

OCSD's monthly Biosolids Monthly Compliance Reports 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 and govern whether biosolids are safe for recycling.

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

Generally speaking, OCSD's biosolids are several orders of magnitude below state and federal hazardous waste limits. However, OCSD performs semi-annual testing of an extensive list of organic and inorganic compounds to verify the continued non-hazardousness of our biosolids.

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

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

- OCSD's biosolids are not ignitable, corrosive, reactive, nor toxic in accordance with the federal regulatory definitions in 40 CFR Part 261.
- OCSD's biosolids are tested at twice annually for the 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.

Biosolids Management System

OCSD continues to utilize our biosolids management system 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.

- Monthly compliance reports and data are posted online (ocsd.com/nani).
- One interested party newsletter was emailed and posted on OCSD's website (www.ocsd.com/biosolids).
- OCSD shared timely updates including the final publication of our Biosolids Master Plan, annual compliance report, and change of contractors and facilities.

Contractor Oversight Program

OCSD has continued our strong contractor oversight program, including:

- Addressing 9 contractor issues with one to be resolved in early 2018
- Performing 8 contractor site inspections
- 61 hauler inspections
- Two contractor accidents occurred in 2017 in which several tons of biosolids were released and recovered. The releases were reported to Regional Water Control Board having jurisdiction in the area.

Biosolids Management System Evaluation

OCSD staff completed an almost two-year process of reviewing, evaluating, and streamlining various parts of its management system after "graduating" from the National Biosolids Partnership in 2015. As a result of this process, almost all of the day-to-day processes were retained, with most of the streamlining occurring around tasks where OCSD saw diminishing return and value such as management system audits, meetings with management that were focused on the system, and the annual brochure. OCSD is replacing management system audits with compliance audits.

Goals and Targets

OCSD's November 2013 Strategic Plan contained numerous agency-wide goals and levels of service targets for 2014-2019. The Plan was updated in December 2015 and December 2017 to provided progress to date, including the completion of seven of the eight strategic goals. The "Future Biosolids Management Options" goal was completed in 2017 as part of OCSD's Biosolids Master Plan. See www.ocsd.com/5yearstrategicplan for more information.

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), and OCSD's performance relative to these commitments are reported below.

Table 3 – Policy Performance

Policy Commitment	2017 Performance
1. Commit to sustainable biosolids program. Support the recycling of biosolids.	OCSD has demonstrated effective pretreatment, water and solids treatment operations, compliance, capital improvements, technology research and planning, and biosolids contractor oversight programs. See this year's accomplishments at the beginning of this report.
2. Strive to balance financial, environmental, and societal considerations when making biosolids decisions.	On a day-to-day basis, OCSD is weighing these considerations and looking out 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.
3. Utilize a biosolids management system to maintain a sustainable and publicly supported biosolids program.	OCSD continues to maintain our biosolids management system as outlined in this section.
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.	See Table 2 for breakdown of our active biosolids management options. See Ten Tenets reporting table below. OCSD maintained more than 10 times (1000%) our daily biosolids production in failsafe facility capacity. OCSD also maintained about 25% extra hauling capacity.
5. Research and implement ways to reduce the volume of biosolids at the	OCSD's Research group actively seeks opportunities for process area improvements, including solids.

treatment plants to minimize the need for offsite management.	OCSD is continuing to monitor the Supercritical Water Oxidation technology (www.scfi.eu) and the progress towards a feasible pilot plant. As mentioned in the "Treatment Plants and Program Updates" section above, OCSD's production of biosolids is anticipated to drop by about one-third once the dewatering centrifuges come online in 2019.
6. Support continuing research of biosolids benefits and potential safety concerns.	OCSD continued our support of the Northwest Biosolids' library (www.nwbiosolids.org). The library contains references to over 2,600 biosolids-related research articles references. Northwest Biosolids sends a monthly summary of research to its members, so we can more easily digest the scientific information and better communicate with 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 public-friendly risk brochure explaining 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).
7. Demonstrate the benefits of biosolids compost by using it at the District's facilities.	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. See the first section for pictures of our new demonstration planter.

Planning: Ten Tenets of OCSD's Biosolids Management Plan

Read more on OCSD's Ten Tenets and the Biosolids Master Plan at ocsd.com/bmp.

Table 4 – Ten Tenets of Biosolids Management Performance	
Policy Commitment	**2017 Performance**
1. Allocate up to 50 percent of biosolids per biosolids contractor.	Each contractor received less than 50% 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 ocsd.com/map.
2. Allocate up to 50 percent of biosolids to each geographic end use market.	OCSD's biosolids (54%) were are turned into compost at three regional facilities. Combined, these facilities' distributed OCSD's biosolids in the following geographic markets (54% is subdivided into counties): • 31% to Kern County, • 10% to Riverside County • 5% San Bernardino County, • 4% to Tulare, • 2% to Los Angeles County, and • Less than 1% to Orange County, Ventura County, San Diego County, and Nevada. OCSD's biosolids (46%) were used to raise feed crops and seed crops, producing 3,714 tons of crops for local Arizona farmers.

Table 4 – Ten Tenets of Biosolids Management Performance	
Policy Commitment	**2017 Performance**
3. Maintain at least three (3) different biosolids management facilities at any time.	OCSD maintained four (4) 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 ocsd.com/map.
4. Maintain at least two (2) different biosolids management practices at any time.	OCSD maintained two (2) 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 ocsd.com/map.
5. Maintain at least two (2) different hauling companies within the biosolids management portfolio.	OCSD and its biosolids management contractors utilized three (3) different hauling companies (GIC, Tule Ranch/Western Express, and Denali).
6. Maintain at least 200 percent contingency capacity at end use sites.	OCSD maintained an average of about 1200% contingency capacity.
7. Maintain 20 percent fail-safe hauling capacity.	OCSD maintained an average of 44% fail-safe hauling capacity.
8. Track and encourage development of emerging markets and/or end uses for biosolids, especially for local end use options.	OCSD entered discussions with Anaergia, who is planning to redevelop a Rialto facility to receive food waste and biosolids to produce electricity and biochar. The facility is expected to come online in 2020. In addition, OCSD rejoined the Association of Compost Producers (ACP), which is the local chapter for the US Composting Council. ACP is dedicated to increasing the quality, value and amount of compost being produced and used in California. ACP members work and invest together to increase compost markets and improve compost product and manufacturing standards. The association provides education and communication on compost benefits and proper use through support of scientific research, and legislation, aligned with developing and expanding quality compost markets.
9. Allocate up to 10 percent of total biosolids production for participation in emerging markets, including participation in pilot or demonstration projects.	No tonnage was allocated to emerging markets or pilots this year. Several future opportunities are in progress for potential future allocation of OCSD's biosolids.
10. Explore partnerships with area soil blenders to	OCSD is closely following the work being done by San Francisco Public Utilities Commission to research and develop

Table 4 – Ten Tenets of Biosolids Management Performance	
Policy Commitment	**2017 Performance**
allow incorporation of OCSD's Class A product into local markets.	their temperature-phase anaerobically digested biosolids soil blend product recipe and roll-out the product to local markets. OCSD's efforts will follow suit at the appropriate time since there are about twelve years until the OCSD facilities are commissioned.

APPENDIX A

Table 1: OCSD Biosolids Wet and Dry Tonnage Distribution for 2017, Plant No. 1
Table 2: OCSD Biosolids Wet and Dry Tonnage Distribution for 2017, Plant No. 2
Biosolids Monthly Compliance Report, January – December 2017

Table 1 - OCSD Biosolids Wet and Dry Tonnage Distribution for 2017

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 (%)	17	19	19	18	18	17	18	18	19	19	19	17	**18**	
Quantity Generated													**Total**	
	Jan	**Feb**	**Mar**	**April**	**May**	**June**	**July**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**		
Synagro - Nusery Products CA - compost (wet tons)	6,533	6,874	8,033	8,025	8,130	8,745	9,265	8,526	7,597	7,744	8,168	8,368	**96,007**	
Synagro - Nusery Products CA - compost (dry metric tons)	1,007	1,060	1,239	1,237	1,254	1,348	1,429	1,315	1,171	1,194	1,259	1,290	**14,803**	**Wet Tons**
Tule Ranch AZ - land application (wet tons)	25	0	0	0	0	122	276	469	988	298	0	179	**2,357**	**134,144**
Tule Ranch AZ - land application (dry metric tons)	4	0	0	0	0	19	43	72	152	46	0	28	**363**	
Liberty Compost CA (wet tons)	4,029	3,100	1,866	1,431	954	2,141	2,698	3,081	3,554	3,861	4,089	4,063	**34,867**	
Liberty Compost CA (dry metric tons)	621	478	288	221	147	330	416	475	548	595	631	626	**5,376**	
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**	
Total Wet Tons	**10,587**	**9,974**	**9,899**	**9,456**	**9,084**	**11,007**	**12,240**	**12,076**	**12,139**	**11,903**	**12,257**	**12,610**	133,230	**Dry Tons**
Total Dry Metric Tons	**1,632**	**1,538**	**1,526**	**1,458**	**1,401**	**1,697**	**1,887**	**1,862**	**1,872**	**1,835**	**1,890**	**1,944**	20,543	**21,018**
Digester Cleanings													**Total**	
										Dig 7	**Dig 7**			
Digester Cleaning Total Solids (%) (average)										30	58			
Synagro AZ Soils (compost) (wet tons) (digester cleanings only)	0	0	0	0	0	0	0	0	0	21	893	0	**914**	
Synagro, AZ Soils (compost) (dry metric tons) (digester cleanings only)	0	0	0	0	0	0	0	0	0	6	470	0	**475**	
Total Wet Tons (Biosolids plus Digester Cleanings)	**10,587**	**9,974**	**9,899**	**9,456**	**9,084**	**11,007**	**12,240**	**12,076**	**12,139**	**11,924**	**13,150**	**12,610**	**134,144**	
Total Dry Metric Tons (Biosolids plus Digester Cleanings)	**1,632**	**1,538**	**1,526**	**1,458**	**1,401**	**1,697**	**1,887**	**1,862**	**1,872**	**1,841**	**2,360**	**1,944**	**21,018**	

Table 2 - OCSD Biosolids Wet and Dry Tonnage Distribution for 2017

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 (%)	20	21	20	20	20	20	21	20	20	21	21	21	**20**	
Quantity Generated													**Total**	
	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec		
Synagro - Nusery Products CA - compost (wet tons)	50	0	101	126	0	0	0	25	51	153	0	0	**507**	
Synagro - Nusery Products CA - compost (dry metric tons)	9	0	18	23	0	0	0	5	9	28	0	0	**92**	**Wet Tons**
Tule Ranch AZ - land application (wet tons)	12,040	11,946	12,672	11,640	12,041	11,417	10,997	10,973	9,699	9,123	8,731	8,652	**129,932**	**153,552**
Tule Ranch AZ - land application (dry metric tons)	2,184	2,167	2,299	2,111	2,184	2,071	1,995	1,990	1,759	1,655	1,584	1,569	**23,570**	
Liberty Compost CA (wet tons)	75	808	1,239	1,789	1,790	883	177	304	0	127	0	125	**7,317**	
Liberty Compost CA (dry metric tons)	14	147	225	325	325	160	32	55	0	23	0	23	**1,327**	
Inland Empire Regional Composting (wet tons)	1,036	980	1,129	988	1,135	1,095	1,049	1,544	1,545	1,646	1,539	1,394	**15,081**	
Inland Empire Regional Composting (dry metric tons)	188	178	205	179	206	199	190	280	280	299	279	253	**2,736**	
Total Wet Tons	**13,202**	**13,734**	**15,141**	**14,543**	**14,967**	**13,395**	**12,222**	**12,846**	**11,295**	**11,049**	**10,270**	**10,172**	**152,836**	**Dry Tons**
Total Dry Metric Tons	**2,395**	**2,491**	**2,747**	**2,638**	**2,715**	**2,430**	**2,217**	**2,330**	**2,049**	**2,004**	**1,863**	**1,845**	**27,725**	**28,101**
Digester Cleanings													**Total**	
	Dig E													
Digester Cleaning Total Solids (%) (average)	58													
Synagro AZ Soils (compost) (wet tons) (digester cleanings only)	716	0	0	0	0	0	0	0	0	0	0	0	**716**	
Synagro, AZ Soils (compost) (dry metric tons) (digester cleanings only)	377	0	0	0	0	0	0	0	0	0	0	0	**377**	
Total Wet Tons (Biosolids plus Digester Cleanings)	**13,918**	**13,734**	**15,141**	**14,543**	**14,967**	**13,395**	**12,222**	**12,846**	**11,295**	**11,049**	**10,270**	**10,172**	**153,552**	
Total Dry Metric Tons (Biosolids plus Digester Cleanings)	**2,771**	**2,491**	**2,747**	**2,638**	**2,715**	**2,430**	**2,217**	**2,330**	**2,049**	**2,004**	**1,863**	**1,845**	**28,101**	

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, 2017

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): 01/04/17, 01/11/17

	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)	pH	Total Solids (%)	VSR (%)
Plant 1 Max/Min*	1.1	10	4.2	37	440	10 DNQ	14	28	4.9	670	5,500	51,000	8.1	17	57
Plant 1 Avg	0.99	9.7	4.0	36	420	9.2 DNQ	14	28	4.7	640	5,500	49,000		17	
Plant 2 Max/Min*	1.0	9.1	6.6	39	460	12	14	26	4.5	760	4,900	46,000	7.9	20	61
Plant 2 Avg	0.76	8.7	6.2	39	450	12	14	25	3.1 DNQ	740	4,800	44,000		20	
Table 1 (Max/Min)*	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	6.5	15	38
Table 3 (Avg)	17	41	39	N/A	1500	300	N/A	420	100	2800	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
Minimum Mean Cell Residence Time (Min 15 days)*	18	18	17	18	18	18	Out of Service	Out of Service	Out of Service	18	18
Minimum Temperature (Min 95 °F)	99	100	100	100	100	99	Out of Service	Out of Service	Out of Service	99	99

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
Minimum Mean Cell Residence Time (Min 15 days)**	19	20	19	Out of Service	19	19	Out of Service	19	20	20	Out of Service	20	19	19	20	19	19	20
Minimum Temperature (Min 95 °F)	97	97	98	Out of Service	97	98	Out of Service	100	101	99	Out of Service	98	97	98	98	98	99	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: January 1- 31, 2017

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.*

X

James Spears jspears@ocsd.com
Operations Manager (714)593-7081
Signed by: Spears, Jim

X

Ronald Coss rcoss@ocsd.com
Lab, Mon. & Compliance Mgr (714)593-7508
Signed by: Coss, Ronald

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, 2017

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): 02/01/17 (Plant 1), 02/02/17 (Plant 2), 02/08/17 (Plant 1 & Plant 2)

	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)	pH	Total Solids (%)	VSR (%)
Plant 1 Avg	1.2	12	5.5	37	440	13	16	35	5.6 DNQ	650	5,200	51,000		19	
Plant 1 Max/Min*	1.3	16	6.0	42	490	14	18	41	8.1	730	5,200	53,000	8.1	18	52
Plant 2 Max/Min*	0.76	18	6.1	50	500	16	17	32	4.9	800	4,900	47,000	8.2	20	60
Plant 2 Avg	0.72	13	5.8	43	460	15	15	28	3.9 DNQ	720	4,700	43,000		21	
Table 1 (Max/Min)*	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	6.5	15	38
Table 3 (Avg)	17	41	39	N/A	1500	300	N/A	420	100	2800	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
Minimum Mean Cell Residence Time (Min 15 days)**	18	17	17	17	17	18	Out of Service	Out of Service	Out of Service	18	18
Minimum Temperature (Min 95 °F)	99	100	99	99	100	99	Out of Service	Out of Service	Out of Service	100	99

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
Minimum Mean Cell Residence Time (Min 15 days)**	19	20	19	Out of Service	19	19	Out of Service	18	19	20	Out of Service	19	19	19	19	19	19	19
Minimum Temperature (Min 95 °F)	97	97	98	Out of Service	97	98	Out of Service	100	101	99	Out of Service	99	99	98	98	98	97	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: February 1- 28, 2017

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.*

X

James Spears jspears@ocsd.com
Operations Manager (714)593-7081
Signed by: Spears, Jim

X

Ronald Coss rcoss@ocsd.com
Lab, Mon. & Compliance Mgr (714)593-7508
Signed by: Coss, Ronald

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, 2017

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): 03/01/17,03/08/17

	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)	**pH**	**Total Solids** (%)	**VSR** (%)
Plant 1 Max/Min[1]	0.73	7.5	4.6	42	470	13	16	40	12	680	6,200	47,000	8.0	18	60
Plant 1 Avg	0.69	11 DNQ	4.5	41	450	13	16	39	7.4 DNQ	680	5,700	44,000		19	
Plant 2 Avg	0.74	12	6.5	44	400	12	16	34	5.5 DNQ	850	5,400	44,000		20	
Plant 2 Max/Min[1]	0.75	16	7.2	46	450	13	17	39	8.2	1000	6,100	44,000	8.0	20	62
Table 1 (Max/Min)[1]	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	6.5	15	38
Table 3 (Avg)	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1[3]	**System Summary**	**Dig. 7**	**Dig. 8**	**Dig. 9**	**Dig. 10**	**Dig. 11**	**Dig. 12**	**Dig. 13**	**Dig. 14**	**Dig. 15**	**Dig. 16**
Minimum Mean Cell Residence Time (Min 15 days)[2]	17	17	16	17	17	17	Out of Service	73[4]	Out of Service	17	17
Minimum Temperature (Min 95 °F)	100	100	100	100	100	100	Out of Service	100	Out of Service	100	100

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**
Minimum Mean Cell Residence Time (Min 15 days)[2]	19	19	18	Out of Service	19	19	Out of Service	18	19	19	Out of Service	19	19	19	19	19	19	19
Minimum Temperature (Min 95 °F)	96	97	98	Out of Service	96	98	Out of Service	100	101	99	Out of Service	99	99	98	100	98	98	99

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

[1] 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).

[2] 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: March 1- 31, 2017

[3] March 5, 2017 – June 7, 2017: OCSD discovered that the Plant No. 1 primary sludge flowmeter feeding the Plant No. 1 digesters and the sludge diversion flowmeter in the line that diverts primary sludge from Plant No. 1 to Plant No. 2 were inaccurate by up to 50% each. The process engineers corrected the affected diversion flowmeter data by adding 50% flow to be conservative (additional solids into the Plant No. 2 headworks, which are considered recycle flows and subtracted from the influent total suspended solids). The primary sludge flowmeter data was not corrected because it would have resulted in higher digestion times (less conservative) and the engineers could not determine the exact daily value by which the meter was inaccurate and the impact to each digester.
[4] Digester 13 was brought back into service on March 30th.

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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James Spears jspears@ocsd.com
Operations Manager (714)593-7081
Signed by: Spears, Jim

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Ronald Coss rcoss@ocsd.com
Lab, Mon. & Compliance Mgr (714)593-7508
Signed by: Coss, Ronald

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, 2017

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): 04/05/17,04/12/17

	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)	**pH**	**Total Solids** (%)	**VSR** (%)
Plant 1 Avg	1.4	6.9	3.6	34	410	11 DNQ	14	30	5.9	580	5,000	44,000		18	
Plant 1 Max/Min[1]	2.0	7.5	3.7	34	410	11	15	31	5.9	580	5,100	45,000	7.9	18	61
Plant 2 Avg	0.63	8.8	5.1	37	440	11	15	30	5.3	710	4,700	45,000		20	
Plant 2 Max/Min[1]	0.73	9.1	5.6	39	460	11	16	31	5.3	730	4,700	49,000	7.9	19	65
Table 1 (Max/Min)[1]	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	6.5	15	38
Table 3 (Avg)	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1[3]	**System Summary**	**Dig. 7**	**Dig. 8**	**Dig. 9**	**Dig. 10**	**Dig. 11**	**Dig. 12**	**Dig. 13**	**Dig. 14**	**Dig. 15**	**Dig. 16**
Minimum Mean Cell Residence Time (Min 15 days)[2]	17	17	17	17	17	Out of Service	Out of Service	18	Out of Service	17	17
Minimum Temperature (Min 95 °F)	99	100	100	100	100	Out of Service	Out of Service	99	Out of Service	100	100

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**
Minimum Mean Cell Residence Time (Min 15 days)[2]	19	20	19	Out of Service	19	19	Out of Service	19	20	20	Out of Service	20	20	19	19	18	19	20
Minimum Temperature (Min 95 °F)	96	97	98	Out of Service	97	98	Out of Service	100	101	99	Out of Service	99	98	96	98	98	98	96

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

[1] 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).

[2] 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: April 1- 30, 2017

[3] March 5, 2017 – June 7, 2017: OCSD discovered that the Plant No. 1 primary sludge flowmeter feeding the Plant No. 1 digesters and the sludge diversion flowmeter in the line that diverts primary sludge from Plant No. 1 to Plant No. 2 were inaccurate by up to 50% each. The process engineers corrected the affected diversion flowmeter data by adding 50% flow to be conservative (additional solids into the Plant No. 2 headworks, which are considered recycle flows and subtracted from the influent total suspended solids). The primary sludge flowmeter data was not corrected because it would have resulted in higher digestion times (less conservative) and the engineers could not determine the exact daily value by which the meter was inaccurate and the impact to each digester.

Certifications:

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James Spears jspears@ocsd.com
Operations Manager (714)593-7081
Signed by: Spears, Jim

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Ronald Coss rcoss@ocsd.com
Lab, Mon. & Compliance Mgr (714)593-7508
Signed by: Coss, Ronald

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, 2017

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): 05/03/17,05/10/17

	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)	pH	Total Solids (%)	VSR (%)
Plant 1 Avg	1.2	8.3	4.2	30	410	9.0 DNQ	15	25	11	590	6,300	50,000		18	
Plant 1 Max/Min[1]	1.2	9.1	4.5	31	440	11	15	25	12	630	6,300	52,000	7.7	17	56
Plant 2 Max/Min[1]	0.68	9.3	5.8	39	520	13	15	27	8.2	840	5,400	48,000	7.7	20	58
Plant 2 Avg	0.65	9.0	5.3	36	470	11 DNQ	14	26	7.4	760	5,400	46,000		20	
Table 1 (Max/Min)[1]	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	6.5	15	38
Table 3 (Avg)	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1[3]	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
Minimum Mean Cell Residence Time (Min 15 days)[2]	18	17	17	17	17	62[4]	Out of Service	18	Out of Service	17	18
Minimum Temperature (Min 95 °F)	99	99	100	100	100	99	Out of Service	100	Out of Service	100	100

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
Minimum Mean Cell Residence Time (Min 15 days)[2]	18	20	19	Out of Service	18	18	Out of Service	18	19	20	Out of Service	18	19	18	18	18	18	18
Minimum Temperature (Min 95 °F)	95	95	99	Out of Service	98	100	Out of Service	100	101	99	Out of Service	100	98	99	99	99	100	99

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

[1] 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).

[2] 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, 2017

[3] March 5, 2017 – June 7, 2017: OCSD discovered that the Plant No. 1 primary sludge flowmeter feeding the Plant No. 1 digesters and the sludge diversion flowmeter in the line that diverts primary sludge from Plant No. 1 to Plant No. 2 were inaccurate by up to 50% each. The process engineers corrected the affected diversion flowmeter data by adding 50% flow to be conservative (additional solids into the Plant No. 2 headworks, which are considered recycle flows and subtracted from the influent total suspended solids). The primary sludge flowmeter data was not corrected because it would have resulted in higher digestion times (less conservative) and the engineers could not determine the exact daily value by which the meter was inaccurate and the impact to each digester.

[4] Digester 11 was placed in service on May 23, 2017.

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.*

12/12/2017

X

James Spears jspears@ocsd.com
Operations Manager (714)593-7081
Signed by: Spears, Jim

12/12/2017

X

Ronald Coss rcoss@ocsd.com
Lab, Mon. & Compliance Mgr (714)593-7508
Signed by: Coss, Ronald

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, 2017

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): 06/07/17,06/14/17

	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)	pH	Total Solids (%)	VSR (%)
Plant 1 Avg	0.66	8.4	3.3	35	430	11 DNQ	15	32	7.0	600	6,600	50,000		17	
Plant 1 Max/Min[1]	0.69	8.8	3.3	35	450	12	15	32	8.0	600	6,600	53,000	8.0	16	55
Plant 2 Max/Min[1]	0.84	10	4.7	41	460	13	14	35	8.9	730	5,500	50,000	8.0	20	58
Plant 2 Avg	0.76	7.9	4.3	39	440	13	14	34	8.0	700	5,500	47,000		20	
Table 1 (Max/Min)[1]	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	6.5	15	38
Table 3 (Avg)	17	41	39	N/A	1500	300	N/A	420	100	2800	N/A	N/A	N/A	N/A	N/A

OCSD Plant 1[4]	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
Minimum Mean Cell Residence Time (Min 15 days)[2]	19	17	17	18	17	29[3]	Out of Service	18	Out of Service	18	18
Minimum Temperature (Min 95 °F)	99	99	100	100	100	100	Out of Service	100	Out of Service	100	100

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
Minimum Mean Cell Residence Time (Min 15 days) [2]	18	19	18	Out of Service	18	18	Out of Service	18	19	19	Out of Service	18	18	18	18	18	18	18
Minimum Temperature (Min 95 °F)	98	98	100	Out of Service	100	101	Out of Service	100	101	99	Out of Service	100	98	100	100	99	100	100

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

1 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).

2 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: June 1- 30, 2017

[3] Digester 11 was placed in service May 23, 2017.

[4] March 5, 2017 – June 7, 2017: OCSD discovered that the Plant No. 1 primary sludge flowmeter feeding the Plant No. 1 digesters and the sludge diversion flowmeter in the line that diverts primary sludge from Plant No. 1 to Plant No. 2 were inaccurate by up to 50% each. The process engineers corrected the affected diversion flowmeter data by adding 50% flow to be conservative (additional solids into the Plant No. 2 headworks, which are considered recycle flows and subtracted from the influent total suspended solids). The primary sludge flowmeter data was not corrected because it would have resulted in higher digestion times (less conservative) and the engineers could not determine the exact daily value by which the meter was inaccurate and the impact to each digester.

Certifications:

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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.*

X

James Spears jspears@ocsd.com
Operations Manager (714)593-7081
Signed by: Spears, Jim

X

Ronald Coss rcoss@ocsd.com
Lab, Mon. & Compliance Mgr (714)593-7508
Signed by: Coss, Ronald

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, 2017

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): 07/06/17,07/12/17

	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 (%)
Plant 1 Max/Min[1]	1.1	7.4	5.2	37	430	12	15	34	6.5	650	6,200	43,000	49,000	8.1	17	51
Plant 1 Avg	0.92	7.2	4.4	36	430	10 DNQ	14	34	6.2	650	6,100	43,000	49,000		18	
Plant 2 Avg	0.76	8.7	4.5	53	480	10	15	33	7.9	730	5,300	42,000	47,000		21	
Plant 2 Max/Min[1]	0.82	9.6	5.1	58	490	11	15	34	9.7	750	5,300	42,000	47,000	8.1	21	65
Table 1 (Max/Min*)	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
Table 3 (Avg)	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
Minimum Mean Cell Residence Time (Min 15 days) [2]	23	21	21	21	21	21	70[3]	21	Out of Service	21	21
Minimum Mean Cell Residence Time (Min 95 °F)	98	100	100	100	100	100	98	100	Out of Service	100	100

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
Minimum Mean Cell Residence Time (Min 15 days) [2]	19	19	18	Out of Service	19	19	Out of Service	18	19	20	Out of Service	19	19	19	19	18	19	19
Minimum Temperature (Min 95 °F)	99	99	100	Out of Service	100	100	Out of Service	99	99	99	Out of Service	100	100	99	100	100	99	100

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

[1] 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).

[2] MCRT based on a 15-Day Rolling Average.

[3] Digester 12 was brought into service on July 11, 2017.

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, 2017

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.*

X

James Spears jspears@ocsd.com
Operations Manager (714)593-7081
Signed by: Spears, Jim

X

Ronald Coss rcoss@ocsd.com
Lab, Mon. & Compliance Mgr (714)593-7508
Signed by: Coss, Ronald

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, 2017

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): 08/02/17,08/09/17

	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 (%)
Plant 1 Max/Min[1]	0.92	8.0	3.7	34	450	11	15	35	5.9	670	6,700	41,000	46,000	7.8	17	60
Plant 1 Avg	0.78	8.0	3.6	34	450	11 DNQ	15	34	5.8	670	6,100	40,000	46,000		18	
Plant 2 Avg	0.92	11	7.7	53	590	15	18	38	5.7	910	5,500	35,000	41,000		20	
Plant 2 Max/Min[1]	1.1	12	7.9	56	630	15	19	41	5.9	960	5,600	41,000	47,000	7.8	20	61
Table 1 (Max/Min)[1]	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
Table 3 (Avg)	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[3]	System Summary	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
Minimum Mean Cell Residence Time (Min 15 days)[2]	22	Out of Service	19	19	19	20	25[3]	20	74[3]	20	20
Minimum Temperature (Min 95 °F)	97	Out of Service	98	98	98	97	99	98	102	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
Minimum Mean Cell Residence Time (Min 15 days)[2]	19	20	18	Out of Service	19	19	Out of Service	18	19	20	Out of Service	19	19	19	19	18	18	19
Minimum Temperature (Min 95 °F)	99	100	100	Out of Service	99	100	Out of Service	100	101	99	Out of Service	99	100	100	100	100	100	102

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

[1] 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).

[2] MCRT based on a 15-Day Rolling Average.

[3] Digester 12 was back in service on July 11th, and Digester 14 was back in service on August 13th.

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, 2017

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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James Spears jspears@ocsd.com
Operations Manager (714)593-7081
Signed by: Spears, Jim

X

Ronald Coss rcoss@ocsd.com
Lab, Mon. & Compliance Mgr (714)593-7508
Signed by: Coss, Ronald

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, 2017

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): 09/06/17,09/13/17

	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 (%)
Plant 1 Max/Min*	1.0	7.5	4.1	37	460	13	15	32	7.8	690	5,900	52,000	58,000	8.1	18	46
Plant 1 Avg	0.99	7.2	3.9	37	450	11 DNQ	15	32	7.6	680	5,800	48,000	54,000		19	
Plant 2 Max/Min*	1.2	11	5.5	47	500	14	16	37	7.9	810	5,600	45,000	51,000	8.1	20	62
Plant 2 Avg	1.1	9.6	5.5	46	480	13	15	36	7.7	780	5,600	44,000	50,000		20	
Table 1 (Max/Min*)	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
Table 3 (Avg)	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
Minimum Mean Cell Residence Time (Min 15 days)**	21	Out of Service	21	19	19	20	20	19	25	19	21
Minimum Temperature (Min 95 °F)	97	Out of Service	97	97	98	98	97	98	97	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
Minimum Mean Cell Residence Time (Min 15 days)**	20	20	19	Out of Service	20	20	Out of Service	19	20	20	Out of Service	20	20	19	20	19	20	20
Minimum Temperature (Min 95 °F)	99	100	100	Out of Service	100	100	Out of Service	100	101	99	Out of Service	99	99	100	100	100	100	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: September 1- 30, 2017

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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Signed by: Spears, Jim

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Signed by: Coss, Ronald

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, 2017

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): 10/04/17,10/24/17

	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 (%)
Plant 1 Max/Min*	1.3	9.3	3.3	34	420	11	14	31	6.8	630	5,700	44,000	49,000	8.1	19	60
Plant 1 Avg	1.1	7.7	2.9	33	400	11	14	28	6.0	610	5,600	44,000	49,000		20	
Plant 2 Max/Min*	0.91	10	5.9	39	430	12	14	32	5.9	700	5,700	41,000	47,000	8.0	20	59
Plant 2 Avg	0.81	8.4	5.9	38	420	12	14	31	5.6	700	5,600	41,000	46,000		21	
Table 1 (Max/Min)*	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
Table 3 (Avg)	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
Minimum Mean Cell Residence Time (Min 15 days)**	21	Out of Service	20	20	20	21	21	20	21	21	21
Minimum Temperature (Min 95 °F)	96	Out of Service	98	97	98	98	98	98	97	97	96

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
Minimum Mean Cell Residence Time (Min 15 days)**	20	21	20	Out of Service	20	20	Out of Service	19	20	21	Out of Service	21	21	20	20	20	20	21
Minimum Temperature (Min 95 °F)	98	99	100	Out of Service	99	100	Out of Service	100	101	98	Out of Service	99	99	100	100	100	99	99

* 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, 2017

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.*

X

James Spears jspears@ocsd.com
Operations Manager (714)593-7081
Signed by: Spears, Jim

X

Ronald Coss rcoss@ocsd.com
Lab, Mon. & Compliance Mgr (714)593-7508
Signed by: Coss, Ronald

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, 2017

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): 11/01/17 (Plant 1),11/02/17 (Plant 2), 11/28/17

	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 (%)
Plant 1 Max/Min[1]	0.86	9.5	3.3	41	460	10 DNQ	16	32	9.6	720	6,000	46,000	52,000	8.0	19	59
Plant 1 Avg	0.75	8.4	3.0	34	410	9.7 DNQ	16	30	7.8	640	6,000	46,000	52,000		19	
Plant 2 Max/Min[1]	0.80	8.6	7.2	42	440	12	15	34	8.9	750	5,400	47,000	52,000	7.9	20	70
Plant 2 Avg	0.78	8.5	6.2	40	420	12	15	32	7.0	720	5,400	44,000	49,000		21	
Table 1 (Max/Min)[1]	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
Table 3 (Avg)	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
Minimum Mean Cell Residence Time (Min 15 days)[2]	18	Out of Service	Out of Service	18	18	18	18	18	18	18	18
Minimum Temperature (Min 95 °F)	97	Out of Service	Out of Service	98	98	97	97	98	97	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
Minimum Mean Cell Residence Time (Min 15 days)[2]	22	21	20	Out of Service	21	21	Out of Service	20	21	21	Out of Service	21	21	23	21	21	21	36[3]
Minimum Temperature (Min 95 °F)	96	98	96	Out of Service	96	100	Out of Service	100	101	99	Out of Service	99	99	99	100	100	100	96

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

[1] 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).

[2] MCRT based on a 15-Day Rolling Average.

[3] Operations intermittently turned off flow to Digester D due to temperature issues, and ended up taking it out of service for two days at the end of the month.

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, 2017

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.*

1/24/2018

X

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1/26/2018

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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, 2017

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): 12/07/17,12/21/17

	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** (%)
Plant 1 Max/Min[1]	0.74	11	3.3	28	390	12	15	29	5.3 DNQ	540	6,700	52,000	58,000	7.9	17	60
Plant 1 Avg	0.74	8.9	3.0	27	380	12	14	28	3.0 DNQ	520	6,500	50,000	56,000		18	
Plant 2 Max/Min[1]	0.63	12	5.3	41	440	14	16	34	6.6	730	5,300	44,000	49,000	7.9	21	66
Plant 2 Avg	0.34 DNQ	10	5.0	39	430	14	15	34	3.6 DNQ	660	5,100	43,000	48,000		22	
Table 1 (Max/Min)[1]	57	75	85	3000	4300	840	75	420	100	7500	N/A	N/A	N/A	6.5	15	38
Table 3 (Avg)	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**
Minimum Mean Cell Residence Time (Min 15 days)[2]	21	Out of Service	Out of Service	21	20	21	21	21	21	21	21
Minimum Temperature (Min 95 °F)	95	Out of Service	Out of Service	98	97	98	98	98	97	97	95

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**
Minimum Mean Cell Residence Time (Min 15 days)[2]	24	24	25	Out of Service	23	23	Out of Service	22	23	24	119[3]	23	23	22	22	22	22	27[3]
Minimum Temperature (Min 95 °F)	95	97	95	Out of Service	97	97	Out of Service	100	101	96	98	98	99	98	100	100	98	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: December 1- 31, 2017

DNQ (Detected, Not Quantified) represents estimated values above the method detection limit (MDL), but below the reporting limit (RL).
[1] 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).
[2] MCRT based on a 15-Day Rolling Average.
[3] Digester M was put into service on December 27, 2017. Digester T was in service, but fed fewer solids for the first half of the month.

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.*

1/29/2018

X

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1/30/2018

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APPENDIX B

SOLIDS MANAGEMENT PROGRAM

9.1 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 to access the most recent document that contains Biosolids Program information, regulations, quantities, goals, and how and where biosolids are recycled.

9.2 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 2016/17, OCSD biosolids met the EQ limits for all the regulated parameters.

TABLE 9.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2008-2017 (Concentration in mg/kg, dry weight)
Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg	Plant 2 Min.	Plant 2 Max	Plant 2 Avg.
Arsenic		41						
	2007-08		2.9	9.0	6.2	4.1	14	7.9
	2008-09		4.3	12	7.1	3.5	13	9.0
	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		2.2	9.4	5.4	5.4	11	8.4
	2014-15		4.5	11	7.2	7.8	12	9.3
	2015-16		3.8	12	8.0	6.2	12	9.2
	2016-17		6.7	12	8.1	5.6	12	8.6

TABLE 9.1 **Trends in Trace Metal Content of Biosolids, Fiscal Years 2008-2017 (Concentration in mg/kg, dry weight)**
Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg.	Plant 2 Min.	Plant 2 Max.	Plant 2 Avg.
Cadmium		39						
	2007-08		3.2	11	5.5	2.6	6.4	3.8
	2008-09		2.5	6.2	4.1	1.7	4.4	3.0
	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

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg.	Plant 2 Min.	Plant 2 Max.	Plant 2 Avg.
Chromium		**						
	2007-08		50	62	54	46	77	60
	2008-09		44	65	55	42	88	62.3
	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

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg.	Plant 2 Min.	Plant 2 Max.	Plant 2 Avg.
Copper		1,500						
	2007-08		500	650	570	460	630	538
	2008-09		500	590	560	500	540	523
	2009-10		420	620	543	370	560	497
	2010-11		520	600	567	500	720	574
	2011-12		430	670	518	380	720	522
	2012-13		480	640	538	500	640	538
	2013-14		460	540	508	470	540	503
	2014-15		320	570	468	320	560	469
	2015-16		380	560	460	340	570	479
	2016-17		400	560	460	340	570	485

TABLE 9.1 **Trends in Trace Metal Content of Biosolids, Fiscal Years 2008-2017 (Concentration in mg/kg, dry weight)**
Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg.	Plant 2 Min.	Plant 2 Max.	Plant 2 Avg.
Lead		300						
	2007-08		6.0	30	20	6.0	24	14
	2008-09		11	25	21	6.0	21	15
	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

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg.	Plant 2 Min.	Plant 2 Max.	Plant 2 Avg.
Mercury		17						
	2007-08		1.1	4.2	1.9	1.3	2.6	1.6
	2008-09		1.0	1.9	1.4	1.0	2.6	1.4
	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

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg.	Plant 2 Min.	Plant 2 Max.	Plant 2 Avg.
Molybdenum		**						
	2007-08		12	17	13	12	18	15
	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

TABLE 9.1 **Trends in Trace Metal Content of Biosolids, Fiscal Years 2008-2017 (Concentration in mg/kg, dry weight)**
Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg.	Plant 2 Min.	Plant 2 Max.	Plant 2 Avg.
Nickel		420						
	2007-08		34	58	45	24	56	31
	2008-09		30	41	35	22	37	29
	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		28	45	38	20	41	33
	2016-17		25	45	36	21	41	32

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg.	Plant 2 Min.	Plant 2 Max.	Plant 2 Avg.
Selenium		100						
	2007-08		3.0	14	8.0	1.4	11	5.6
	2008-09		2.5	14	9.7	2.8	13	7.5
	2009-10		2.7	18	7.3	2.8	16	5.6
	2010-11		2.8	26	10.6	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		1.9	13	7.3	2.7	13	7.7
	2014-15		2.9	13	6.8	4.0	15	7.0
	2015-16		2.4	10	7.7	2.2	10	7.0
	2016-17		4.1	10	8.4	4.8	10	8.0

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg.	Plant 2 Min.	Plant 2 Max.	Plant 2 Avg.
Silver		**						
	2007-08		19	25	22	10	15	13
	2008-09		19	24	21	9.5	13	12
	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		1.7	7.6	5.7	3.8	9.1	7.0
	2014-15		4.9	7.8	6.7	6.0	8.6	7.0
	2015-16		4.6	7.7	6.1	4.2	8.0	6.0
	2016-17		3.6	7.7	5.7	4.3	7.9	5.7

TABLE 9.1 **Trends in Trace Metal Content of Biosolids, Fiscal Years 2008-2017 (Concentration in mg/kg, dry weight)**
Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1 Min.	Plant 1 Max.	Plant 1 Avg.	Plant 2 Min.	Plant 2 Max.	Plant 2 Avg.
Zinc		2,800						
	2006-07		820	1100	900	720	930	790
	2007-08		740	890	806	680	790	716
	2008-09		720	870	785	700	800	749
	2009-10		560	810	741	520	790	710
	2010-11		630	740	696	700	830	740
	2011-12		560	880	709	560	910	749
	2012-13		640	860	723	680	880	768
	2013-14		590	730	671	620	750	700
	2014-15		420	720	620	465	740	669
	2015-16		500	770	617	520	890	733
	2016-17		550	770	614	520	890	737

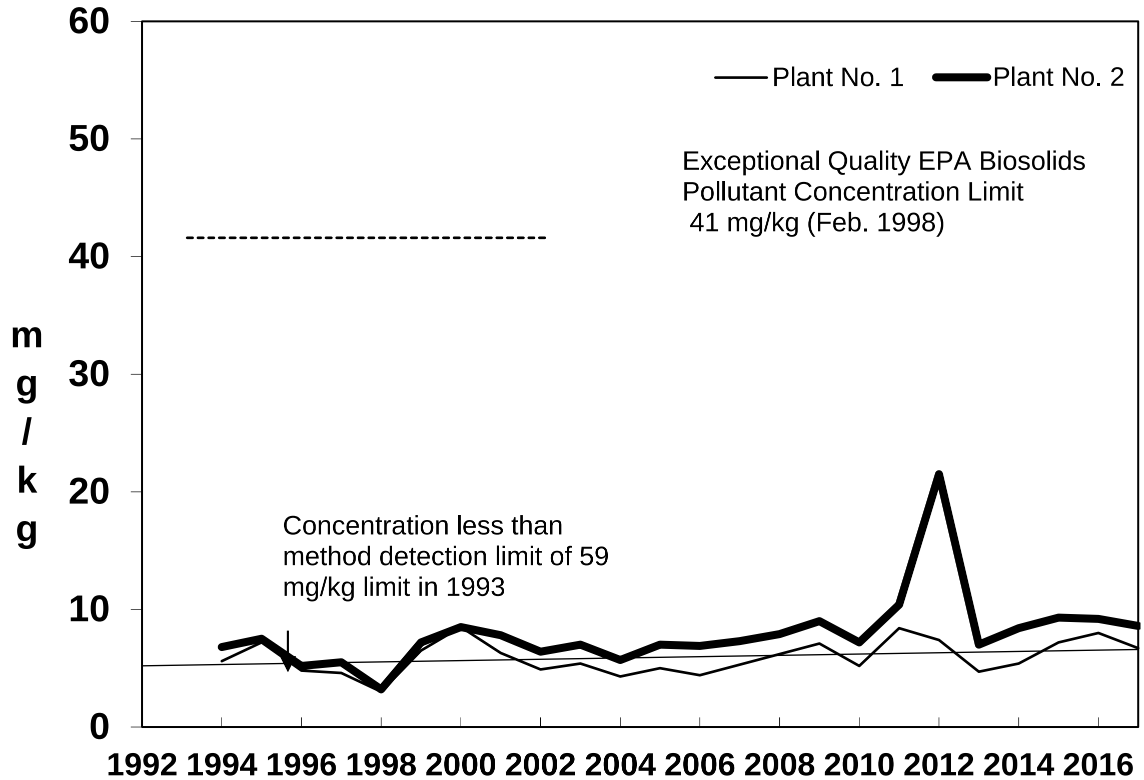

Figure 9-1 **Trends in Concentrations of Arsenic in Biosolids, Fiscal Years 1992-2017**
Orange County Sanitation District, Resource Protection Division

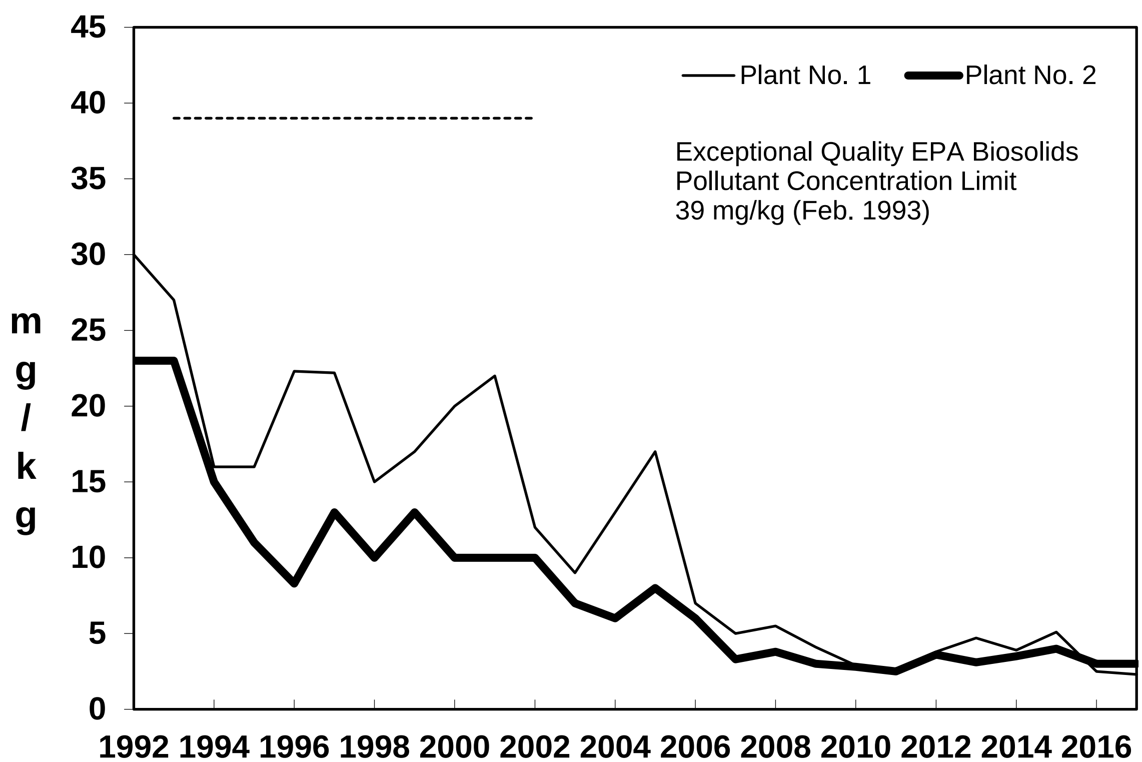

Figure 9-2 **Trends in Concentrations of Cadmium in Biosolids, Fiscal Years 1992-2017**
Orange County Sanitation District, Resource Protection Division

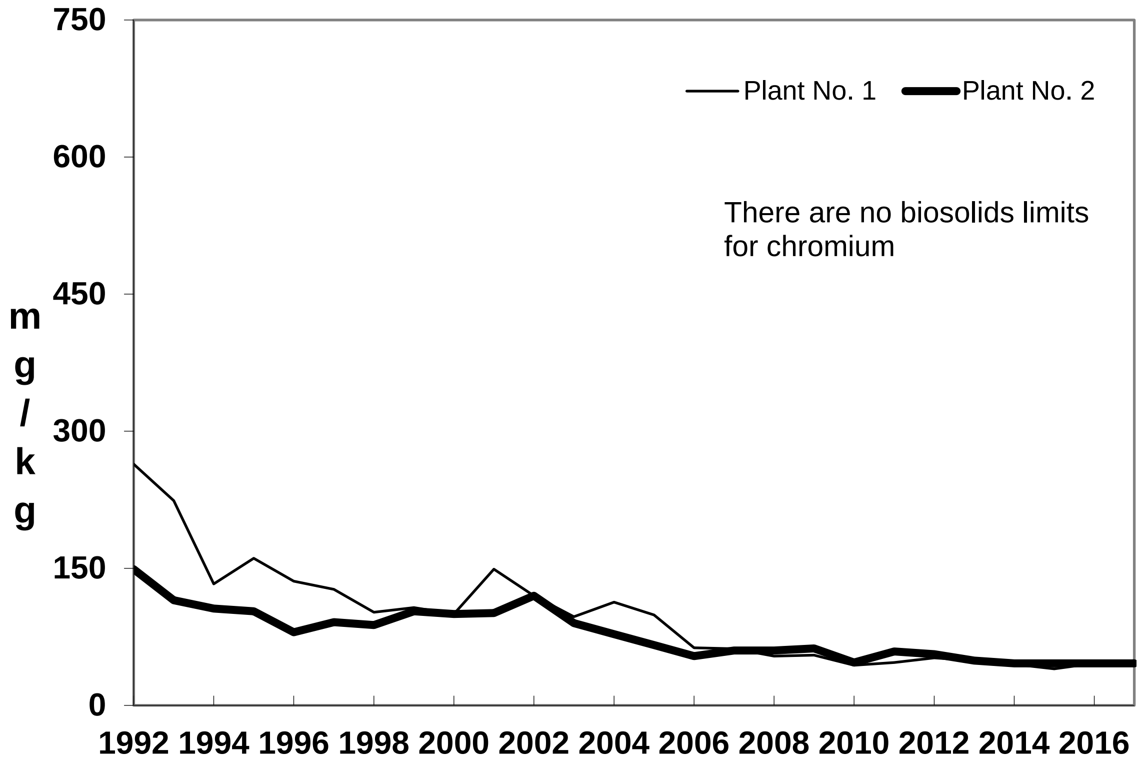

Figure 9-3 **Trends in Concentrations of Chromium in Biosolids, Fiscal Years 1992-2017**
Orange County Sanitation District, Resource Protection Division

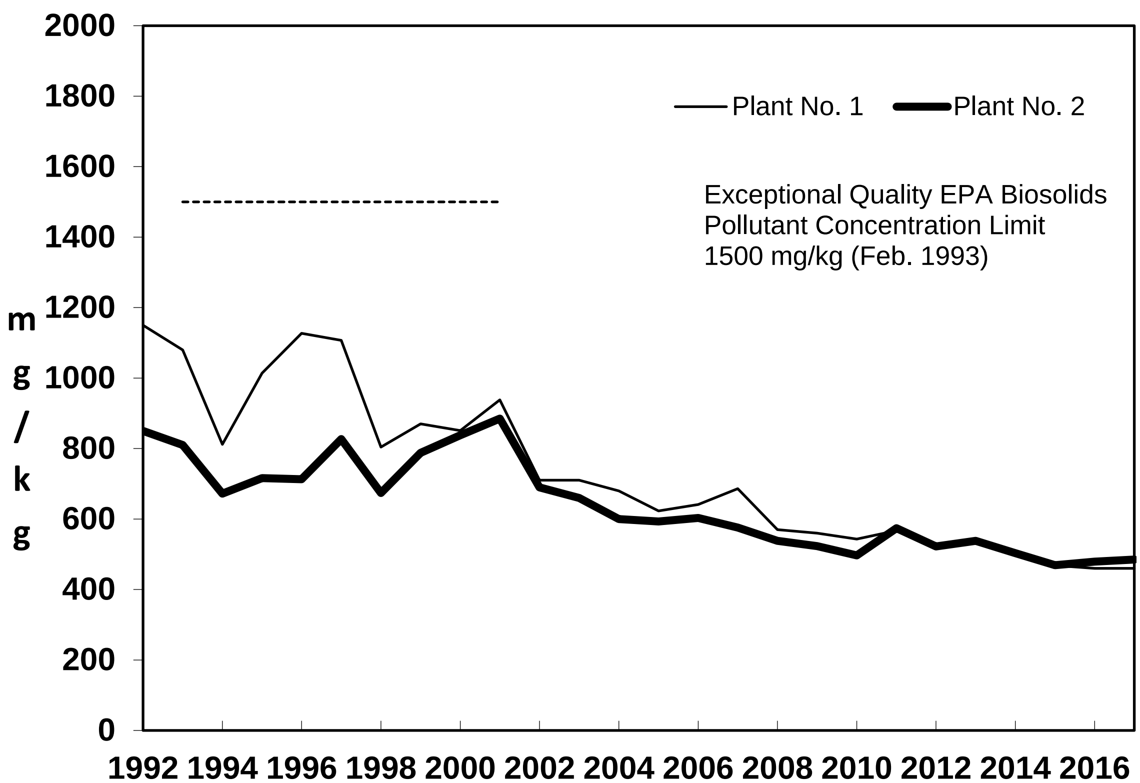

Figure 9-4 **Trends in Concentrations of Copper in Biosolids, Fiscal Years 1992-2017**
Orange County Sanitation District, Resource Protection Division

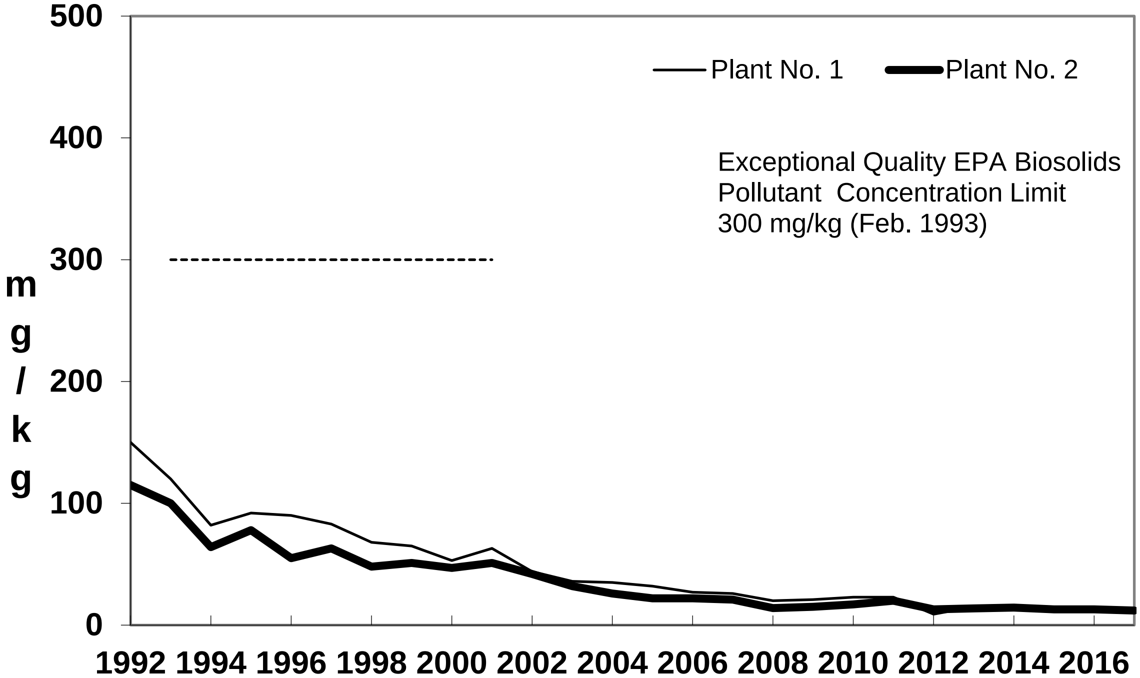

Figure 9-5 **Trends in Concentrations of Lead in Biosolids, Fiscal Years 1992-2017**
Orange County Sanitation District, Resource Protection Division

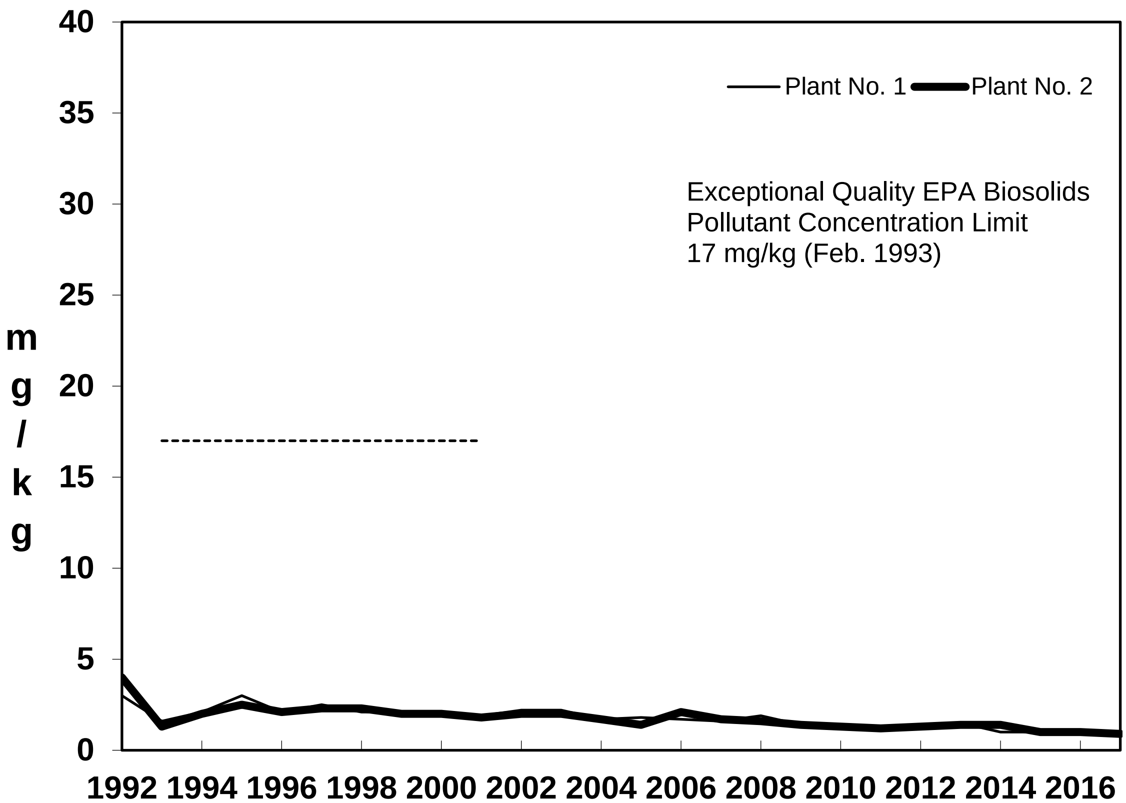

Figure 9-6 **Trends in Concentrations of Mercury in Biosolids, Fiscal Years 1992-2017**
Orange County Sanitation District, Resource Protection Division

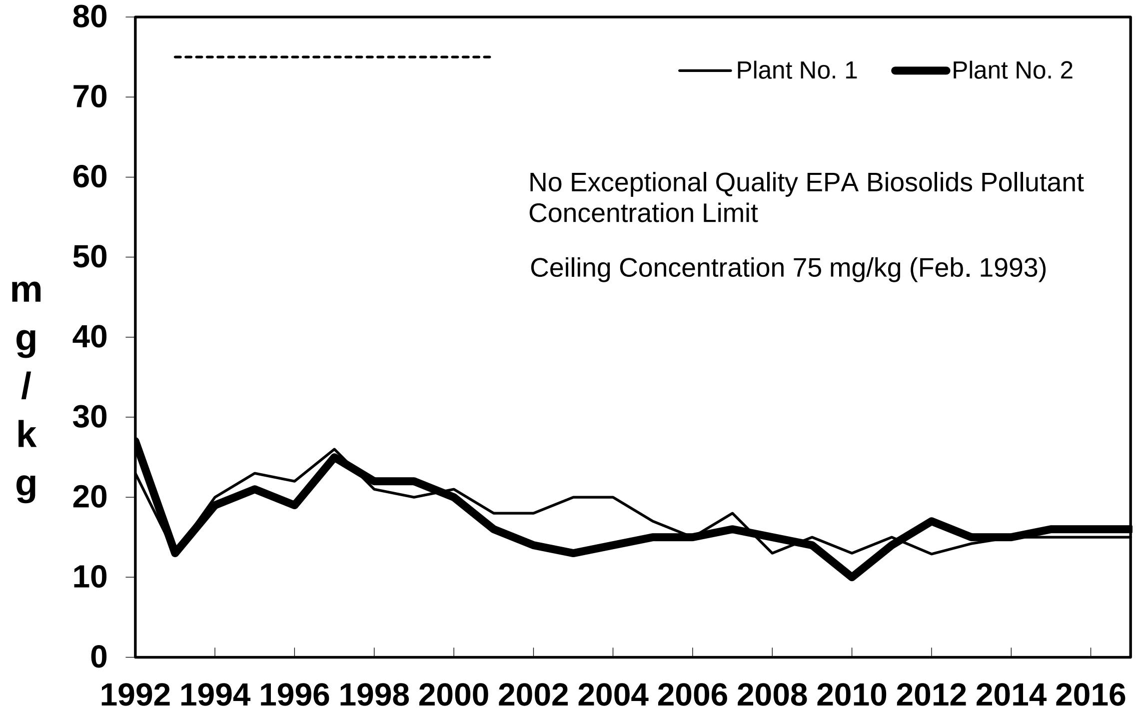

Figure 9-7 **Trends in Concentrations of Molybdenum in Biosolids, Fiscal Years 1992-2017 Orange County Sanitation District, Resource Protection Division**

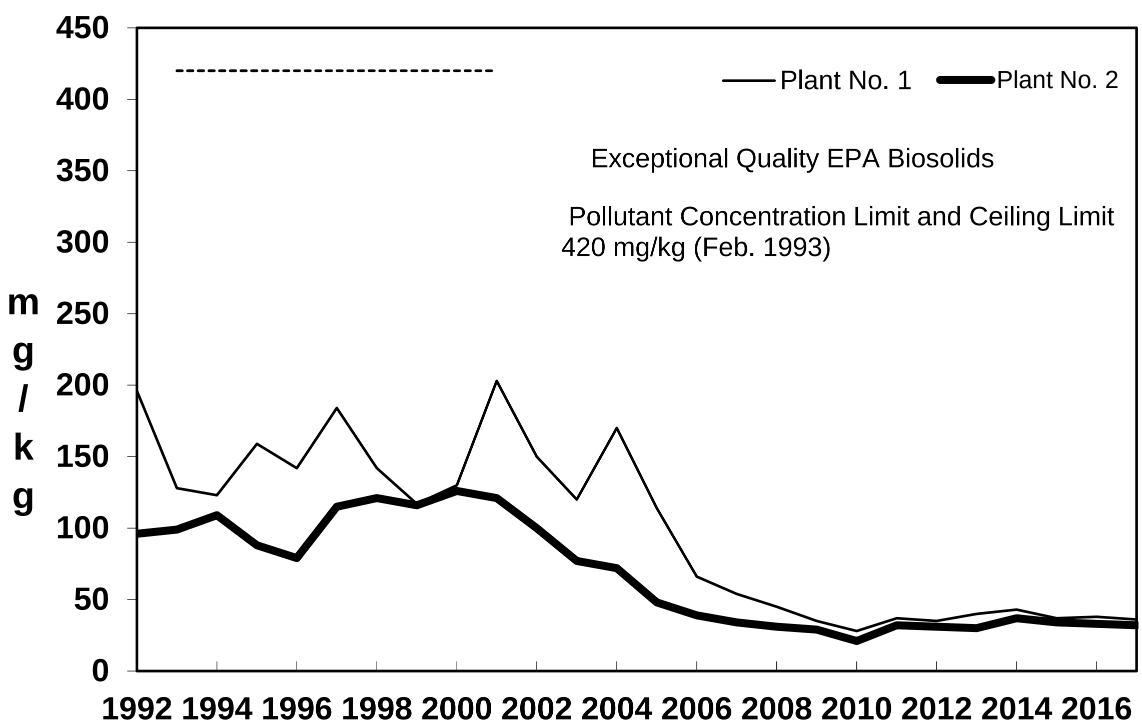

Figure 9-8 **Trends in Concentrations of Nickel in Biosolids, Fiscal Years, 1992-2017 Orange County Sanitation District, Resource Protection Division**

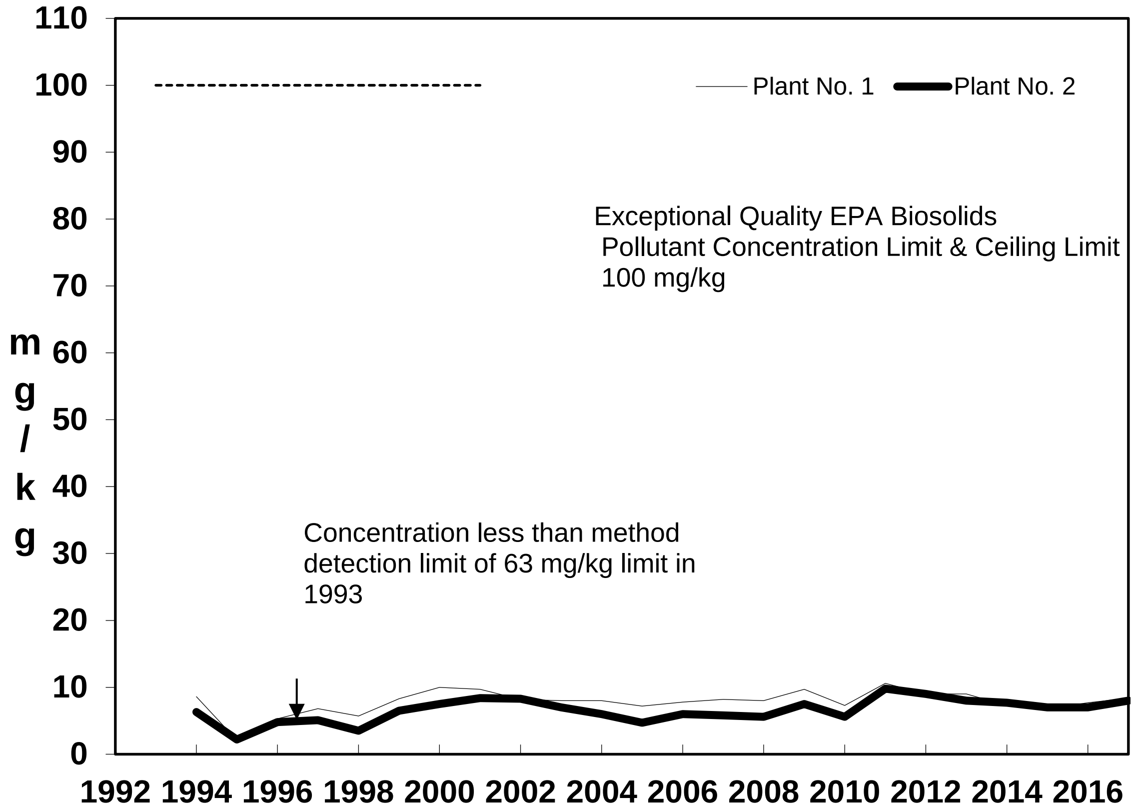

Figure 9-9 **Trends in Concentrations of Selenium in Biosolids, Fiscal Years 1992-2017**
Orange County Sanitation District, Resource Protection Division

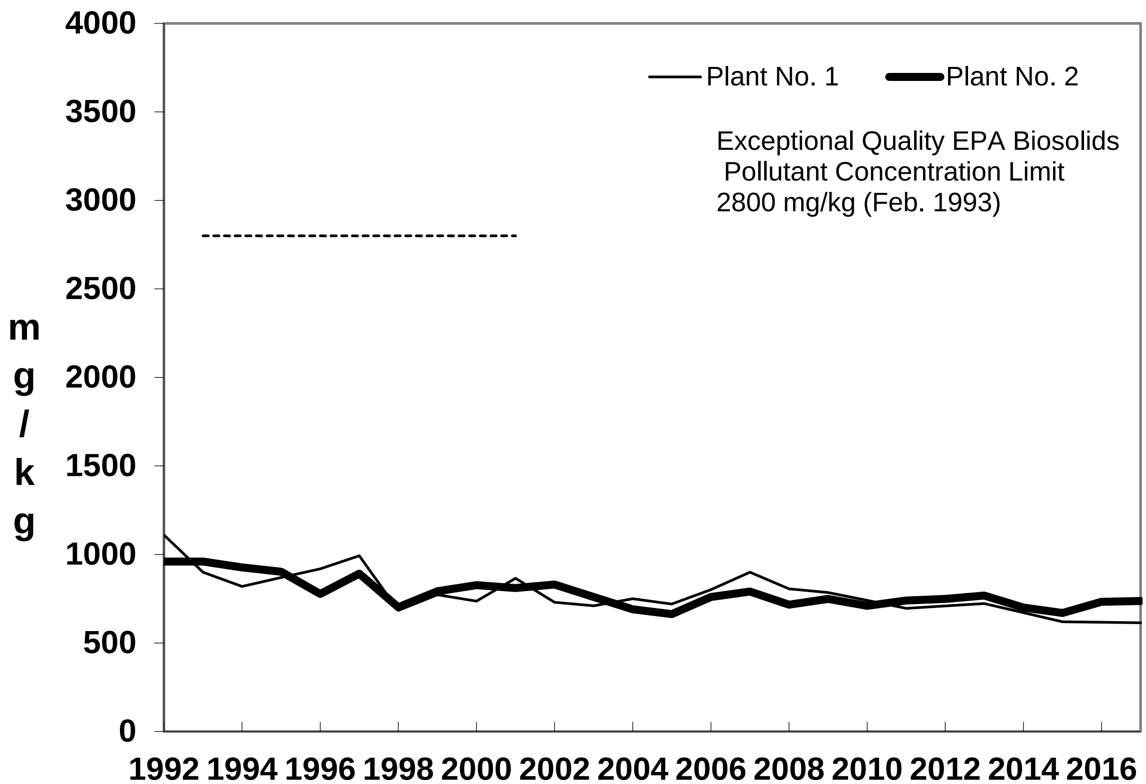

Figure 9-10 **Trends in Concentrations of Zinc in Biosolids, Fiscal Years 1992-2017**
Orange County Sanitation District, Resource Protection Division

APPENDIX C

Summary of Priority Pollutants and
Trace Constituents Analysis in Biosolids for 2017

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
General Chemistry								
	Ammonia-N	SM 4500 NH3 G	mg/kg dry weight	Plant 1 Cake	01/04/2017	5400	290	1500
					01/11/2017	5500	300	1500
					02/01/2017	5100	260	1300
					02/08/2017	5200	280	1400
					03/01/2017	6200	250	1300
					03/08/2017	5200	280	1400
					04/05/2017	5100	280	1400
					04/12/2017	4900	270	1300
					05/03/2017	6200	270	1400
					05/10/2017	6300	290	1500
					06/07/2017	6600	310	1500
					06/14/2017	6500	280	1400
					07/06/2017	6000	260	1300
					07/12/2017	6200	290	1400
					08/02/2017	5500	250	1300
					08/09/2017	6700	290	1500
					09/06/2017	5900	270	1400
					09/13/2017	5700	260	1300
					10/04/2017	5700	250	1300
					10/24/2017	5500	240	1200
					11/01/2017	6000	260	1300
					11/28/2017	6000	270	1300
					12/07/2017	6200	280	1400
					12/21/2017	6700	290	1500
					Annual Mean	5800		
		SM 4500 NH3 G	mg/kg dry weight	Plant 2 Cake	01/04/2017	4900	250	1300
					01/11/2017	4700	240	1200
					02/02/2017	4400	230	1100
					02/08/2017	4900	250	1300
					03/01/2017	6100	250	1200
					03/08/2017	4600	250	1200
					04/05/2017	4600	240	1200
					04/12/2017	4700	260	1300
					05/03/2017	5300	250	1200
					05/10/2017	5400	240	1200
					06/07/2017	5500	240	1200
					06/14/2017	5400	250	1200
					07/06/2017	5300	240	1200
					07/12/2017	5300	240	1200
					08/02/2017	5300	240	1200
					08/09/2017	5600	240	1200
					09/06/2017	5600	250	1300
					09/13/2017	5600	250	1200
					10/04/2017	5500	240	1200
					10/24/2017	5700	240	1200
					11/02/2017	5400	230	1100
					11/28/2017	5300	250	1200
					12/07/2017	5300	240	1200
					12/21/2017	4900	230	1100
					Annual Mean	5200		
	Corrosivity	EPA 9040C	-	Plant 1 Cake	01/04/2017	NEG	--	--
					Annual Mean	NEG		
		EPA 9040C	-	Plant 2 Cake	01/04/2017	NEG	--	--
					Annual Mean	NEG		
	Fluoride	EPA 300.0	mg/kg dry weight	Plant 1 Cake	01/04/2017	31	20	29
					07/06/2017	25 DNQ	19	27
					Annual Mean	28 DNQ		
		EPA 300.0	mg/kg dry weight	Plant 2 Cake	01/04/2017	30	18	25
					07/06/2017	25	17	24
					Annual Mean	28		
	Hexavalent	EPA 7196A	mg/kg dry	Plant 1	01/04/2017	ND	12	29

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Chromium		weight	Cake	04/05/2017	ND	28	56
					07/06/2017	ND	13	27
					10/04/2017	ND	26	51
					Annual Mean	<28		
		EPA 7196A	mg/kg dry weight	Plant 2 Cake	01/04/2017	ND	10	25
					04/05/2017	ND	25	49
					07/06/2017	ND	12	24
					10/04/2017	ND	25	49
					Annual Mean	<25		
	Kjeldahl Nitrogen	EPA 351.2	mg/kg dry weight	Plant 1 Cake	01/04/2017	52000	5500	7300
					01/11/2017	56000	5600	7500
					02/01/2017	55000	4900	6600
					02/08/2017	58000	5200	7000
					03/01/2017	47000	4700	6300
					03/08/2017	52000	5300	7000
					04/05/2017	50000	5200	7000
					04/12/2017	47000	5000	6700
					05/03/2017	58000	5100	6800
					05/10/2017	55000	5400	7200
					06/07/2017	60000	5800	7700
					06/14/2017	53000	5300	7100
					07/06/2017	49000	5000	6600
					07/12/2017	48000	9900	13000
					08/02/2017	46000	8000	11000
					08/09/2017	46000	5400	7200
					09/06/2017	58000	2700	3500
					09/13/2017	50000	3200	4300
					10/04/2017	49000	3000	4100
					10/24/2017	49000	11000	15000
					11/01/2017	51000	6100	8200
					11/28/2017	52000	6300	8300
					12/07/2017	58000	7100	9500
					12/21/2017	54000	10000	13000
					Annual Mean	52000		
		EPA 351.2	mg/kg dry weight	Plant 2 Cake	01/04/2017	51000	4800	6300
					01/11/2017	46000	4600	6100
					02/02/2017	44000	4300	5700
					02/08/2017	52000	4700	6300
					03/01/2017	49000	4600	6200
					03/08/2017	49000	4600	6100
					04/05/2017	45000	4500	6000
					04/12/2017	54000	4800	6500
					05/03/2017	53000	4600	6100
					05/10/2017	50000	4600	6100
					06/07/2017	55000	4600	6100
					06/14/2017	50000	4600	6200
					07/06/2017	47000	4500	6000
					07/12/2017	46000	8300	11000
					08/02/2017	34000	1800	2500
					08/09/2017	47000	8600	11000
					09/06/2017	49000	3000	4000
					09/13/2017	51000	3000	4000
					10/04/2017	45000	1900	2500
					10/24/2017	47000	11000	14000
					11/02/2017	52000	4800	6400
					11/28/2017	45000	8300	11000
					12/07/2017	47000	5500	7300
					12/21/2017	49000	7600	10000
					Annual Mean	48000		
	Nitrate-N	EPA 300.0	mg/kg dry weight	Plant 1 Cake	01/04/2017	ND	4.7	6.4
					07/06/2017	ND	4.3	5.9
					07/12/2017	ND	4.7	6.4

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					08/02/2017	ND	4.1	5.6
					08/09/2017	ND	4.7	6.5
					09/06/2017	ND	4.4	6.1
					09/13/2017	ND	4.2	5.7
					10/04/2017	ND	4.1	5.6
					10/24/2017	ND	3.9	5.3
					11/01/2017	ND	4.2	5.8
					11/28/2017	ND	4.3	5.9
					12/07/2017	ND	4.6	6.3
					12/21/2017	ND	4.7	6.5
					Annual Mean	<4.7		
		EPA 300.0	mg/kg dry weight	Plant 2 Cake	01/04/2017	ND	4.1	5.6
					07/06/2017	ND	3.9	5.3
					07/12/2017	ND	3.9	5.3
					08/02/2017	9.6	4.0	5.4
					08/09/2017	ND	4.0	5.4
					09/06/2017	ND	4.0	5.5
					09/13/2017	ND	4.0	5.4
					10/04/2017	ND	3.9	5.4
					10/24/2017	ND	3.9	5.4
					11/02/2017	ND	3.7	5.1
					11/28/2017	ND	4.0	5.5
					12/07/2017	ND	3.8	5.2
					12/21/2017	ND	3.7	5.1
					Annual Mean	4.3 DNQ		
	Nitrite-N	EPA 300.0	mg/kg dry weight	Plant 1 Cake	07/06/2017	15	5.9	8.0
					07/12/2017	8.8	6.4	8.8
					08/02/2017	ND	5.6	7.7
					08/09/2017	11	6.5	8.9
					09/06/2017	ND	6.1	8.3
					09/13/2017	ND	5.7	7.8
					10/04/2017	ND	5.6	7.7
					10/24/2017	ND	5.3	7.3
					11/01/2017	ND	5.8	7.9
					11/28/2017	18	5.9	8.1
					12/07/2017	ND	6.3	8.6
					12/21/2017	ND	6.5	8.9
					Annual Mean	8.3 DNQ		
		EPA 300.0	mg/kg dry weight	Plant 2 Cake	07/06/2017	33	5.3	7.3
					07/12/2017	11	5.3	7.3
					08/02/2017	ND	5.4	7.4
					08/09/2017	ND	5.4	7.4
					09/06/2017	ND	5.5	7.5
					09/13/2017	ND	5.4	7.4
					10/04/2017	ND	5.4	7.3
					10/24/2017	ND	5.4	7.3
					11/02/2017	ND	5.1	6.9
					11/28/2017	ND	5.5	7.5
					12/07/2017	ND	5.2	7.2
					12/21/2017	ND	5.1	6.9
					Annual Mean	8.1 DNQ		
	Organic Lead	HML 939-M	mg/kg dry weight	Plant 1 Cake	01/04/2017	ND	0.12	0.30
					04/05/2017	ND	0.13	0.31
					07/06/2017	ND	0.13	0.33
					10/04/2017	ND	0.12	0.28
					Annual Mean	<0.13		
		HML 939-M	mg/kg dry weight	Plant 2 Cake	01/04/2017	ND	0.12	0.28
					04/05/2017	ND	0.11	0.27
					07/06/2017	ND	0.12	0.30
					10/04/2017	ND	0.11	0.27
					Annual Mean	<0.12		
	Organic Nitrogen	CALC	mg/kg dry	Plant 1	01/04/2017	46600	--	--

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
			weight	Cake	01/11/2017	50500	--	--
					02/01/2017	49900	--	--
					02/08/2017	52800	--	--
					03/01/2017	40800	--	--
					03/08/2017	46800	--	--
					04/05/2017	44900	--	--
					04/12/2017	42100	--	--
					05/03/2017	51800	--	--
					05/10/2017	48700	--	--
					06/07/2017	53400	--	--
					06/14/2017	46500	--	--
					07/06/2017	43000	--	--
					07/12/2017	42000	--	--
					08/02/2017	41000	--	--
					08/09/2017	39000	--	--
					09/06/2017	52000	--	--
					09/13/2017	44000	--	--
					10/04/2017	43000	--	--
					10/24/2017	44000	--	--
					11/01/2017	45000	--	--
					11/28/2017	46000	--	--
					12/07/2017	52000	--	--
					12/21/2017	47000	--	--
					Annual Mean	46000		
		CALC	mg/kg dry weight	Plant 2 Cake	01/04/2017	46100	--	--
					01/11/2017	41300	--	--
					02/02/2017	39600	--	--
					02/08/2017	47100	--	--
					03/01/2017	42900	--	--
					03/08/2017	44400	--	--
					04/05/2017	40400	--	--
					04/12/2017	49300	--	--
					05/03/2017	47700	--	--
					05/10/2017	44600	--	--
					06/07/2017	49500	--	--
					06/14/2017	44600	--	--
					07/06/2017	42000	--	--
					07/12/2017	41000	--	--
					08/02/2017	29000	--	--
					08/09/2017	41000	--	--
					09/06/2017	43000	--	--
					09/13/2017	45000	--	--
					10/04/2017	40000	--	--
					10/24/2017	41000	--	--
					11/02/2017	47000	--	--
					11/28/2017	40000	--	--
					12/07/2017	42000	--	--
					12/21/2017	44000	--	--
					Annual Mean	43000		
	pH	EPA 9045C	pH units	Plant 1 Cake	01/04/2017	8.1	0.10	0.1
					02/01/2017	8.1	0.10	0.1
					03/01/2017	8.0	0.10	0.1
					04/05/2017	7.9	0.10	0.1
					04/12/2017	8.0	0.10	0.1
					05/03/2017	7.7	0.10	0.1
					05/10/2017	7.9	0.10	0.1
					06/07/2017	8.2	0.10	0.1
					06/14/2017	8.0	0.10	0.1
					07/06/2017	8.1	0.10	0.1
					07/12/2017	8.2	0.10	0.1
					08/02/2017	8.1	0.10	0.1
					08/09/2017	7.8	0.10	0.1

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					09/06/2017	8.2	0.10	0.1
					09/13/2017	8.1	0.10	0.1
					10/04/2017	8.1	0.10	0.1
					11/01/2017	8.2	0.10	0.1
					11/28/2017	8.0	0.10	0.1
					12/07/2017	7.9	0.10	0.1
					12/21/2017	8.2	0.10	0.1
					Annual Mean	8.0		
		EPA 9045C	pH units	Plant 2 Cake	01/04/2017	7.9	0.10	0.1
					02/02/2017	8.2	0.10	0.1
					03/01/2017	8.0	0.10	0.1
					04/05/2017	8.0	0.10	0.1
					04/12/2017	7.9	0.10	0.1
					05/03/2017	7.7	0.10	0.1
					05/10/2017	8.1	0.10	0.1
					06/07/2017	8.1	0.10	0.1
					06/14/2017	8.0	0.10	0.1
					07/06/2017	8.1	0.10	0.1
					07/12/2017	8.2	0.10	0.1
					08/02/2017	8.2	0.10	0.1
					08/09/2017	7.8	0.10	0.1
					09/06/2017	8.1	0.10	0.1
					09/13/2017	8.1	0.10	0.1
					10/04/2017	8.0	0.10	0.1
					11/02/2017	8.2	0.10	0.1
					11/28/2017	7.9	0.10	0.1
					12/07/2017	7.9	0.10	0.1
					12/21/2017	8.1	0.10	0.1
					Annual Mean	8.0		
	Total Cyanide	EPA 9014	mg/kg dry weight	Plant 1 Cake	01/04/2017	ND	2.5	2.9
					04/05/2017	ND	2.4	2.8
					07/06/2017	2.7	2.3	2.7
					10/24/2017	6.8	2.0	2.4
					Annual Mean	3.6 DNQ		
		EPA 9014	mg/kg dry weight	Plant 2 Cake	01/04/2017	ND	2.2	2.5
					04/05/2017	3.2	2.1	2.5
					07/06/2017	3.3	2.1	2.4
					10/24/2017	ND	2.1	2.4
					Annual Mean	2.7 DNQ		
	Total Nitrogen	CALC	mg/kg dry weight	Plant 1 Cake	07/06/2017	49000	--	--
					07/12/2017	48000	--	--
					08/02/2017	46000	--	--
					08/09/2017	46000	--	--
					09/06/2017	58000	--	--
					09/13/2017	50000	--	--
					10/04/2017	49000	--	--
					10/24/2017	49000	--	--
					11/01/2017	51000	--	--
					11/28/2017	52000	--	--
					12/07/2017	58000	--	--
					12/21/2017	54000	--	--
					Annual Mean	51000		
		CALC	mg/kg dry weight	Plant 2 Cake	07/06/2017	47000	--	--
					07/12/2017	46000	--	--
					08/02/2017	34000	--	--
					08/09/2017	47000	--	--
					09/06/2017	49000	--	--
					09/13/2017	51000	--	--
					10/04/2017	45000	--	--
					10/24/2017	47000	--	--
					11/02/2017	52000	--	--
					11/28/2017	45000	--	--

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					12/07/2017	47000	--	--
					12/21/2017	49000	--	--
					Annual Mean	47000		
	Total Solids	SM 2540G	%	Plant 1 Cake	01/04/2017	17	0.050	0.050
					01/11/2017	17	0.050	0.050
					02/01/2017	19	0.050	0.050
					02/08/2017	18	0.050	0.050
					03/01/2017	20	0.050	0.050
					03/08/2017	18	0.050	0.050
					04/05/2017	18	0.050	0.050
					04/12/2017	18	0.050	0.050
					05/03/2017	18	0.050	0.050
					05/10/2017	17	0.050	0.050
					06/07/2017	16	0.050	0.050
					06/14/2017	17	0.050	0.050
					07/06/2017	19	0.050	0.050
					07/12/2017	17	0.050	0.050
					08/02/2017	19	0.050	0.050
					08/09/2017	17	0.050	0.050
					09/06/2017	18	0.050	0.050
					09/13/2017	19	0.050	0.050
					10/04/2017	19	0.050	0.050
					10/24/2017	21	0.050	0.050
					11/01/2017	19	0.050	0.050
					11/28/2017	19	0.050	0.050
					12/07/2017	18	0.050	0.050
					12/21/2017	17	0.050	0.050
					Annual Mean	18		
		SM 2540G	%	Plant 2 Cake	01/04/2017	20	0.050	0.050
					01/11/2017	20	0.050	0.050
					02/02/2017	22	0.050	0.050
					02/08/2017	20	0.050	0.050
					03/01/2017	20	0.050	0.050
					03/08/2017	20	0.050	0.050
					04/05/2017	20	0.050	0.050
					04/12/2017	19	0.050	0.050
					05/03/2017	20	0.050	0.050
					05/10/2017	20	0.050	0.050
					06/07/2017	20	0.050	0.050
					06/14/2017	20	0.050	0.050
					07/06/2017	21	0.050	0.050
					07/12/2017	21	0.050	0.050
					08/02/2017	20	0.050	0.050
					08/09/2017	20	0.050	0.050
					09/06/2017	20	0.050	0.050
					09/13/2017	20	0.050	0.050
					10/04/2017	20	0.050	0.050
					10/24/2017	21	0.050	0.050
					11/02/2017	22	0.050	0.050
					11/28/2017	20	0.050	0.050
					12/07/2017	21	0.050	0.050
					12/21/2017	22	0.050	0.050
					Annual Mean	20		
Trace Elements								
	Antimony	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	5.1 DNQ	1.8	12
					04/05/2017	ND	1.7	11
					07/06/2017	ND	1.6	11
					10/04/2017	ND	5.1	10
					Annual Mean	3.4 DNQ		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	4.6 DNQ	1.5	10
					04/05/2017	2.6 DNQ	1.5	9.8
					07/06/2017	ND	1.5	9.7

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					10/04/2017	ND	4.9	9.8
					Annual Mean	3.4 DNQ		
	Arsenic	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	10	1.5	1.8
					01/11/2017	9.4	1.6	1.8
					02/01/2017	8.5	1.4	1.6
					02/08/2017	16	3.0	16
					03/01/2017	14 DNQ	2.8	15
					03/08/2017	7.5	1.5	1.7
					04/05/2017	7.5	1.5	1.7
					04/12/2017	6.3	1.4	1.6
					05/03/2017	7.4	1.4	1.7
					05/10/2017	9.1	1.5	1.8
					06/07/2017	8.8	1.6	1.9
					06/14/2017	7.9	1.5	1.7
					07/06/2017	7.4	1.4	1.6
					07/12/2017	6.9	1.5	1.7
					08/02/2017	7.9	1.3	1.5
					08/09/2017	8.0	1.5	1.8
					09/06/2017	7.5	1.4	1.7
					09/13/2017	6.9	1.4	1.6
					10/04/2017	6.1	2.6	5.1
					10/24/2017	9.3	2.4	4.8
					11/01/2017	9.5	2.6	5.3
					11/28/2017	7.2	2.7	5.4
					12/07/2017	6.8	2.8	5.7
					12/21/2017	11	0.65	3.5
					Annual Mean	8.6 DNQ		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	9.1	1.3	1.5
					01/11/2017	8.3	1.3	1.5
					02/02/2017	8.7	1.2	1.4
					02/08/2017	18	2.8	15
					03/01/2017	16	2.7	15
					03/08/2017	7.9	1.3	1.5
					04/05/2017	9.1	1.3	1.5
					04/12/2017	8.4	1.3	1.5
					05/03/2017	8.6	1.3	1.5
					05/10/2017	9.3	1.3	1.5
					06/07/2017	10	1.3	1.5
					06/14/2017	5.8	1.3	1.5
					07/06/2017	7.8	1.3	1.5
					07/12/2017	9.6	1.3	1.4
					08/02/2017	10	1.3	1.5
					08/09/2017	12	1.3	1.5
					09/06/2017	8.1	1.3	1.5
					09/13/2017	11	1.3	1.5
					10/04/2017	6.8	2.4	4.9
					10/24/2017	10	2.4	4.8
					11/02/2017	8.6	2.3	4.6
					11/28/2017	8.4	2.5	5.0
					12/07/2017	8.5	2.4	4.8
					12/21/2017	12	0.50	2.7
					Annual Mean	9.7		
	Barium	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	450	1.8	5.9
					04/05/2017	360	1.7	5.7
					07/06/2017	420	1.6	5.3
					10/04/2017	360	2.6	5.1
					Annual Mean	400		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	910	1.5	5.1
					04/05/2017	840	1.5	4.9
					07/06/2017	820	1.5	4.9
					10/04/2017	710	2.4	4.9
					Annual Mean	820		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Beryllium	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	ND	0.23	0.59
					04/05/2017	ND	0.23	0.57
					07/06/2017	ND	0.21	0.53
					10/04/2017	0.33 DNQ	0.26	0.51
					Annual Mean	0.25 DNQ		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	ND	0.20	0.51
					04/05/2017	0.33 DNQ	0.20	0.49
					07/06/2017	ND	0.19	0.49
					10/04/2017	0.59	0.24	0.49
					Annual Mean	0.33 DNQ		
	Cadmium	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	4.2	0.47	1.2
					01/11/2017	3.7	0.48	1.2
					02/01/2017	4.9	0.43	1.1
					02/08/2017	6.0	0.14	2.7
					03/01/2017	4.6	0.12	2.5
					03/08/2017	4.3	0.45	1.1
					04/05/2017	3.5	0.45	1.1
					04/12/2017	3.7	0.43	1.1
					05/03/2017	4.5	0.44	1.1
					05/10/2017	3.9	0.47	1.2
					06/07/2017	3.3	0.50	1.2
					06/14/2017	3.2	0.46	1.1
					07/06/2017	5.2	0.43	1.1
					07/12/2017	3.6	0.47	1.2
					08/02/2017	3.7	0.41	1.0
					08/09/2017	3.5	0.47	1.2
					09/06/2017	3.6	0.44	1.1
					09/13/2017	4.1	0.42	1.0
					10/04/2017	3.3	0.51	1.0
					10/24/2017	2.5	0.48	0.97
					11/01/2017	3.3	0.53	1.1
					11/28/2017	2.7	0.54	1.1
					12/07/2017	2.7	0.57	1.1
					12/21/2017	3.3	0.029	0.59
					Annual Mean	3.8		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	6.6	0.41	1.0
					01/11/2017	5.7	0.39	0.98
					02/02/2017	5.4	0.37	0.93
					02/08/2017	6.1	0.12	2.5
					03/01/2017	7.2	0.12	2.5
					03/08/2017	5.7	0.40	0.99
					04/05/2017	5.6	0.39	0.98
					04/12/2017	4.6	0.41	1.0
					05/03/2017	5.8	0.40	1.0
					05/10/2017	4.7	0.39	0.98
					06/07/2017	4.7	0.39	0.98
					06/14/2017	3.9	0.40	0.99
					07/06/2017	5.1	0.39	0.97
					07/12/2017	3.8	0.38	0.96
					08/02/2017	7.5	0.39	0.98
					08/09/2017	7.9	0.39	0.99
					09/06/2017	5.5	0.40	1.0
					09/13/2017	5.4	0.40	0.99
					10/04/2017	5.9	0.49	0.98
					10/24/2017	5.9	0.48	0.97
					11/02/2017	7.2	0.46	0.93
					11/28/2017	5.2	0.50	0.99
					12/07/2017	5.3	0.48	0.96
					12/21/2017	4.6	0.022	0.46
					Annual Mean	5.6		
	Chromium	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	37	0.47	4.7
					01/11/2017	35	0.48	4.8

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					02/01/2017	32	0.43	4.3
					02/08/2017	42	1.2	11
					03/01/2017	40	1.1	10
					03/08/2017	42	0.45	4.5
					04/05/2017	34	0.45	4.5
					04/12/2017	33	0.43	4.3
					05/03/2017	31	0.44	4.4
					05/10/2017	29	0.47	4.7
					06/07/2017	35	0.50	5.0
					06/14/2017	35	0.46	4.6
					07/06/2017	35	0.43	4.3
					07/12/2017	37	0.47	4.7
					08/02/2017	34	0.41	4.1
					08/09/2017	34	0.47	4.7
					09/06/2017	36	0.44	4.4
					09/13/2017	37	0.42	4.2
					10/04/2017	32	2.0	4.1
					10/24/2017	34	1.9	3.9
					11/01/2017	41	2.1	4.2
					11/28/2017	27	2.1	4.3
					12/07/2017	26	2.3	4.6
					12/21/2017	28	0.25	2.4
					Annual Mean	34		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	39	0.41	4.1
					01/11/2017	38	0.39	3.9
					02/02/2017	35	0.37	3.7
					02/08/2017	50	1.1	10
					03/01/2017	46	1.1	9.8
					03/08/2017	42	0.40	4.0
					04/05/2017	39	0.39	3.9
					04/12/2017	34	0.41	4.1
					05/03/2017	39	0.40	4.0
					05/10/2017	32	0.39	3.9
					06/07/2017	41	0.39	3.9
					06/14/2017	37	0.40	4.0
					07/06/2017	58	0.39	3.9
					07/12/2017	48	0.38	3.8
					08/02/2017	50	0.39	3.9
					08/09/2017	56	0.39	3.9
					09/06/2017	45	0.40	4.0
					09/13/2017	47	0.40	4.0
					10/04/2017	37	2.0	3.9
					10/24/2017	39	1.9	3.9
					11/02/2017	42	1.9	3.7
					11/28/2017	37	2.0	4.0
					12/07/2017	41	1.9	3.8
					12/21/2017	37	0.20	1.8
					Annual Mean	42		
	Cobalt	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	ND	0.59	5.9
					04/05/2017	ND	0.57	5.7
					07/06/2017	2.3 DNQ	0.53	5.3
					10/04/2017	ND	2.6	5.1
					Annual Mean	1.5 DNQ		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	ND	0.51	5.1
					04/05/2017	ND	0.49	4.9
					07/06/2017	2.4 DNQ	0.49	4.9
					10/04/2017	ND	2.4	4.9
					Annual Mean	1.4 DNQ		
	Copper	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	440	0.70	2.9
					01/11/2017	400	0.72	3.0
					02/01/2017	380	0.64	2.7
					02/08/2017	490	2.4	14

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					03/01/2017	420	2.2	12
					03/08/2017	470	0.67	2.8
					04/05/2017	410	0.68	2.8
					04/12/2017	400	0.65	2.7
					05/03/2017	440	0.66	2.8
					05/10/2017	380	0.70	2.9
					06/07/2017	410	0.75	3.1
					06/14/2017	450	0.69	2.9
					07/06/2017	420	0.64	2.7
					07/12/2017	430	0.70	2.9
					08/02/2017	440	0.61	2.6
					08/09/2017	450	0.71	2.9
					09/06/2017	430	0.66	2.8
					09/13/2017	460	0.63	2.6
					10/04/2017	420	1.3	2.6
					10/24/2017	380	1.2	2.4
					11/01/2017	460	1.3	2.6
					11/28/2017	350	1.3	2.7
					12/07/2017	370	1.4	2.8
					12/21/2017	390	0.52	2.9
					Annual Mean	420		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	460	0.61	2.5
					01/11/2017	430	0.59	2.4
					02/02/2017	410	0.56	2.3
					02/08/2017	500	2.2	13
					03/01/2017	340	2.2	12
					03/08/2017	450	0.60	2.5
					04/05/2017	460	0.59	2.5
					04/12/2017	420	0.62	2.6
					05/03/2017	520	0.60	2.5
					05/10/2017	410	0.59	2.4
					06/07/2017	460	0.59	2.5
					06/14/2017	410	0.60	2.5
					07/06/2017	460	0.58	2.4
					07/12/2017	490	0.58	2.4
					08/02/2017	540	0.59	2.5
					08/09/2017	630	0.59	2.5
					09/06/2017	450	0.61	2.5
					09/13/2017	500	0.59	2.5
					10/04/2017	430	1.2	2.4
					10/24/2017	400	1.2	2.4
					11/02/2017	440	1.2	2.3
					11/28/2017	400	1.2	2.5
					12/07/2017	440	1.2	2.4
					12/21/2017	420	0.40	2.3
					Annual Mean	450		
	Iron	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	75000	2.9	35
					01/11/2017	63000	3.0	36
					02/01/2017	62000	2.7	32
					02/08/2017	78000	12	55
					03/01/2017	67000	11	51
					03/08/2017	76000	2.8	34
					04/05/2017	61000	2.8	34
					04/12/2017	62000	2.7	33
					05/03/2017	75000	2.8	33
					05/10/2017	62000	2.9	35
					06/07/2017	63000	3.1	37
					06/14/2017	65000	2.9	34
					07/06/2017	68000	2.7	32
					07/12/2017	62000	2.9	35
					08/02/2017	67000	2.6	31
					08/09/2017	65000	2.9	35

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					09/06/2017	61000	2.8	33
					09/13/2017	71000	2.6	31
					10/04/2017	56000	15	31
					10/24/2017	52000	14	29
					11/01/2017	68000	16	32
					11/28/2017	50000	16	32
					12/07/2017	51000	17	34
					12/21/2017	48000	2.6	12
					Annual Mean	64000		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	75000	2.5	31
					01/11/2017	67000	2.4	29
					02/02/2017	59000	2.3	28
					02/08/2017	73000	11	51
					03/01/2017	65000	11	49
					03/08/2017	67000	2.5	30
					04/05/2017	63000	2.5	29
					04/12/2017	57000	2.6	31
					05/03/2017	69000	2.5	30
					05/10/2017	58000	2.4	29
					06/07/2017	64000	2.5	29
					06/14/2017	58000	2.5	30
					07/06/2017	64000	2.4	29
					07/12/2017	65000	2.4	29
					08/02/2017	71000	2.5	29
					08/09/2017	82000	2.5	30
					09/06/2017	68000	2.5	30
					09/13/2017	73000	2.5	30
					10/04/2017	61000	15	29
					10/24/2017	59000	15	29
					11/02/2017	70000	14	28
					11/28/2017	63000	15	30
					12/07/2017	69000	14	29
					12/21/2017	70000	10	45
					Annual Mean	66000		
	Lead	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	10 DNQ	0.94	12
					01/11/2017	8.3 DNQ	0.96	12
					02/01/2017	11	0.85	11
					02/08/2017	14	0.75	5.5
					03/01/2017	13	0.69	5.1
					03/08/2017	13	0.90	11
					04/05/2017	10 DNQ	0.91	11
					04/12/2017	11	0.87	11
					05/03/2017	11	0.88	11
					05/10/2017	7.0 DNQ	0.93	12
					06/07/2017	9.4 DNQ	1.0	12
					06/14/2017	12	0.92	11
					07/06/2017	8.4 DNQ	0.85	11
					07/12/2017	12	0.93	12
					08/02/2017	11	0.82	10
					08/09/2017	10 DNQ	0.94	12
					09/06/2017	9.7 DNQ	0.88	11
					09/13/2017	13	0.84	10
					10/04/2017	11	5.1	10
					10/24/2017	10	4.8	9.7
					11/01/2017	10 DNQ	5.3	11
					11/28/2017	9.3 DNQ	5.4	11
					12/07/2017	11	5.7	11
					12/21/2017	12	0.16	1.2
					Annual Mean	11 DNQ		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	12	0.81	10
					01/11/2017	11	0.78	9.8
					02/02/2017	13	0.74	9.3

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					02/08/2017	16	0.70	5.1
					03/01/2017	13	0.67	4.9
					03/08/2017	11	0.79	9.9
					04/05/2017	11	0.78	9.8
					04/12/2017	10	0.83	10
					05/03/2017	13	0.80	10
					05/10/2017	9.3 DNQ	0.78	9.8
					06/07/2017	13	0.78	9.8
					06/14/2017	12	0.79	9.9
					07/06/2017	9.8	0.78	9.7
					07/12/2017	11	0.77	9.6
					08/02/2017	14	0.78	9.8
					08/09/2017	15	0.79	9.9
					09/06/2017	12	0.81	10
					09/13/2017	14	0.79	9.9
					10/04/2017	12	4.9	9.8
					10/24/2017	12	4.8	9.7
					11/02/2017	11	4.6	9.3
					11/28/2017	12	5.0	9.9
					12/07/2017	13	4.8	9.6
					12/21/2017	14	0.12	0.91
					Annual Mean	12 DNQ		
	Magnesium	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	5500	5.9	59
					01/11/2017	4300	6.0	60
					02/01/2017	4000	5.3	53
					02/08/2017	5100	18	140
					03/01/2017	4500	17	130
					03/08/2017	4700	5.6	56
					04/05/2017	4300	5.7	57
					04/12/2017	4400	5.4	54
					05/03/2017	5300	5.5	55
					05/10/2017	4400	5.8	58
					06/07/2017	5000	6.2	62
					06/14/2017	5300	5.7	57
					07/06/2017	6300	5.3	53
					07/12/2017	5800	5.8	58
					08/02/2017	6700	5.1	51
					08/09/2017	6300	5.9	59
					09/06/2017	5900	5.5	55
					09/13/2017	6900	5.2	52
					10/04/2017	5700	26	51
					10/24/2017	5700	24	48
					11/01/2017	7200	26	53
					11/28/2017	5600	27	54
					12/07/2017	6000	28	57
					12/21/2017	6500	3.9	29
					Annual Mean	5500		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	6800	5.1	51
					01/11/2017	6600	4.9	49
					02/02/2017	6500	4.6	46
					02/08/2017	8000	17	130
					03/01/2017	7400	16	120
					03/08/2017	6900	5.0	50
					04/05/2017	6600	4.9	49
					04/12/2017	6100	5.2	52
					05/03/2017	7200	5.0	50
					05/10/2017	5900	4.9	49
					06/07/2017	7000	4.9	49
					06/14/2017	6500	5.0	50
					07/06/2017	8600	4.9	49
					07/12/2017	8600	4.8	48
					08/02/2017	8700	4.9	49

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					08/09/2017	8900	4.9	49
					09/06/2017	6700	5.0	50
					09/13/2017	7100	4.9	49
					10/04/2017	6500	24	49
					10/24/2017	6300	24	48
					11/02/2017	7700	23	46
					11/28/2017	6800	25	50
					12/07/2017	7200	24	48
					12/21/2017	6800	3.1	23
					Annual Mean	7100		
	Mercury	EPA 7471A	mg/kg dry weight	Plant 1 Cake	01/04/2017	0.88	0.071	0.12
					01/11/2017	1.1	0.071	0.12
					02/01/2017	1.3	0.064	0.11
					02/08/2017	0.99	0.066	0.11
					03/01/2017	0.65	0.060	0.10
					03/08/2017	0.73	0.066	0.11
					04/05/2017	2.0	0.068	0.11
					04/12/2017	0.72	0.067	0.11
					05/03/2017	1.2	0.065	0.11
					05/10/2017	1.2	0.14	0.23
					06/07/2017	0.69	0.075	0.12
					06/14/2017	0.63	0.069	0.12
					07/06/2017	0.74	0.064	0.11
					07/12/2017	1.1	0.068	0.11
					08/02/2017	0.92	0.062	0.10
					08/09/2017	0.64	0.070	0.12
					09/06/2017	0.97	0.067	0.11
					09/13/2017	1.0	0.062	0.10
					10/04/2017	1.3	0.060	0.10
					10/24/2017	0.80	0.058	0.097
					11/01/2017	0.64	0.064	0.11
					11/28/2017	0.86	0.32	0.53
					12/07/2017	0.74	0.067	0.11
					12/21/2017	0.73	0.071	0.12
					Annual Mean	0.94		
		EPA 7471A	mg/kg dry weight	Plant 2 Cake	01/04/2017	1.0	0.060	0.10
					01/11/2017	0.52	0.059	0.098
					02/02/2017	0.76	0.055	0.091
					02/08/2017	0.67	0.060	0.10
					03/01/2017	0.75	0.059	0.098
					03/08/2017	0.72	0.060	0.099
					04/05/2017	0.53	0.059	0.098
					04/12/2017	0.73	0.061	0.10
					05/03/2017	0.68	0.059	0.098
					05/10/2017	0.61	0.12	0.20
					06/07/2017	0.84	0.059	0.098
					06/14/2017	0.68	0.060	0.099
					07/06/2017	0.82	0.057	0.095
					07/12/2017	0.70	0.057	0.095
					08/02/2017	0.73	0.058	0.096
					08/09/2017	1.1	0.061	0.10
					09/06/2017	0.91	0.061	0.10
					09/13/2017	1.2	0.061	0.10
					10/04/2017	0.91	0.059	0.098
					10/24/2017	0.71	0.057	0.095
					11/02/2017	0.80	0.056	0.093
					11/28/2017	0.76	0.29	0.49
					12/07/2017	ND	0.057	0.094
					12/21/2017	0.63	0.054	0.090
					Annual Mean	0.74 DNQ		
	Molybdenum	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	14	0.47	5.9
					01/11/2017	14	0.48	6.0

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					02/01/2017	14	0.43	5.3
					02/08/2017	18	0.31	11
					03/01/2017	16	0.29	10
					03/08/2017	15	0.45	5.6
					04/05/2017	12	0.45	5.7
					04/12/2017	15	0.43	5.4
					05/03/2017	15	0.44	5.5
					05/10/2017	14	0.47	5.8
					06/07/2017	14	0.50	6.2
					06/14/2017	15	0.46	5.7
					07/06/2017	15	0.43	5.3
					07/12/2017	13	0.47	5.8
					08/02/2017	14	0.41	5.1
					08/09/2017	15	0.47	5.9
					09/06/2017	14	0.44	5.5
					09/13/2017	15	0.42	5.2
					10/04/2017	14	2.6	5.1
					10/24/2017	13	2.4	4.8
					11/01/2017	16	2.6	5.3
					11/28/2017	15	2.7	5.4
					12/07/2017	15	2.8	5.7
					12/21/2017	12	0.067	2.4
					Annual Mean	14		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	14	0.41	5.1
					01/11/2017	13	0.39	4.9
					02/02/2017	13	0.37	4.6
					02/08/2017	17	0.29	10
					03/01/2017	17	0.28	9.8
					03/08/2017	15	0.40	5.0
					04/05/2017	16	0.39	4.9
					04/12/2017	13	0.41	5.2
					05/03/2017	15	0.40	5.0
					05/10/2017	13	0.39	4.9
					06/07/2017	14	0.39	4.9
					06/14/2017	13	0.40	5.0
					07/06/2017	14	0.39	4.9
					07/12/2017	15	0.38	4.8
					08/02/2017	17	0.39	4.9
					08/09/2017	19	0.39	4.9
					09/06/2017	14	0.40	5.0
					09/13/2017	16	0.40	4.9
					10/04/2017	14	2.4	4.9
					10/24/2017	14	2.4	4.8
					11/02/2017	15	2.3	4.6
					11/28/2017	15	2.5	5.0
					12/07/2017	16	2.4	4.8
					12/21/2017	13	0.052	1.8
					Annual Mean	15		
	Nickel	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	28	0.47	12
					01/11/2017	28	0.48	12
					02/01/2017	29	0.43	11
					02/08/2017	41	0.99	11
					03/01/2017	40	0.91	10
					03/08/2017	37	0.45	11
					04/05/2017	31	0.45	11
					04/12/2017	29	0.43	11
					05/03/2017	24	0.44	11
					05/10/2017	25	0.47	12
					06/07/2017	32	0.50	12
					06/14/2017	32	0.46	11
					07/06/2017	34	0.43	11
					07/12/2017	33	0.47	12

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					08/02/2017	32	0.41	10
					08/09/2017	35	0.47	12
					09/06/2017	32	0.44	11
					09/13/2017	32	0.42	10
					10/04/2017	31	5.1	10
					10/24/2017	25	4.8	9.7
					11/01/2017	32	5.3	11
					11/28/2017	28	5.4	11
					12/07/2017	26	5.7	11
					12/21/2017	29	0.21	2.4
					Annual Mean	31		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	24	0.41	10
					01/11/2017	26	0.39	9.8
					02/02/2017	24	0.37	9.3
					02/08/2017	32	0.91	10
					03/01/2017	39	0.88	9.8
					03/08/2017	29	0.40	9.9
					04/05/2017	31	0.39	9.8
					04/12/2017	29	0.41	10
					05/03/2017	27	0.40	10
					05/10/2017	24	0.39	9.8
					06/07/2017	35	0.39	9.8
					06/14/2017	32	0.40	9.9
					07/06/2017	34	0.39	9.7
					07/12/2017	31	0.38	9.6
					08/02/2017	35	0.39	9.8
					08/09/2017	41	0.39	9.9
					09/06/2017	35	0.40	10
					09/13/2017	37	0.40	9.9
					10/04/2017	32	4.9	9.8
					10/24/2017	29	4.8	9.7
					11/02/2017	34	4.6	9.3
					11/28/2017	30	5.0	9.9
					12/07/2017	33	4.8	9.6
					12/21/2017	34	0.16	1.8
					Annual Mean	32		
	Potassium	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	1100	35	290
					Annual Mean	1100		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	1100	31	250
					Annual Mean	1100		
	Selenium	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	4.9	1.9	2.9
					01/11/2017	4.4	1.9	3.0
					02/01/2017	8.1	1.7	2.7
					02/08/2017	ND	3.1	27
					03/01/2017	ND	2.8	25
					03/08/2017	12	1.8	2.8
					04/05/2017	5.8	1.8	2.8
					04/12/2017	5.9	1.7	2.7
					05/03/2017	12	1.8	2.8
					05/10/2017	9.0	1.9	2.9
					06/07/2017	6.0	2.0	3.1
					06/14/2017	8.0	1.8	2.9
					07/06/2017	6.5	1.7	2.7
					07/12/2017	5.9	1.9	2.9
					08/02/2017	5.7	1.6	2.6
					08/09/2017	5.9	1.9	2.9
					09/06/2017	7.8	1.8	2.8
					09/13/2017	7.4	1.7	2.6
					10/04/2017	5.1	2.6	5.1
					10/24/2017	6.8	2.4	4.8
					11/01/2017	9.6	2.6	5.3
					11/28/2017	6.0	2.7	5.4

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					12/07/2017	5.3 DNQ	2.8	5.7
					12/21/2017	ND	0.66	5.9
					Annual Mean	6.4 DNQ		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	4.5	1.6	2.5
					01/11/2017	1.6 DNQ	1.6	2.4
					02/02/2017	4.9	1.5	2.3
					02/08/2017	ND	2.8	25
					03/01/2017	ND	2.8	25
					03/08/2017	8.2	1.6	2.5
					04/05/2017	5.2	1.6	2.5
					04/12/2017	5.3	1.7	2.6
					05/03/2017	6.5	1.6	2.5
					05/10/2017	8.2	1.6	2.4
					06/07/2017	7.0	1.6	2.5
					06/14/2017	8.9	1.6	2.5
					07/06/2017	6.0	1.6	2.4
					07/12/2017	9.7	1.5	2.4
					08/02/2017	5.9	1.6	2.5
					08/09/2017	5.5	1.6	2.5
					09/06/2017	7.9	1.6	2.5
					09/13/2017	7.5	1.6	2.5
					10/04/2017	5.3	2.4	4.9
					10/24/2017	5.9	2.4	4.8
					11/02/2017	8.9	2.3	4.6
					11/28/2017	5.1	2.5	5.0
					12/07/2017	6.6	2.4	4.8
					12/21/2017	ND	0.51	4.6
					Annual Mean	5.9 DNQ		
	Silver	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	5.7	1.5	1.8
					01/11/2017	5.1	1.5	1.8
					02/01/2017	5.4	1.3	1.6
					02/08/2017	4.7 DNQ	0.78	14
					03/01/2017	4.2 DNQ	0.71	13
					03/08/2017	4.8	1.4	1.7
					04/05/2017	4.2	1.4	1.7
					04/12/2017	4.2	1.4	1.6
					05/03/2017	4.4	1.4	1.7
					05/10/2017	4.8	1.5	1.8
					06/07/2017	3.7	1.6	1.9
					06/14/2017	3.5	1.4	1.7
					07/06/2017	3.7	1.3	1.6
					10/04/2017	4.1	0.77	1.5
					10/24/2017	3.8	0.72	1.4
					11/28/2017	3.7	0.80	1.6
					12/07/2017	3.8	0.85	1.7
					12/21/2017	2.9	0.17	2.9
					Annual Mean	4.3 DNQ		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	5.2	1.3	1.5
					01/11/2017	4.8	1.2	1.5
					02/02/2017	5.5	1.2	1.4
					02/08/2017	5.0 DNQ	0.72	13
					03/01/2017	4.6 DNQ	0.69	12
					03/08/2017	5.0	1.2	1.5
					04/05/2017	5.2	1.2	1.5
					04/12/2017	5.3	1.3	1.5
					05/03/2017	5.2	1.2	1.5
					05/10/2017	5.5	1.2	1.5
					06/07/2017	4.7	1.2	1.5
					06/14/2017	3.6	1.2	1.5
					07/06/2017	4.1	1.2	1.5
					10/04/2017	4.4	0.73	1.5
					10/24/2017	4.2	0.73	1.5

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					11/28/2017	4.2	0.74	1.5
					12/07/2017	4.5	0.72	1.4
					12/21/2017	3.5	0.13	2.3
					Annual Mean	4.7 DNQ		
	Thallium	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	ND	1.2	18
					04/05/2017	ND	1.1	17
					07/06/2017	ND	1.1	16
					10/04/2017	ND	7.7	15
					Annual Mean	<7.7		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	ND	1.0	15
					04/05/2017	ND	0.98	15
					07/06/2017	ND	0.97	15
					10/04/2017	ND	7.3	15
					Annual Mean	<7.3		
	Total Phosphorus	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	28000	47	94
					Annual Mean	28000		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	26000	41	81
					Annual Mean	26000		
	Vanadium	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	27	0.59	5.9
					04/05/2017	23	0.57	5.7
					07/06/2017	24	0.53	5.3
					10/04/2017	20	2.6	5.1
					Annual Mean	24		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	53	0.51	5.1
					04/05/2017	44	0.49	4.9
					07/06/2017	53	0.49	4.9
					10/04/2017	51	2.4	4.9
					Annual Mean	50		
	Zinc	EPA 6010B	mg/kg dry weight	Plant 1 Cake	01/04/2017	670	1.4	4.7
					01/11/2017	600	1.4	4.8
					02/01/2017	560	1.3	4.3
					02/08/2017	730	9.5	27
					03/01/2017	680	8.7	25
					03/08/2017	680	1.3	4.5
					04/05/2017	580	1.4	4.5
					04/12/2017	580	1.3	4.3
					05/03/2017	630	1.3	4.4
					05/10/2017	550	1.4	4.7
					06/07/2017	600	1.5	5.0
					06/14/2017	600	1.4	4.6
					07/06/2017	640	1.3	4.3
					07/12/2017	650	1.4	4.7
					08/02/2017	670	1.2	4.1
					08/09/2017	660	1.4	4.7
					09/06/2017	660	1.3	4.4
					09/13/2017	690	1.3	4.2
					10/04/2017	630	3.8	7.7
					10/24/2017	590	3.6	7.2
					11/01/2017	720	4.0	7.9
					11/28/2017	550	4.0	8.0
					12/07/2017	540	4.3	8.5
					12/21/2017	490	2.0	5.9
					Annual Mean	620		
		EPA 6010B	mg/kg dry weight	Plant 2 Cake	01/04/2017	760	1.2	4.1
					01/11/2017	720	1.2	3.9
					02/02/2017	640	1.1	3.7
					02/08/2017	800	8.8	25
					03/01/2017	1000	8.5	25
					03/08/2017	700	1.2	4.0
					04/05/2017	730	1.2	3.9
					04/12/2017	680	1.2	4.1
					05/03/2017	840	1.2	4.0

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					05/10/2017	680	1.2	3.9
					06/07/2017	730	1.2	3.9
					06/14/2017	660	1.2	4.0
					07/06/2017	750	1.2	3.9
					07/12/2017	710	1.2	3.8
					08/02/2017	860	1.2	3.9
					08/09/2017	960	1.2	3.9
					09/06/2017	750	1.2	4.0
					09/13/2017	810	1.2	4.0
					10/04/2017	700	3.7	7.3
					10/24/2017	700	3.6	7.3
					11/02/2017	750	3.5	7.0
					11/28/2017	690	3.7	7.4
					12/07/2017	730	3.6	7.2
					12/21/2017	580	1.6	4.6
					Annual Mean	750		
TCLP - Trace Elements								
	Arsenic	EPA 6010B-TCLP	mg/L	Plant 1 Cake	01/04/2017	ND	0.070	0.20
					Annual Mean	<0.070		
		EPA 6010B-TCLP	mg/L	Plant 2 Cake	01/04/2017	ND	0.070	0.20
					Annual Mean	<0.070		
	Barium	EPA 6010B-TCLP	mg/L	Plant 1 Cake	01/04/2017	0.17 DNQ	0.060	0.20
					Annual Mean	0.17 DNQ		
		EPA 6010B-TCLP	mg/L	Plant 2 Cake	01/04/2017	0.27	0.060	0.20
					Annual Mean	0.27		
	Cadmium	EPA 6010B-TCLP	mg/L	Plant 1 Cake	01/04/2017	ND	0.020	0.10
					Annual Mean	<0.020		
		EPA 6010B-TCLP	mg/L	Plant 2 Cake	01/04/2017	ND	0.020	0.10
					Annual Mean	<0.020		
	Chromium	EPA 6010B-TCLP	mg/L	Plant 1 Cake	01/04/2017	ND	0.020	0.10
					Annual Mean	<0.020		
		EPA 6010B-TCLP	mg/L	Plant 2 Cake	01/04/2017	ND	0.020	0.10
					Annual Mean	<0.020		
	Lead	EPA 6010B-TCLP	mg/L	Plant 1 Cake	01/04/2017	ND	0.040	0.10
					Annual Mean	<0.040		
		EPA 6010B-TCLP	mg/L	Plant 2 Cake	01/04/2017	ND	0.040	0.10
					Annual Mean	<0.040		
	Mercury	EPA 7470A-TCLP	mg/L	Plant 1 Cake	01/04/2017	ND	0.0010	0.0020
					Annual Mean	<0.0010		
		EPA 7470A-TCLP	mg/L	Plant 2 Cake	01/04/2017	ND	0.0010	0.0020
					Annual Mean	<0.0010		
	Selenium	EPA 6010B-TCLP	mg/L	Plant 1 Cake	01/04/2017	ND	0.080	0.10
					Annual Mean	<0.080		
		EPA 6010B-TCLP	mg/L	Plant 2 Cake	01/04/2017	ND	0.080	0.10
					Annual Mean	<0.080		
	Silver	EPA 6010B-TCLP	mg/L	Plant 1 Cake	01/04/2017	ND	0.060	0.20
					Annual Mean	<0.060		
		EPA 6010B-TCLP	mg/L	Plant 2 Cake	01/04/2017	ND	0.060	0.20
					Annual Mean	<0.060		
STLC - Trace Elements								
	Antimony	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.14	0.20
					Annual Mean	<0.14		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.14	0.20
					Annual Mean	<0.14		
	Arsenic	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.13	0.20
					Annual Mean	<0.13		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.13	0.20
					Annual Mean	<0.13		
	Barium	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	7.2	0.12	0.20
					Annual Mean	7.2		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	18	0.12	0.20
					Annual Mean	18		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Beryllium	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.080
					Annual Mean	<0.018		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.080
					Annual Mean	<0.018		
	Cadmium	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.040	0.10
					Annual Mean	<0.040		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.040	0.10
					Annual Mean	<0.040		
	Chromium	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	0.44	0.040	0.10
					Annual Mean	0.44		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	0.55	0.040	0.10
					Annual Mean	0.55		
	Cobalt	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.040	0.20
					Annual Mean	<0.040		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.040	0.20
					Annual Mean	<0.040		
	Copper	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.060	0.20
					Annual Mean	<0.060		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.060	0.20
					Annual Mean	<0.060		
	Lead	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.080	0.10
					Annual Mean	<0.080		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.080	0.10
					Annual Mean	<0.080		
	Mercury	EPA 7470A-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.0010	0.0020
					Annual Mean	<0.0010		
		EPA 7470A-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.0010	0.0020
					Annual Mean	<0.0010		
	Molybdenum	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	0.15 DNQ	0.040	0.40
					Annual Mean	0.15 DNQ		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	0.060 DNQ	0.040	0.40
					Annual Mean	0.060 DNQ		
	Nickel	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	0.35	0.040	0.20
					Annual Mean	0.35		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	0.31	0.040	0.20
					Annual Mean	0.31		
	Selenium	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.16	0.20
					Annual Mean	<0.16		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.16	0.20
					Annual Mean	<0.16		
	Silver	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.12	0.20
					Annual Mean	<0.12		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.12	0.20
					Annual Mean	<0.12		
	Thallium	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	ND	0.16	0.20
					Annual Mean	<0.16		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	ND	0.16	0.20
					Annual Mean	<0.16		
	Vanadium	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	0.48	0.060	0.20
					Annual Mean	0.48		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	0.94	0.060	0.20
					Annual Mean	0.94		
	Zinc	EPA 6010B-STLC	mg/L	Plant 1 Cake	01/04/2017	6.2	0.18	0.40
					Annual Mean	6.2		
		EPA 6010B-STLC	mg/L	Plant 2 Cake	01/04/2017	2.9	0.18	0.40
					Annual Mean	2.9		
Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	1,1,1-Trichloroethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,1,2,2-Tetrachloroethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,1,2-Trichloroethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,1-Dichloroethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,1-Dichloroethene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	1,1-Dichloropropene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,2,3-Trichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	1,2,3-Trichloropropane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	280
					04/05/2017	ND	1100	5700
					07/06/2017	ND	25	250
					10/04/2017	ND	24	240
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	250
					04/05/2017	ND	980	4900
					07/06/2017	ND	24	240
					10/04/2017	ND	23	230
					Annual Mean	<980		
	1,2,4-Trichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	1,2,4-Trimethylbenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	28 DNQ	25	51
					10/04/2017	ND	24	49
					Annual Mean	160 DNQ		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	27 DNQ	25	49
					04/05/2017	ND	490	980
					07/06/2017	24 DNQ	24	48
					10/04/2017	ND	23	47
					Annual Mean	140 DNQ		
	1,2-Dibromo-3-chloropropane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	57	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	51	130
					10/04/2017	ND	49	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	49	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	48	120
					10/04/2017	ND	47	120
					Annual Mean	<980		
	1,2-Dibromoethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					Annual Mean	<490		
	1,2-Dichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,2-Dichloroethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,2-Dichloropropane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,3,5-Trichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	1100	2300
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	980	2000
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<980		
	1,3,5-Trimethylbenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,3-Dichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,3-Dichloropropane	EPA 8260B	µg/kg dry	Plant 1	01/04/2017	ND	28	57

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
				Cake	04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	1,4-Dichlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	2,2-Dichloropropane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	1100	2300
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	980	2000
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<980		
	2-Chlorotoluene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	2-Hexanone	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	140	710
					04/05/2017	ND	5700	14000
					10/04/2017	ND	120	610
					Annual Mean	<5700		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	120	610
					04/05/2017	ND	4900	12000
					10/04/2017	ND	120	580
					Annual Mean	<4900		
	4-Chlorotoluene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	570	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	490	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<490		
	Acrolein	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	280	2800
					04/05/2017	ND	23000	57000
					07/06/2017	ND	250	2500
					10/04/2017	ND	240	2400
					Annual Mean	<23000		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	250	2500
					04/05/2017	ND	20000	49000
					07/06/2017	ND	240	2400
					10/04/2017	ND	230	2300
					Annual Mean	<20000		
	Acrylonitrile	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	570	2800
					04/05/2017	ND	11000	57000
					07/06/2017	ND	510	2500
					10/04/2017	ND	490	2400
					Annual Mean	<11000		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	490	2500
					04/05/2017	ND	9800	49000
					07/06/2017	ND	480	2400
					10/04/2017	ND	470	2300
					Annual Mean	<9800		
	Benzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Bromobenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	Bromochloromethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	Bromodichloromethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Bromoform	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	57	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	51	130
					10/04/2017	ND	49	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	49	120
					04/05/2017	ND	980	2400

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					07/06/2017	ND	48	120
					10/04/2017	ND	47	120
					Annual Mean	<980		
	Bromomethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	Carbon tetrachloride	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	Chlorobenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Chloroethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	57	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	51	130
					10/04/2017	ND	49	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	49	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	48	120
					10/04/2017	ND	47	120
					Annual Mean	<980		
	Chloroform	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Chloromethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					Annual Mean	<980		
	cis-1,2-Dichloroethene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	cis-1,3-Dichloropropene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Dibromochloromethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Dibromomethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Dichlorodifluoromethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	57	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	51	130
					10/04/2017	ND	49	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	49	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	48	120
					10/04/2017	ND	47	120
					Annual Mean	<980		
	Ethylbenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Hexachlorobutadien	EPA 8260B	µg/kg dry	Plant 1	01/04/2017	ND	28	140

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	e			Cake	04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	Isobutyl alcohol	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	710	1400
					04/05/2017	ND	28000	57000
					07/06/2017	ND	640	1300
					10/04/2017	ND	610	1200
					Annual Mean	<28000		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	610	1200
					04/05/2017	ND	24000	49000
					07/06/2017	ND	600	1200
					10/04/2017	ND	580	1200
					Annual Mean	<24000		
	Isopropylbenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	m,p-Xylenes	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	57	110
					04/05/2017	ND	1100	2300
					07/06/2017	ND	51	100
					10/04/2017	ND	49	98
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	49	98
					04/05/2017	ND	980	2000
					07/06/2017	ND	48	96
					10/04/2017	ND	47	93
					Annual Mean	<980		
	Methyl ethyl ketone	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	3400	140	280
					04/05/2017	ND	5700	11000
					07/06/2017	2200	130	250
					10/04/2017	ND	120	240
					Annual Mean	2900 DNQ		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	230 DNQ	120	250
					04/05/2017	ND	4900	9800
					07/06/2017	3400	120	240
					10/04/2017	1600	120	230
					Annual Mean	2500 DNQ		
	Methylene Chloride	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	140	570
					04/05/2017	ND	5700	11000
					07/06/2017	180 DNQ	130	510
					10/04/2017	ND	120	490
					Annual Mean	1500 DNQ		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	120	490
					04/05/2017	ND	4900	9800
					07/06/2017	310 DNQ	120	480
					10/04/2017	ND	120	470
					Annual Mean	1400 DNQ		
	MIBK	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	71	140
					04/05/2017	ND	2300	5700
					07/06/2017	ND	64	130

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					10/04/2017	ND	61	120
					Annual Mean	<2300		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	61	120
					04/05/2017	ND	2000	4900
					07/06/2017	ND	60	120
					10/04/2017	ND	58	120
					Annual Mean	<2000		
	Naphthalene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	57	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	51	130
					10/04/2017	ND	49	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	49	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	48	120
					10/04/2017	ND	47	120
					Annual Mean	<980		
	n-Butylbenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	31 DNQ	23	120
					Annual Mean	260 DNQ		
	n-Propylbenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	o-Xylene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	sec-Butylbenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	570	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	490	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<490		
	Styrene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	tert-Butylbenzene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	Tetrachloroethene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Toluene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	30 DNQ	28	57
					04/05/2017	ND	570	1100
					07/06/2017	88	25	51
					10/04/2017	ND	24	49
					Annual Mean	180 DNQ		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	25 DNQ	23	47
					Annual Mean	140 DNQ		
	trans-1,2-Dichloroethene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	trans-1,3-Dichloropropene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Trichloroethene	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	57
					04/05/2017	ND	570	1100
					07/06/2017	ND	25	51
					10/04/2017	ND	24	49
					Annual Mean	<570		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	49
					04/05/2017	ND	490	980

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					07/06/2017	ND	24	48
					10/04/2017	ND	23	47
					Annual Mean	<490		
	Trichlorofluoromethane	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
	Vinyl chloride	EPA 8260B	µg/kg dry	Plant 1 Cake	01/04/2017	ND	28	140
					04/05/2017	ND	1100	2800
					07/06/2017	ND	25	130
					10/04/2017	ND	24	120
					Annual Mean	<1100		
		EPA 8260B	µg/kg dry	Plant 2 Cake	01/04/2017	ND	25	120
					04/05/2017	ND	980	2400
					07/06/2017	ND	24	120
					10/04/2017	ND	23	120
					Annual Mean	<980		
TCLP - Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0027	0.050
					Annual Mean	<0.0027		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0027	0.050
					Annual Mean	<0.0027		
	1,1,1-Trichloroethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0030	0.020
					Annual Mean	<0.0030		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0030	0.020
					Annual Mean	<0.0030		
	1,1,2,2-Tetrachloroethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0024	0.020
					Annual Mean	<0.0024		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0024	0.020
					Annual Mean	<0.0024		
	1,1,2-Trichloroethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0030	0.020
					Annual Mean	<0.0030		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0030	0.020
					Annual Mean	<0.0030		
	1,1-Dichloroethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0027	0.020
					Annual Mean	<0.0027		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0027	0.020
					Annual Mean	<0.0027		
	1,1-Dichloroethene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0042	0.050
					Annual Mean	<0.0042		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0042	0.050
					Annual Mean	<0.0042		
	1,1-Dichloropropene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0028	0.020
					Annual Mean	<0.0028		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0028	0.020
					Annual Mean	<0.0028		
	1,2,3-Trichlorobenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	0.0032 DNQ	0.0030	0.050
					Annual Mean	0.0032 DNQ		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0030	0.050
					Annual Mean	<0.0030		
	1,2,3-Trichloropropane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0040	0.10
					Annual Mean	<0.0040		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0040	0.10
					Annual Mean	<0.0040		
	1,2,4-Trichlorobenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0048	0.050
					Annual Mean	<0.0048		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0048	0.050
					Annual Mean	<0.0048		
	1,2,4-Trimethylbenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0023	0.020
					Annual Mean	<0.0023		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0023	0.020
					Annual Mean	<0.0023		
	1,2-Dibromo-3-chloropropane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0097	0.050
					Annual Mean	<0.0097		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0097	0.050
					Annual Mean	<0.0097		
	1,2-Dibromoethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0040	0.020
					Annual Mean	<0.0040		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0040	0.020
					Annual Mean	<0.0040		
	1,2-Dichlorobenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0032	0.020
					Annual Mean	<0.0032		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0032	0.020
					Annual Mean	<0.0032		
	1,2-Dichloroethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0028	0.020
					Annual Mean	<0.0028		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0028	0.020
					Annual Mean	<0.0028		
	1,2-Dichloropropane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0035	0.020
					Annual Mean	<0.0035		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0035	0.020
					Annual Mean	<0.0035		
	1,3,5-Trichlorobenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0050	0.020
					Annual Mean	<0.0050		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0050	0.020
					Annual Mean	<0.0050		
	1,3,5-Trimethylbenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.026	0.020
					Annual Mean	<0.026		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.026	0.020
					Annual Mean	<0.026		
	1,3-Dichlorobenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0035	0.020
					Annual Mean	<0.0035		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0035	0.020
					Annual Mean	<0.0035		
	1,3-Dichloropropane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0032	0.020
					Annual Mean	<0.0032		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0032	0.020
					Annual Mean	<0.0032		
	1,4-Dichlorobenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0037	0.020
					Annual Mean	<0.0037		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0037	0.020
					Annual Mean	<0.0037		
	2,2-Dichloropropane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0034	0.020
					Annual Mean	<0.0034		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0034	0.020
					Annual Mean	<0.0034		
	2-Chlorotoluene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0028	0.050
					Annual Mean	<0.0028		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0028	0.050
					Annual Mean	<0.0028		
	4-Chlorotoluene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0029	0.050
					Annual Mean	<0.0029		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0029	0.050
					Annual Mean	<0.0029		
	Acetone	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	0.61	0.045	0.10
					Annual Mean	0.61		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	1.1	0.045	0.10
					Annual Mean	1.1		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Acrolein	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.040	0.50
					Annual Mean	<0.040		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.040	0.50
					Annual Mean	<0.040		
	Acrylonitrile	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.012	0.50
					Annual Mean	<0.012		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.012	0.50
					Annual Mean	<0.012		
	Benzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0028	0.020
					Annual Mean	<0.0028		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0028	0.020
					Annual Mean	<0.0028		
	Bromobenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0027	0.050
					Annual Mean	<0.0027		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0027	0.050
					Annual Mean	<0.0027		
	Bromochloromethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0040	0.050
					Annual Mean	<0.0040		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0040	0.050
					Annual Mean	<0.0040		
	Bromodichloromethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0030	0.020
					Annual Mean	<0.0030		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0030	0.020
					Annual Mean	<0.0030		
	Bromoform	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0040	0.050
					Annual Mean	<0.0040		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0040	0.050
					Annual Mean	<0.0040		
	Bromomethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0042	0.050
					Annual Mean	<0.0042		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0042	0.050
					Annual Mean	<0.0042		
	Carbon tetrachloride	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0028	0.050
					Annual Mean	<0.0028		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0028	0.050
					Annual Mean	<0.0028		
	Chlorobenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0036	0.020
					Annual Mean	<0.0036		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0036	0.020
					Annual Mean	<0.0036		
	Chloroethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0040	0.050
					Annual Mean	<0.0040		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0040	0.050
					Annual Mean	<0.0040		
	Chloroform	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0033	0.020
					Annual Mean	<0.0033		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0033	0.020
					Annual Mean	<0.0033		
	Chloromethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0040	0.050
					Annual Mean	<0.0040		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0040	0.050
					Annual Mean	<0.0040		
	cis-1,2-Dichloroethene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0032	0.020
					Annual Mean	<0.0032		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0032	0.020
					Annual Mean	<0.0032		
	cis-1,3-Dichloropropene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0022	0.020
					Annual Mean	<0.0022		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0022	0.020
					Annual Mean	<0.0022		
	Dibromochloromethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0040	0.020
					Annual Mean	<0.0040		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0040	0.020
					Annual Mean	<0.0040		
	Dibromomethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0036	0.020
					Annual Mean	<0.0036		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0036	0.020
					Annual Mean	<0.0036		
	Dichlorodifluoromethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0026	0.050
					Annual Mean	<0.0026		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0026	0.050
					Annual Mean	<0.0026		
	Ethylbenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0025	0.020
					Annual Mean	<0.0025		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0025	0.020
					Annual Mean	<0.0025		
	Hexachlorobutadiene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0038	0.050
					Annual Mean	<0.0038		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0038	0.050
					Annual Mean	<0.0038		
	Isobutyl alcohol	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.070	0.20
					Annual Mean	<0.070		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.070	0.20
					Annual Mean	<0.070		
	Isopropylbenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0025	0.020
					Annual Mean	<0.0025		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0025	0.020
					Annual Mean	<0.0025		
	m,p-Xylenes	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0060	0.020
					Annual Mean	<0.0060		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0060	0.020
					Annual Mean	<0.0060		
	Methyl ethyl ketone	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	0.054 DNQ	0.047	0.10
					Annual Mean	0.054 DNQ		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.047	0.10
					Annual Mean	<0.047		
	Methylene Chloride	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	0.012 DNQ	0.0095	0.050
					Annual Mean	0.012 DNQ		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	0.0095 DNQ	0.0095	0.050
					Annual Mean	0.0095 DNQ		
	MIBK	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.035	0.10
					Annual Mean	<0.035		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.035	0.10
					Annual Mean	<0.035		
	Naphthalene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	0.0058 DNQ	0.0041	0.050
					Annual Mean	0.0058 DNQ		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0041	0.050
					Annual Mean	<0.0041		
	n-Butylbenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0037	0.050
					Annual Mean	<0.0037		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0037	0.050
					Annual Mean	<0.0037		
	n-Propylbenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0027	0.020
					Annual Mean	<0.0027		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0027	0.020
					Annual Mean	<0.0027		
	o-Xylene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0030	0.020
					Annual Mean	<0.0030		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0030	0.020
					Annual Mean	<0.0030		
	sec-Butylbenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0025	0.050
					Annual Mean	<0.0025		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0025	0.050
					Annual Mean	<0.0025		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Styrene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0020	0.020
					Annual Mean	<0.0020		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0020	0.020
					Annual Mean	<0.0020		
	tert-Butylbenzene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0022	0.050
					Annual Mean	<0.0022		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0022	0.050
					Annual Mean	<0.0022		
	Tetrachloroethene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0032	0.020
					Annual Mean	<0.0032		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0032	0.020
					Annual Mean	<0.0032		
	Toluene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0036	0.020
					Annual Mean	<0.0036		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0036	0.020
					Annual Mean	<0.0036		
	trans-1,2-Dichloroethene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0030	0.020
					Annual Mean	<0.0030		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0030	0.020
					Annual Mean	<0.0030		
	trans-1,3-Dichloropropene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0032	0.020
					Annual Mean	<0.0032		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0032	0.020
					Annual Mean	<0.0032		
	Trichloroethene	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0026	0.020
					Annual Mean	<0.0026		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0026	0.020
					Annual Mean	<0.0026		
	Trichlorofluoromethane	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0034	0.050
					Annual Mean	<0.0034		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0034	0.050
					Annual Mean	<0.0034		
	Vinyl chloride	EPA 8260B	mg/L	Plant 1 Cake	01/04/2017	ND	0.0040	0.050
					Annual Mean	<0.0040		
		EPA 8260B	mg/L	Plant 2 Cake	01/04/2017	ND	0.0040	0.050
					Annual Mean	<0.0040		
Semi-Volatile Organic Compounds								
	1,2,4-Trichlorobenzene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	ND	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400
					Annual Mean	<13000		
	1,2-Dichlorobenzene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	1,3-Dichlorobenzene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	ND	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400
					Annual Mean	<13000		
	1,4-Dichlorobenzene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	ND	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400
					Annual Mean	<13000		
	2,4,5-Trichlorophenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6600	17000
					04/05/2017	ND	6900	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	990	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6400	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	12000	32000
					10/04/2017	ND	940	2400
					Annual Mean	<12000		
	2,4,6-Trichlorophenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3800	17000
					04/05/2017	ND	4000	17000
					07/06/2017	ND	8100	35000
					10/04/2017	ND	570	2500
					Annual Mean	<8100		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3700	16000
					04/05/2017	ND	6900	30000
					07/06/2017	ND	7200	32000
					10/04/2017	ND	540	2400
					Annual Mean	<7200		
	2,4-Dichlorophenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3400	17000
					04/05/2017	ND	3500	17000
					07/06/2017	ND	7200	35000
					10/04/2017	ND	510	2500
					Annual Mean	<7200		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3300	16000
					04/05/2017	ND	6100	30000
					07/06/2017	ND	6400	32000
					10/04/2017	ND	490	2400
					Annual Mean	<6400		
	2,4-Dimethylphenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6600	17000
					04/05/2017	ND	6900	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	990	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6400	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	12000	32000
					10/04/2017	ND	940	2400
					Annual Mean	<12000		
	2,4-Dinitrophenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	17000	34000
					04/05/2017	ND	17000	35000
					07/06/2017	ND	35000	71000
					10/04/2017	ND	2500	5000
					Annual Mean	<35000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	16000	33000
					04/05/2017	ND	30000	60000

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					07/06/2017	ND	32000	63000
					10/04/2017	ND	2400	4800
					Annual Mean	<32000		
	2,4-Dinitrotoluene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4100	17000
					04/05/2017	ND	4200	17000
					07/06/2017	ND	8600	35000
					10/04/2017	ND	610	2500
					Annual Mean	<8600		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4000	16000
					04/05/2017	ND	7300	30000
					07/06/2017	ND	7600	32000
					10/04/2017	ND	580	2400
					Annual Mean	<7600		
	2,6-Dinitrotoluene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4900	17000
					04/05/2017	ND	5000	17000
					07/06/2017	ND	10000	35000
					10/04/2017	ND	720	2500
					Annual Mean	<10000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4700	16000
					04/05/2017	ND	8700	30000
					07/06/2017	ND	9100	32000
					10/04/2017	ND	690	2400
					Annual Mean	<9100		
	2-Chloronaphthalene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3400	17000
					04/05/2017	ND	3500	17000
					07/06/2017	ND	7200	35000
					10/04/2017	ND	510	2500
					Annual Mean	<7200		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3300	16000
					04/05/2017	ND	6100	30000
					07/06/2017	ND	6400	32000
					10/04/2017	ND	490	2400
					Annual Mean	<6400		
	2-Chlorophenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	2-Methylnaphthalene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	2-Methylphenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4100	17000
					04/05/2017	ND	4200	17000
					07/06/2017	ND	8600	35000
					10/04/2017	ND	610	2500
					Annual Mean	<8600		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4000	16000
					04/05/2017	ND	7300	30000
					07/06/2017	ND	7600	32000
					10/04/2017	ND	580	2400

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					Annual Mean	<7600		
	2-Nitroaniline	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3400	17000
					04/05/2017	ND	3500	17000
					07/06/2017	ND	7200	35000
					10/04/2017	ND	510	2500
					Annual Mean	<7200		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3300	16000
					04/05/2017	ND	6100	30000
					07/06/2017	ND	6400	32000
					10/04/2017	ND	490	2400
					Annual Mean	<6400		
	2-Nitrophenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	ND	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400
					Annual Mean	<13000		
	3,3-Dichlorobenzidine	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	7700	42000
					04/05/2017	ND	7900	44000
					07/06/2017	ND	16000	89000
					10/04/2017	ND	1100	6300
					Annual Mean	<16000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	7400	41000
					04/05/2017	ND	14000	76000
					07/06/2017	ND	14000	79000
					10/04/2017	ND	1100	6000
					Annual Mean	<14000		
	3-Nitroaniline	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	ND	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400
					Annual Mean	<13000		
	4,6-Dinitro-2-methylphenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	21000
					04/05/2017	ND	7000	22000
					07/06/2017	ND	14000	45000
					10/04/2017	ND	1000	3200
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	21000
					04/05/2017	ND	12000	38000
					07/06/2017	ND	13000	40000
					10/04/2017	ND	970	3000
					Annual Mean	<13000		
	4-Bromophenyl phenyl ether	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3800	17000
					04/05/2017	ND	4000	17000
					07/06/2017	ND	8100	35000
					10/04/2017	ND	570	2500
					Annual Mean	<8100		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3700	16000
					04/05/2017	ND	6900	30000
					07/06/2017	ND	7200	32000
					10/04/2017	ND	540	2400
					Annual Mean	<7200		
	4-Chloro-3-	EPA 8270C	µg/kg dry	Plant 1	01/04/2017	ND	3600	17000

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	methylphenol			Cake	04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	4-Chloroaniline	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	ND	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400
					Annual Mean	<13000		
	4-Chlorophenyl phenyl ether	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4300	17000
					04/05/2017	ND	4500	17000
					07/06/2017	ND	9100	35000
					10/04/2017	ND	650	2500
					Annual Mean	<9100		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4200	16000
					04/05/2017	ND	7800	30000
					07/06/2017	ND	8100	32000
					10/04/2017	ND	620	2400
					Annual Mean	<8100		
	4-Methylphenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	8700 DNQ	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	7600 DNQ		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400
					Annual Mean	<13000		
	4-Nitroaniline	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	42000
					04/05/2017	ND	7000	44000
					07/06/2017	ND	14000	89000
					10/04/2017	ND	1000	6300
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	41000
					04/05/2017	ND	12000	76000
					07/06/2017	ND	13000	79000
					10/04/2017	ND	970	6000
					Annual Mean	<13000		
	4-Nitrophenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	7200	42000
					04/05/2017	ND	7400	44000
					07/06/2017	ND	15000	89000
					10/04/2017	ND	1100	6300
					Annual Mean	<15000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6900	41000
					04/05/2017	ND	13000	76000
					07/06/2017	ND	13000	79000
					10/04/2017	ND	1000	6000
					Annual Mean	<13000		
	Acenaphthene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3400	17000
					04/05/2017	ND	3500	17000
					07/06/2017	ND	7200	35000

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					10/04/2017	ND	510	2500
					Annual Mean	<7200		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3300	16000
					04/05/2017	ND	6100	30000
					07/06/2017	ND	6400	32000
					10/04/2017	ND	490	2400
					Annual Mean	<6400		
	Acenaphthylene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	Aniline	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4300	21000
					04/05/2017	ND	4500	22000
					07/06/2017	ND	9100	45000
					10/04/2017	ND	650	3200
					Annual Mean	<9100		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4200	21000
					04/05/2017	ND	7800	38000
					07/06/2017	ND	8100	40000
					10/04/2017	ND	620	3000
					Annual Mean	<8100		
	Anthracene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4100	17000
					04/05/2017	ND	4200	17000
					07/06/2017	ND	8600	35000
					10/04/2017	ND	610	2500
					Annual Mean	<8600		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4000	16000
					04/05/2017	ND	7300	30000
					07/06/2017	ND	7600	32000
					10/04/2017	ND	580	2400
					Annual Mean	<7600		
	Azobenzene/1,2-Diphenylhydrazine	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	Benz(a)anthracene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	Benzidine	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	34000	69000
					04/05/2017	ND	35000	71000
					07/06/2017	ND	71000	140000
					10/04/2017	ND	5000	10000
					Annual Mean	<71000		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	33000	66000
					04/05/2017	ND	60000	120000
					07/06/2017	ND	63000	130000
					10/04/2017	ND	4800	9700
					Annual Mean	<63000		
	Benzo(a)pyrene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3400	17000
					04/05/2017	ND	3500	17000
					07/06/2017	ND	7200	35000
					10/04/2017	ND	510	2500
					Annual Mean	<7200		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3300	16000
					04/05/2017	ND	6100	30000
					07/06/2017	ND	6400	32000
					10/04/2017	ND	490	2400
					Annual Mean	<6400		
	Benzo(b)fluoranthene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	Benzo(g,h,i)perylene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	5600	17000
					04/05/2017	ND	5800	17000
					07/06/2017	ND	12000	35000
					10/04/2017	ND	840	2500
					Annual Mean	<12000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	5500	16000
					04/05/2017	ND	10000	30000
					07/06/2017	ND	11000	32000
					10/04/2017	ND	800	2400
					Annual Mean	<11000		
	Benzo(k)fluoranthene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	Benzoic acid	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	17000	42000
					04/05/2017	ND	18000	44000
					07/06/2017	ND	36000	89000
					10/04/2017	ND	2600	6300
					Annual Mean	<36000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	17000	41000
					04/05/2017	ND	31000	76000
					07/06/2017	ND	32000	79000
					10/04/2017	ND	2500	6000
					Annual Mean	<32000		
	Benzyl alcohol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	7700	17000
					04/05/2017	ND	7900	17000
					07/06/2017	ND	16000	35000
					10/04/2017	ND	1100	2500
					Annual Mean	<16000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	7400	16000
					04/05/2017	ND	14000	30000

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					07/06/2017	ND	14000	32000
					10/04/2017	ND	1100	2400
					Annual Mean	<14000		
	Bis(2-chloroethoxy)methane	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	ND	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400
					Annual Mean	<13000		
	Bis(2-chloroethyl)ether	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	Bis(2-chloroisopropyl)ether	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	ND	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400
					Annual Mean	<13000		
	Bis(2-ethylhexyl)phthalate	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	45000	4600	17000
					04/05/2017	37000	4700	17000
					07/06/2017	45000	9700	35000
					10/04/2017	8900	680	2500
					Annual Mean	34000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	49000	4500	16000
					04/05/2017	47000	8200	30000
					07/06/2017	40000	8600	32000
					10/04/2017	14000	650	2400
					Annual Mean	38000		
	Butyl benzyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4100	17000
					04/05/2017	ND	4200	17000
					07/06/2017	ND	8600	35000
					10/04/2017	ND	610	2500
					Annual Mean	<8600		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4000	16000
					04/05/2017	ND	7300	30000
					07/06/2017	ND	7600	32000
					10/04/2017	ND	580	2400
					Annual Mean	<7600		
	Chrysene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3800	17000
					04/05/2017	ND	4000	17000
					07/06/2017	ND	8100	35000
					10/04/2017	ND	570	2500
					Annual Mean	<8100		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3700	16000
					04/05/2017	ND	6900	30000
					07/06/2017	ND	7200	32000
					10/04/2017	ND	540	2400

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					Annual Mean	<7200		
	Cresol	EPA 8270C	µg/kg dry	Plant 1 Cake	07/06/2017	ND	14000	35000
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	07/06/2017	ND	13000	32000
					Annual Mean	<13000		
	Dibenz(a,h)anthracene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	5100	21000
					04/05/2017	ND	5300	22000
					07/06/2017	ND	11000	45000
					10/04/2017	ND	760	3200
					Annual Mean	<11000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	5000	21000
					04/05/2017	ND	9200	38000
					07/06/2017	ND	9600	40000
					10/04/2017	ND	730	3000
					Annual Mean	<9600		
	Dibenzofuran	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3400	17000
					04/05/2017	ND	3500	17000
					07/06/2017	ND	7200	35000
					10/04/2017	ND	510	2500
					Annual Mean	<7200		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3300	16000
					04/05/2017	ND	6100	30000
					07/06/2017	ND	6400	32000
					10/04/2017	ND	490	2400
					Annual Mean	<6400		
	Diethyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4900	17000
					04/05/2017	ND	5000	17000
					07/06/2017	ND	10000	35000
					10/04/2017	ND	720	2500
					Annual Mean	<10000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4700	16000
					04/05/2017	ND	8700	30000
					07/06/2017	ND	9100	32000
					10/04/2017	ND	690	2400
					Annual Mean	<9100		
	Dimethyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3400	17000
					04/05/2017	ND	3500	17000
					07/06/2017	ND	7200	35000
					10/04/2017	ND	510	2500
					Annual Mean	<7200		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3300	16000
					04/05/2017	ND	6100	30000
					07/06/2017	ND	6400	32000
					10/04/2017	ND	490	2400
					Annual Mean	<6400		
	Di-n-butyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4600	17000
					04/05/2017	ND	4700	17000
					07/06/2017	ND	9700	35000
					10/04/2017	ND	680	2500
					Annual Mean	<9700		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4500	16000
					04/05/2017	ND	8200	30000
					07/06/2017	ND	8600	32000
					10/04/2017	ND	650	2400
					Annual Mean	<8600		
	Di-n-octyl phthalate	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4600	17000
					04/05/2017	ND	4700	17000
					07/06/2017	ND	9700	35000
					10/04/2017	ND	680	2500
					Annual Mean	<9700		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4500	16000
					04/05/2017	ND	8200	30000

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					07/06/2017	ND	8600	32000
					10/04/2017	ND	650	2400
					Annual Mean	<8600		
	Fluoranthene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	Fluorene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	Hexachlorobenzene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	Hexachlorobutadiene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	ND	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400
					Annual Mean	<13000		
	Hexachlorocyclopentadiene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	42000
					04/05/2017	ND	7000	44000
					07/06/2017	ND	14000	89000
					10/04/2017	ND	1000	6300
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	41000
					04/05/2017	ND	12000	76000
					07/06/2017	ND	13000	79000
					10/04/2017	ND	970	6000
					Annual Mean	<13000		
	Hexachloroethane	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6800	17000
					04/05/2017	ND	7000	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6600	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	970	2400

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					Annual Mean	<13000		
	Indeno(1,2,3-cd)pyrene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	6600	17000
					04/05/2017	ND	6900	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	990	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	6400	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	12000	32000
					10/04/2017	ND	940	2400
					Annual Mean	<12000		
	Isophorone	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3400	17000
					04/05/2017	ND	3500	17000
					07/06/2017	ND	7200	35000
					10/04/2017	ND	510	2500
					Annual Mean	<7200		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3300	16000
					04/05/2017	ND	6100	30000
					07/06/2017	ND	6400	32000
					10/04/2017	ND	490	2400
					Annual Mean	<6400		
	Kepone	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	51000	200000
					04/05/2017	ND	53000	210000
					07/06/2017	ND	110000	430000
					10/04/2017	ND	15000	61000
					Annual Mean	<110000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	50000	200000
					04/05/2017	ND	92000	370000
					07/06/2017	ND	96000	380000
					10/04/2017	ND	18000	73000
					Annual Mean	<96000		
	Naphthalene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3400	17000
					04/05/2017	ND	3500	17000
					07/06/2017	ND	7200	35000
					10/04/2017	ND	510	2500
					Annual Mean	<7200		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3300	16000
					04/05/2017	ND	6100	30000
					07/06/2017	ND	6400	32000
					10/04/2017	ND	490	2400
					Annual Mean	<6400		
	Nitrobenzene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	N-Nitrosodimethylamine	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3600	17000
					04/05/2017	ND	3700	17000
					07/06/2017	ND	7500	35000
					10/04/2017	ND	530	2500
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	16000
					04/05/2017	ND	6400	30000
					07/06/2017	ND	6700	32000
					10/04/2017	ND	510	2400
					Annual Mean	<6700		
	N-Nitroso-di-n-	EPA 8270C	µg/kg dry	Plant 1	01/04/2017	ND	3600	13000

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	propylamine			Cake	04/05/2017	ND	3700	13000
					07/06/2017	ND	7500	27000
					10/04/2017	ND	530	1900
					Annual Mean	<7500		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3500	12000
					04/05/2017	ND	6400	23000
					07/06/2017	ND	6700	24000
					10/04/2017	ND	510	1800
					Annual Mean	<6700		
	N-Nitrosodiphenylamine	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4100	17000
					04/05/2017	ND	4200	17000
					07/06/2017	ND	8600	35000
					10/04/2017	ND	610	2500
					Annual Mean	<8600		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4000	16000
					04/05/2017	ND	7300	30000
					07/06/2017	ND	7600	32000
					10/04/2017	ND	580	2400
					Annual Mean	<7600		
	Pentachlorophenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	17000	42000
					04/05/2017	ND	18000	44000
					07/06/2017	ND	36000	89000
					10/04/2017	ND	2600	6300
					Annual Mean	<36000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	17000	41000
					04/05/2017	ND	31000	76000
					07/06/2017	ND	32000	79000
					10/04/2017	ND	2500	6000
					Annual Mean	<32000		
	Phenanthrene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	3400	17000
					04/05/2017	ND	3500	17000
					07/06/2017	ND	7200	35000
					10/04/2017	ND	510	2500
					Annual Mean	<7200		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	3300	16000
					04/05/2017	ND	6100	30000
					07/06/2017	ND	6400	32000
					10/04/2017	ND	490	2400
					Annual Mean	<6400		
	Phenol	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4600	17000
					04/05/2017	ND	4700	17000
					07/06/2017	ND	9700	35000
					10/04/2017	ND	680	2500
					Annual Mean	<9700		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4500	16000
					04/05/2017	ND	8200	30000
					07/06/2017	ND	8600	32000
					10/04/2017	ND	650	2400
					Annual Mean	<8600		
	Pyrene	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	4100	17000
					04/05/2017	ND	7100	17000
					07/06/2017	ND	14000	35000
					10/04/2017	ND	1000	2500
					Annual Mean	<14000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	4000	16000
					04/05/2017	ND	12000	30000
					07/06/2017	ND	13000	32000
					10/04/2017	ND	980	2400
					Annual Mean	<13000		
	Pyridine	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	ND	7700	17000
					04/05/2017	ND	7900	18000
					07/06/2017	ND	16000	36000

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					10/04/2017	ND	1100	2600
					Annual Mean	<16000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	ND	7400	17000
					04/05/2017	ND	14000	31000
					07/06/2017	ND	14000	32000
					10/04/2017	ND	1100	2500
					Annual Mean	<14000		
TCLP - Semi-Volatile Organic Compounds								
	1,2,4-Trichlorobenzene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
	1,2-Dichlorobenzene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	1,3-Dichlorobenzene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	1,4-Dichlorobenzene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.013	0.050
					Annual Mean	<0.013		
	2,4,5-Trichlorophenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.10
					Annual Mean	<0.015		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.015	0.10
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.10
					Annual Mean	<0.015		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.015	0.10
					Annual Mean	<0.015		
	2,4,6-Trichlorophenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.023	0.10
					Annual Mean	<0.023		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.023	0.10
					Annual Mean	<0.023		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.023	0.10
					Annual Mean	<0.023		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.023	0.10
					Annual Mean	<0.023		
	2,4-Dichlorophenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
	2,4-Dimethylphenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.10
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.10
					Annual Mean	<0.018		
	2,4-Dinitrophenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.040	0.50
					Annual Mean	<0.040		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.040	0.50
					Annual Mean	<0.040		
	2,4-Dinitrotoluene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.018	0.050
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.018	0.050
					Annual Mean	<0.018		
	2,6-Dinitrotoluene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
	2-Chloronaphthalene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	2-Chlorophenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	2-Methylnaphthalene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
	2-Methylphenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	2-Nitroaniline	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.010	0.10
					Annual Mean	<0.010		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.010	0.10
					Annual Mean	<0.010		
	2-Nitrophenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
	3,3-Dichlorobenzidine	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.038	0.20
					Annual Mean	<0.038		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.038	0.20
					Annual Mean	<0.038		
	3-Nitroaniline	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.10
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.10
					Annual Mean	<0.015		
	4,6-Dinitro-2-methylphenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.020	0.20
					Annual Mean	<0.020		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.020	0.20
					Annual Mean	<0.020		
	4-Bromophenyl phenyl ether	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	4-Chloro-3-methylphenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.10
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.10
					Annual Mean	<0.013		
	4-Chloroaniline	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
	4-Chlorophenyl phenyl ether	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	4-Methylphenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	0.034 DNQ	0.015	0.050
					Annual Mean	0.034 DNQ		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	0.043 DNQ	0.015	0.050
					Annual Mean	0.043 DNQ		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	4-Nitroaniline	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.020	0.50
					Annual Mean	<0.020		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.020	0.50
					Annual Mean	<0.020		
	4-Nitrophenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.028	0.50
					Annual Mean	<0.028		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.028	0.50
					Annual Mean	<0.028		
	Acenaphthene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	Acenaphthylene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	Aniline	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
	Anthracene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
	Azobenzene/1,2-Diphenylhydrazine	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.10
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.10
					Annual Mean	<0.013		
	Benz(a)anthracene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
	Benzidine	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.050	0.50
					Annual Mean	<0.050		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.050	0.50
					Annual Mean	<0.050		
	Benzo(a)pyrene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	Benzo(b)fluoranthene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
	Benzo(g,h,i)perylene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.020	0.050
					Annual Mean	<0.020		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.020	0.050
					Annual Mean	<0.020		
	Benzo(k)fluoranthene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
	Benzoic acid	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	0.054 DNQ	0.050	0.50
					Annual Mean	0.054 DNQ		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.050	0.50
					Annual Mean	<0.050		
	Benzyl alcohol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.10
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.10
					Annual Mean	<0.018		
	Bis(2-chloroethoxy)methane	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	Bis(2-chloroethyl)ether	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	Bis(2-chloroisopropyl)ether	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
	Bis(2-ethylhexyl)phthalate	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.020	0.25
					Annual Mean	<0.020		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.020	0.25
					Annual Mean	<0.020		
	Butyl benzyl phthalate	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.020	0.10
					Annual Mean	<0.020		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.020	0.10
					Annual Mean	<0.020		
	Chrysene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
	Cresol	EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	0.043 DNQ	0.015	0.050
					Annual Mean	0.043 DNQ		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	Dibenz(a,h)anthracene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.10
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.10
					Annual Mean	<0.015		
	Dibenzofuran	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.020	0.050
					Annual Mean	<0.020		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.020	0.050
					Annual Mean	<0.020		
	Diethyl phthalate	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
	Dimethyl phthalate	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
	Di-n-butyl phthalate	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.10
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.10
					Annual Mean	<0.015		
	Di-n-octyl phthalate	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.20
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.20
					Annual Mean	<0.018		
	Fluoranthene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	Fluorene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	Hexachlorobenzene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	Hexachlorobutadiene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.020	0.050
					Annual Mean	<0.020		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.020	0.050
					Annual Mean	<0.020		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.020	0.050
					Annual Mean	<0.020		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.020	0.050
					Annual Mean	<0.020		
	Hexachlorocyclopentadiene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.025	0.20
					Annual Mean	<0.025		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.025	0.20
					Annual Mean	<0.025		
	Hexachloroethane	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.018	0.050
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.018	0.050
					Annual Mean	<0.018		
	Indeno(1,2,3-cd)pyrene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.10
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.10
					Annual Mean	<0.018		
	Isophorone	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	Kepone	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.035	0.10
					Annual Mean	<0.035		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.035	0.10
					Annual Mean	<0.035		
	Naphthalene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.050
					Annual Mean	<0.015		
	Nitrobenzene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.015	0.20
					Annual Mean	<0.015		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.015	0.20
					Annual Mean	<0.015		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.015	0.20
					Annual Mean	<0.015		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.015	0.20
					Annual Mean	<0.015		
	N-Nitrosodimethylamine	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.012	0.10
					Annual Mean	<0.012		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.012	0.10
					Annual Mean	<0.012		
	N-Nitroso-di-n-propylamine	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.10
					Annual Mean	<0.018		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.10
					Annual Mean	<0.018		
	N-Nitrosodiphenylamine	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
	Pentachlorophenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.20
					Annual Mean	<0.018		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.018	0.20
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.20
					Annual Mean	<0.018		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.018	0.20
					Annual Mean	<0.018		
	Phenanthrene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.018	0.050
					Annual Mean	<0.018		
	Phenol	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.010	0.050
					Annual Mean	<0.010		
	Pyrene	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.020	0.050
					Annual Mean	<0.020		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.020	0.050
					Annual Mean	<0.020		
	Pyridine	EPA 8270C	mg/L	Plant 1 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C	mg/L	Plant 2 Cake	01/04/2017	ND	0.013	0.050
					Annual Mean	<0.013		
		EPA 8270C-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.013	0.050
					Annual Mean	<0.013		
Organochlorine Pesticides								
	Aldrin	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	13	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	11	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	alpha-BHC	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	11	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	9.5	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	beta-BHC	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	33	85

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	29	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	Chlordane	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	280	1400
					04/05/2017	ND	280	1400
					07/06/2017	ND	390	1200
					Annual Mean	<390		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.23	1.1
					Annual Mean	<0.23		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	240	1200
					04/05/2017	ND	220	1100
					07/06/2017	ND	350	1100
					Annual Mean	<350		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.23	1.2
					Annual Mean	<0.23		
	delta-BHC	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	280
					04/05/2017	ND	43	280
					07/06/2017	ND	20	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.23
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	240
					04/05/2017	ND	33	220
					07/06/2017	ND	18	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.23
					Annual Mean	<0.035		
	Dieldrin	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	10	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	9.3	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	Endosulfan 1	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	8.8	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	7.8	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	Endosulfan 2	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	14	85
					Annual Mean	<43		
			mg/kg dry	Plant 1	10/24/2017	ND	0.034	0.11

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
			weight	Cake	Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	13	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	Endosulfan Sulfate	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	56	280
					04/05/2017	ND	57	280
					07/06/2017	ND	14	85
					Annual Mean	<57		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.046	0.23
					Annual Mean	<0.046		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	47	240
					04/05/2017	ND	44	220
					07/06/2017	ND	12	76
					Annual Mean	<47		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.047	0.23
					Annual Mean	<0.047		
	Endrin	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	15	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	14	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	Endrin Aldehyde	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	8.5	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	7.6	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	Endrin Ketone	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	56	140
					04/05/2017	ND	57	140
					07/06/2017	ND	24	85
					Annual Mean	<57		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.046	0.11
					Annual Mean	<0.046		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	47	120
					04/05/2017	ND	44	110
					07/06/2017	ND	22	76
					Annual Mean	<47		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.047	0.12
					Annual Mean	<0.047		
	gamma-BHC	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	23	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2	01/04/2017	ND	35	120

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
				Cake	04/05/2017	ND	33	110
					07/06/2017	ND	21	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	Heptachlor	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	56	140
					04/05/2017	ND	57	140
					07/06/2017	ND	11	85
					Annual Mean	<57		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.046	0.11
					Annual Mean	<0.046		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	47	120
					04/05/2017	ND	44	110
					07/06/2017	ND	9.5	76
					Annual Mean	<47		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.047	0.12
					Annual Mean	<0.047		
	Heptachlor Epoxide	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	56	140
					04/05/2017	ND	57	140
					07/06/2017	ND	21	85
					Annual Mean	<57		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.046	0.11
					Annual Mean	<0.046		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	47	120
					04/05/2017	ND	44	110
					07/06/2017	ND	19	76
					Annual Mean	<47		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.047	0.12
					Annual Mean	<0.047		
	Kepone	EPA 8081A	µg/kg dry	Plant 1 Cake	07/06/2017	ND	1200	3700
					10/24/2017	ND	12000	36000
					Annual Mean	<12000		
		EPA 8081A	µg/kg dry	Plant 2 Cake	07/06/2017	ND	1100	3300
					10/24/2017	ND	12000	36000
					Annual Mean	<12000		
	Methoxychlor	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	22	160
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	20	150
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	Mirex	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	280
					04/05/2017	ND	43	280
					07/06/2017	ND	13	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.23
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	240
					04/05/2017	ND	33	220
					07/06/2017	ND	12	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.23
					Annual Mean	<0.035		
	o,p'-DDD	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	9.0	85

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	8.0	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	o,p'-DDE	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	16	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	14	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	o,p'-DDT	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	13	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	12	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	p,p'-DDD	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	27	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	24	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	p,p'-DDE	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	12	85
					Annual Mean	<43		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	0.034	0.11
					Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	11	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	p,p'-DDT	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	42	140
					04/05/2017	ND	43	140
					07/06/2017	ND	29	85
					Annual Mean	<43		
			mg/kg dry	Plant 1	10/24/2017	ND	0.034	0.11

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
			weight	Cake	Annual Mean	<0.034		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	35	120
					04/05/2017	ND	33	110
					07/06/2017	ND	26	76
					Annual Mean	<35		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	0.035	0.12
					Annual Mean	<0.035		
	Total DDTs	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	--	--
					04/05/2017	ND	--	--
					07/06/2017	ND	--	--
					10/24/2017	ND	--	--
					Annual Mean	ND		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	--	--
					04/05/2017	ND	--	--
					07/06/2017	ND	--	--
					10/24/2017	ND	--	--
					Annual Mean	ND		
	Toxaphene	EPA 8081A	µg/kg dry	Plant 1 Cake	01/04/2017	ND	1400	5600
					04/05/2017	ND	1400	5700
					07/06/2017	ND	790	3300
					Annual Mean	<1400		
			mg/kg dry weight	Plant 1 Cake	10/24/2017	ND	1.1	4.6
					Annual Mean	<1.1		
		EPA 8081A	µg/kg dry	Plant 2 Cake	01/04/2017	ND	1200	4700
					04/05/2017	ND	1100	4400
					07/06/2017	ND	700	3000
					Annual Mean	<1200		
			mg/kg dry weight	Plant 2 Cake	10/24/2017	ND	1.2	4.7
					Annual Mean	<1.2		
TCLP - Organochlorine Pesticides								
	Chlordane	EPA 8081A-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.0010	0.0050
					Annual Mean	<0.0010		
		EPA 8081A-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.0010	0.0050
					Annual Mean	<0.0010		
	Endrin	EPA 8081A-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.00010	0.00050
					Annual Mean	<0.00010		
		EPA 8081A-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.00010	0.00050
					Annual Mean	<0.00010		
	gamma-BHC	EPA 8081A-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.00010	0.00050
					Annual Mean	<0.00010		
		EPA 8081A-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.00010	0.00050
					Annual Mean	<0.00010		
	Heptachlor	EPA 8081A-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.00020	0.00050
					Annual Mean	<0.00020		
		EPA 8081A-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.00020	0.00050
					Annual Mean	<0.00020		
	Heptachlor Epoxide	EPA 8081A-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.00020	0.00050
					Annual Mean	<0.00020		
		EPA 8081A-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.00020	0.00050
					Annual Mean	<0.00020		
	Methoxychlor	EPA 8081A-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.00010	0.00050
					Annual Mean	<0.00010		
		EPA 8081A-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.00010	0.00050
					Annual Mean	<0.00010		
	Toxaphene	EPA 8081A-TCLP	mg/L	Plant 1 Cake	07/06/2017	ND	0.0025	0.025
					Annual Mean	<0.0025		
		EPA 8081A-TCLP	mg/L	Plant 2 Cake	07/06/2017	ND	0.0025	0.025
					Annual Mean	<0.0025		
STLC - Organochlorine Pesticides								
	Aldrin	EPA 8081	µg/L	Plant 1 Cake	07/06/2017	ND	0.10	0.50
					Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.50	2.5

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
				Cake	Annual Mean	<0.50		
	Chlordane	EPA 8081	µg/L	Plant 1	07/06/2017	ND	1.0	5.0
				Cake	Annual Mean	<1.0		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	5.0	25
				Cake	Annual Mean	<5.0		
	Dieldrin	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.50	2.5
				Cake	Annual Mean	<0.50		
	Endrin	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.50	2.5
				Cake	Annual Mean	<0.50		
	gamma-BHC	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.50	2.5
				Cake	Annual Mean	<0.50		
	Heptachlor	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.15	0.50
				Cake	Annual Mean	<0.15		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.75	2.5
				Cake	Annual Mean	<0.75		
	Methoxychlor	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.50	2.5
				Cake	Annual Mean	<0.50		
	Mirex	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	1.0
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.50	5.0
				Cake	Annual Mean	<0.50		
	o,p'-DDD	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
	o,p'-DDE	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
	o,p'-DDT	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
	p,p'-DDD	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.50	2.5
				Cake	Annual Mean	<0.50		
	p,p'-DDE	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.50	2.5
				Cake	Annual Mean	<0.50		
	p,p'-DDT	EPA 8081	µg/L	Plant 1	07/06/2017	ND	0.10	0.50
				Cake	Annual Mean	<0.10		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	0.50	2.5
				Cake	Annual Mean	<0.50		
	Total DDTs	EPA 8081	µg/L	Plant 1	07/06/2017	ND	--	--
				Cake	Annual Mean	ND		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	--	--
				Cake	Annual Mean	ND		
	Toxaphene	EPA 8081	µg/L	Plant 1	07/06/2017	ND	2.5	25
				Cake	Annual Mean	<2.5		
		EPA 8081	µg/L	Plant 2	07/06/2017	ND	13	130
				Cake	Annual Mean	<13		
PCBs								

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	PCB 1016	EPA 8082	µg/kg dry	Plant 1 Cake	01/04/2017	ND	200	580
					04/05/2017	ND	450	1300
					07/06/2017	ND	420	1200
					10/04/2017	ND	870	2600
					Annual Mean	<870		
		EPA 8082	µg/kg dry	Plant 2 Cake	01/04/2017	ND	170	510
					04/05/2017	ND	420	1200
					07/06/2017	ND	400	1200
					10/04/2017	ND	790	2300
					Annual Mean	<790		
	PCB 1221	EPA 8082	µg/kg dry	Plant 1 Cake	01/04/2017	ND	200	580
					04/05/2017	ND	450	1300
					07/06/2017	ND	420	1200
					10/04/2017	ND	870	2600
					Annual Mean	<870		
		EPA 8082	µg/kg dry	Plant 2 Cake	01/04/2017	ND	170	510
					04/05/2017	ND	420	1200
					07/06/2017	ND	400	1200
					10/04/2017	ND	790	2300
					Annual Mean	<790		
	PCB 1232	EPA 8082	µg/kg dry	Plant 1 Cake	01/04/2017	ND	200	580
					04/05/2017	ND	450	1300
					07/06/2017	ND	420	1200
					10/04/2017	ND	870	2600
					Annual Mean	<870		
		EPA 8082	µg/kg dry	Plant 2 Cake	01/04/2017	ND	170	510
					04/05/2017	ND	420	1200
					07/06/2017	ND	400	1200
					10/04/2017	ND	790	2300
					Annual Mean	<790		
	PCB 1242	EPA 8082	µg/kg dry	Plant 1 Cake	01/04/2017	ND	200	580
					04/05/2017	ND	450	1300
					07/06/2017	ND	420	1200
					10/04/2017	ND	870	2600
					Annual Mean	<870		
		EPA 8082	µg/kg dry	Plant 2 Cake	01/04/2017	ND	170	510
					04/05/2017	ND	420	1200
					07/06/2017	ND	400	1200
					10/04/2017	ND	790	2300
					Annual Mean	<790		
	PCB 1248	EPA 8082	µg/kg dry	Plant 1 Cake	01/04/2017	ND	200	580
					04/05/2017	ND	450	1300
					07/06/2017	ND	420	1200
					10/04/2017	ND	870	2600
					Annual Mean	<870		
		EPA 8082	µg/kg dry	Plant 2 Cake	01/04/2017	ND	170	510
					04/05/2017	ND	420	1200
					07/06/2017	ND	400	1200
					10/04/2017	ND	790	2300
					Annual Mean	<790		
	PCB 1254	EPA 8082	µg/kg dry	Plant 1 Cake	01/04/2017	ND	200	580
					04/05/2017	ND	450	1300
					07/06/2017	ND	420	1200
					10/04/2017	ND	870	2600
					Annual Mean	<870		
		EPA 8082	µg/kg dry	Plant 2 Cake	01/04/2017	ND	170	510
					04/05/2017	ND	420	1200
					07/06/2017	ND	400	1200
					10/04/2017	ND	790	2300
					Annual Mean	<790		
	PCB 1260	EPA 8082	µg/kg dry	Plant 1 Cake	01/04/2017	ND	200	580
					04/05/2017	ND	450	1300

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					07/06/2017	ND	420	1200
					10/04/2017	ND	870	2600
					Annual Mean	<870		
		EPA 8082	µg/kg dry	Plant 2 Cake	01/04/2017	ND	170	510
					04/05/2017	ND	420	1200
					07/06/2017	ND	400	1200
					10/04/2017	ND	790	2300
					Annual Mean	<790		
	PCB_HR_DM	EPA 8082	µg/kg dry	Plant 1 Cake	01/04/2017	ND	200	580
					04/05/2017	ND	450	1300
					07/06/2017	ND	420	1200
					10/04/2017	ND	870	2600
					Annual Mean	<870		
		EPA 8082	µg/kg dry	Plant 2 Cake	01/04/2017	ND	170	510
					04/05/2017	ND	420	1200
					07/06/2017	ND	400	1200
					10/04/2017	ND	790	2300
					Annual Mean	<790		
	Total PCBs	EPA 8082	µg/kg dry	Plant 1 Cake	01/04/2017	ND	--	--
					04/05/2017	ND	--	--
					07/06/2017	ND	--	--
					10/04/2017	ND	--	--
					Annual Mean	ND		
		EPA 8082	µg/kg dry	Plant 2 Cake	01/04/2017	ND	--	--
					04/05/2017	ND	--	--
					07/06/2017	ND	--	--
					10/04/2017	ND	--	--
					Annual Mean	ND		
Herbicides								
	2,4,5-T	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	370	1300
					07/06/2017	ND	12	44
					Annual Mean	<370		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	320	1100
					07/06/2017	ND	11	40
					Annual Mean	<320		
	2,4,5-TP (Silvex)	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	260	1300
					07/06/2017	ND	8.5	44
					Annual Mean	<260		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	220	1100
					07/06/2017	ND	7.7	40
					Annual Mean	<220		
	2,4-D	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	810	1300
					07/06/2017	ND	27	44
					Annual Mean	<810		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	690	1100
					07/06/2017	ND	24	40
					Annual Mean	<690		
	2,4-DB	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	490	1300
					07/06/2017	ND	16	44
					Annual Mean	<490		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	410	1100
					07/06/2017	ND	14	40
					Annual Mean	<410		
	4-Nitrophenol	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	500	5300
					07/06/2017	ND	17	180
					Annual Mean	<500		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	430	4600
					07/06/2017	ND	15	160
					Annual Mean	<430		
	Dalapon	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	1200 DNQ	470	16000
					07/06/2017	210 DNQ	15	530
					Annual Mean	700 DNQ		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	400	14000
					07/06/2017	130 DNQ	14	480
					Annual Mean	260 DNQ		
	Dicamba	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	310	1300
					07/06/2017	ND	10	44
					Annual Mean	<310		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	260	1100
					07/06/2017	ND	9.1	40
					Annual Mean	<260		
	Dichlorprop (2,4-DP)	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	180	1300
					07/06/2017	ND	5.9	44
					Annual Mean	<180		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	150	1100
					07/06/2017	ND	5.3	40
					Annual Mean	<150		
	Dinoseb (DNBP)	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	740	8100
					07/06/2017	ND	25	270
					Annual Mean	<740		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	630	6900
					07/06/2017	ND	22	240
					Annual Mean	<630		
	MCPA	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	31000	320000
					07/06/2017	ND	1000	11000
					Annual Mean	<31000		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	26000	280000
					07/06/2017	ND	910	9600
					Annual Mean	<26000		
	MCPP	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	27000	320000
					07/06/2017	ND	910	11000
					Annual Mean	<27000		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	23000	280000
					07/06/2017	ND	820	9600
					Annual Mean	<23000		
	Pentachlorophenol	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	68	1300
					07/06/2017	ND	2.2	44
					Annual Mean	<68		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	58	1100
					07/06/2017	ND	2.0	40
					Annual Mean	<58		
	Picloram	EPA 8151	µg/kg dry	Plant 1 Cake	01/04/2017	ND	290	1300
					07/06/2017	ND	9.6	44
					Annual Mean	<290		
		EPA 8151	µg/kg dry	Plant 2 Cake	01/04/2017	ND	250	1100
					07/06/2017	ND	8.6	40
					Annual Mean	<250		
TCLP - Herbicides								
	2,4,5-T	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	6.2E-06	0.025
					Annual Mean	<6.2E-06		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	6.2E-06	0.025
					Annual Mean	<6.2E-06		
	2,4,5-TP (Silvex)	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	6.2E-06	0.025
					Annual Mean	<6.2E-06		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	6.2E-06	0.025
					Annual Mean	<6.2E-06		
	2,4-D	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	3.7E-06	0.050
					Annual Mean	<3.7E-06		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	3.7E-06	0.050
					Annual Mean	<3.7E-06		
	2,4-DB	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	1.5E-05	0.050
					Annual Mean	<1.5E-05		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	1.5E-05	0.050
					Annual Mean	<1.5E-05		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
	3,5-Dichlorobenzoic acid	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	1.3E-05	0.10
					Annual Mean	<1.3E-05		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	1.3E-05	0.10
					Annual Mean	<1.3E-05		
	4-Nitrophenol	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	2.6E-05	0.10
					Annual Mean	<2.6E-05		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	2.6E-05	0.10
					Annual Mean	<2.6E-05		
	ACIFLUORFEN	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	8.9E-06	0.10
					Annual Mean	<8.9E-06		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	8.9E-06	0.10
					Annual Mean	<8.9E-06		
	BENTAZON	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	1.0E-05	0.10
					Annual Mean	<1.0E-05		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	1.0E-05	0.10
					Annual Mean	<1.0E-05		
	Chloramben	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	7.9E-06	0.10
					Annual Mean	<7.9E-06		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	7.9E-06	0.10
					Annual Mean	<7.9E-06		
	Dalapon	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	1.0E-05	0.50
					Annual Mean	<1.0E-05		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	1.0E-05	0.50
					Annual Mean	<1.0E-05		
	DCPA	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	8.7E-06	0.10
					Annual Mean	<8.7E-06		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	8.7E-06	0.10
					Annual Mean	<8.7E-06		
	Dicamba	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	8.5E-06	0.050
					Annual Mean	<8.5E-06		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	8.5E-06	0.050
					Annual Mean	<8.5E-06		
	Dichlorprop (2,4-DP)	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	1.5E-05	0.050
					Annual Mean	<1.5E-05		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	1.5E-05	0.050
					Annual Mean	<1.5E-05		
	Dinoseb (DNBP)	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	1.6E-05	0.10
					Annual Mean	<1.6E-05		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	1.6E-05	0.10
					Annual Mean	<1.6E-05		
	MCPA	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	0.0017	12
					Annual Mean	<0.0017		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	0.0017	12
					Annual Mean	<0.0017		
	MCPP	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	0.0019	12
					Annual Mean	<0.0019		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	0.0019	12
					Annual Mean	<0.0019		
	Pentachlorophenol	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	3.7E-06	0.025
					Annual Mean	<3.7E-06		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	3.7E-06	0.025
					Annual Mean	<3.7E-06		
	Picloram	EPA 8151	mg/L	Plant 1 Cake	01/04/2017	ND	7.7E-06	0.050
					Annual Mean	<7.7E-06		
		EPA 8151	mg/L	Plant 2 Cake	01/04/2017	ND	7.7E-06	0.050
					Annual Mean	<7.7E-06		
Dioxins/Furans								
	1,2,3,4,6,7,8-HpCDD	EPA 1613B	pg/g dry	Plant 1 Cake	03/08/2017	120	0.90	27
					Annual Mean	120		
		EPA 1613B	pg/g dry	Plant 2 Cake	03/08/2017	95	0.62	25
					Annual Mean	95		
	1,2,3,4,6,7,8-HpCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	ND	21	27

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
				Cake	Annual Mean	<21		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	ND	25	25
				Cake	Annual Mean	<25		
	1,2,3,4,7,8,9-HpCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	ND	15	27
				Cake	Annual Mean	<15		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	ND	21	25
				Cake	Annual Mean	<21		
	1,2,3,4,7,8-HxCDD	EPA 1613B	pg/g dry	Plant 1	03/08/2017	1.0 DNQ	0.66	27
				Cake	Annual Mean	1.0 DNQ		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	0.93 DNQ	0.53	25
				Cake	Annual Mean	0.93 DNQ		
	1,2,3,4,7,8-HxCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	ND	2.3	27
				Cake	Annual Mean	<2.3		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	3.0 DNQ	0.51	25
				Cake	Annual Mean	3.0 DNQ		
	1,2,3,6,7,8-HxCDD	EPA 1613B	pg/g dry	Plant 1	03/08/2017	ND	3.9	27
				Cake	Annual Mean	<3.9		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	3.6 DNQ	0.50	25
				Cake	Annual Mean	3.6 DNQ		
	1,2,3,6,7,8-HxCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	4.0 DNQ	0.46	27
				Cake	Annual Mean	4.0 DNQ		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	6.8 DNQ	0.47	25
				Cake	Annual Mean	6.8 DNQ		
	1,2,3,7,8,9-HxCDD	EPA 1613B	pg/g dry	Plant 1	03/08/2017	2.5 DNQ	0.58	27
				Cake	Annual Mean	2.5 DNQ		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	2.2 DNQ	0.45	25
				Cake	Annual Mean	2.2 DNQ		
	1,2,3,7,8,9-HxCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	ND	0.33	27
				Cake	Annual Mean	<0.33		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	ND	0.33	25
				Cake	Annual Mean	<0.33		
	1,2,3,7,8-PeCDD	EPA 1613B	pg/g dry	Plant 1	03/08/2017	ND	11	27
				Cake	Annual Mean	<11		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	ND	8.3	25
				Cake	Annual Mean	<8.3		
	1,2,3,7,8-PeCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	ND	1.3	27
				Cake	Annual Mean	<1.3		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	ND	0.43	25
				Cake	Annual Mean	<0.43		
	2,3,4,6,7,8-HxCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	1.7 DNQ	0.36	27
				Cake	Annual Mean	1.7 DNQ		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	ND	1.4	25
				Cake	Annual Mean	<1.4		
	2,3,4,7,8-PeCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	ND	0.53	27
				Cake	Annual Mean	<0.53		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	1.2 DNQ	0.46	25
				Cake	Annual Mean	1.2 DNQ		
	2,3,7,8-TCDD	EPA 1613B	pg/g dry	Plant 1	01/04/2017	ND	0.77	5.9
				Cake	03/08/2017	ND	0.46	5.5
					04/05/2017	ND	0.71	11
					07/06/2017	ND	1.6	28
					10/04/2017	0.24 DNQ	0.14	2.5
					Annual Mean	0.76 DNQ		
		EPA 1613B	pg/g dry	Plant 2	01/04/2017	ND	0.44	5.1
				Cake	03/08/2017	ND	0.35	4.9
					04/05/2017	ND	0.59	9.8
					07/06/2017	ND	1.4	25
					10/04/2017	ND	0.14	2.4
					Annual Mean	<1.4		
	2,3,7,8-TCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	8.4	1.3	5.5
				Cake	Annual Mean	8.4		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	4.1 DNQ	1.5	4.9

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
				Cake	Annual Mean	4.1 DNQ		
	OCDD	EPA 1613B	pg/g dry	Plant 1	03/08/2017	1100	0.84	55
				Cake	Annual Mean	1100		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	1200	0.72	49
				Cake	Annual Mean	1200		
	OCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	75	0.32	55
				Cake	Annual Mean	75		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	97	0.40	49
				Cake	Annual Mean	97		
	Total HpCDD	EPA 1613B	pg/g dry	Plant 1	03/08/2017	250	0.90	27
				Cake	Annual Mean	250		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	190	0.62	25
				Cake	Annual Mean	190		
	Total HpCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	20 DNQ	18	27
				Cake	Annual Mean	20 DNQ		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	30	23	25
				Cake	Annual Mean	30		
	Total HxCDD	EPA 1613B	pg/g dry	Plant 1	03/08/2017	29	1.7	27
				Cake	Annual Mean	29		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	27	0.49	25
				Cake	Annual Mean	27		
	Total HxCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	25 DNQ	0.87	27
				Cake	Annual Mean	25 DNQ		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	35	0.67	25
				Cake	Annual Mean	35		
	Total PeCDD	EPA 1613B	pg/g dry	Plant 1	03/08/2017	ND	37	37
				Cake	Annual Mean	<37		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	ND	24	25
				Cake	Annual Mean	<24		
	Total PeCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	28	0.91	27
				Cake	Annual Mean	28		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	33	0.44	25
				Cake	Annual Mean	33		
	Total TCDD	EPA 1613B	pg/g dry	Plant 1	03/08/2017	5.3 DNQ	0.46	5.5
				Cake	Annual Mean	5.3 DNQ		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	1.1 DNQ	0.35	4.9
				Cake	Annual Mean	1.1 DNQ		
	Total TCDF	EPA 1613B	pg/g dry	Plant 1	03/08/2017	13	0.92	5.5
				Cake	Annual Mean	13		
		EPA 1613B	pg/g dry	Plant 2	03/08/2017	13	0.76	4.9
				Cake	Annual Mean	13		
Other								
	Chrysotile		% dry weight	Plant 1	01/04/2017	ND	--	--
				Cake	04/05/2017	ND	--	--
					07/06/2017	ND	--	--
					10/04/2017	ND	--	--
					Annual Mean	ND		
			% dry weight	Plant 2	01/04/2017	ND	--	--
				Cake	04/05/2017	ND	--	--
					07/06/2017	ND	--	--
					10/04/2017	ND	--	--
					Annual Mean	ND		
	Paint Filter Free Liquid test	EPA 9095B	-	Plant 1	01/04/2017	NEG	--	--
				Cake	02/01/2017	NEG	--	--
					03/01/2017	NEG	--	--
					04/05/2017	NEG	--	--
					Annual Mean	NEG		
		EPA 9095B	-	Plant 2	01/04/2017	NEG	--	--
				Cake	02/02/2017	NEG	--	--
					03/01/2017	NEG	--	--
					04/05/2017	NEG	--	--
					Annual Mean	NEG		

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
Tentatively Identified Compounds								
	1000147-77-7	EPA 8270C	µg/kg dry	Plant 1 Cake	10/04/2017	610000	--	3800
						430000	--	7600
					Annual Mean	520000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	04/05/2017	3400000	--	46000
					Annual Mean	3400000		
	17-(1,5-DIMETHYLHEXYL)-10,13-DIMETHYL-2,	EPA 8270C	µg/kg dry	Plant 1 Cake	07/06/2017	3500000	--	54000
					Annual Mean	3500000		
	17-(1,5-DIMETHYLHEXYL)-10,13-DIMETHYLHEX	EPA 8270C	µg/kg dry	Plant 1 Cake	04/05/2017	1900000	--	26000
					Annual Mean	1900000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	04/05/2017	3000000	--	46000
					Annual Mean	3000000		
	2,6,10,14,18,22-TETRACOSAHEXAENE, 2,6,10	EPA 8270C	µg/kg dry	Plant 2 Cake	10/04/2017	75000	--	9100
					Annual Mean	75000		
	758-16-7	EPA 8270C	µg/kg dry	Plant 2 Cake	10/04/2017	78000	--	3600
						86000	--	9100
					Annual Mean	82000		
	9-OCTADECENOIC ACID, (E)-	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	390000	--	26000
					04/05/2017	400000	--	26000
					07/06/2017	590000	--	54000
					10/04/2017	58000	--	3800
						59000	--	7600
					Annual Mean	300000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	1100000	--	25000
					04/05/2017	1300000	--	46000
					07/06/2017	1100000	--	48000
					10/04/2017	82000	--	3600
						100000	--	9100
					Annual Mean	740000		
	Cholest-4-en-3-one	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	510000	--	26000
					04/05/2017	500000	--	26000
					10/04/2017	71000	--	7600
					Annual Mean	360000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	520000	--	25000
					04/05/2017	850000	--	46000
					07/06/2017	380000	--	48000
					Annual Mean	580000		
	CHOLEST-8-EN-3-OL, (3.BETA.)-	EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	1300000	--	25000
					Annual Mean	1300000		
	Cholestan-3-ol	EPA 8270C	µg/kg dry	Plant 1 Cake	07/06/2017	4300000	--	54000
					Annual Mean	4300000		
	CHOLESTAN-3-OL, (3.ALPHA.)-	EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	150000	--	25000
					Annual Mean	150000		
	Cholestan-3-one	EPA 8270C	µg/kg dry	Plant 1 Cake	10/04/2017	62000	--	7600
					Annual Mean	62000		
	CHOLESTANE, 2,3-EPOXY-, (2.ALPHA.,3.ALPH	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	1200000	--	26000
					Annual Mean	1200000		
	CHOLESTANE, 3-ETHOXY-, (3.BETA.,5.ALPHA.	EPA 8270C	µg/kg dry	Plant 2 Cake	04/05/2017	840000	--	46000
					Annual Mean	840000		
	CHOLESTANOL	EPA 8270C	µg/kg dry	Plant 1 Cake	04/05/2017	320000	--	26000
					07/06/2017	460000	--	54000
					Annual Mean	390000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	2200000	--	25000
					04/05/2017	440000	--	46000
					10/04/2017	450000	--	3600
						470000	--	9100

	Parameter	Method	Units	Sample Location	Sample Date	Result	MDL	RL
					Annual Mean	890000		
	CHOLESTEROL	EPA 8270C	µg/kg dry	Plant 2 Cake	10/04/2017	130000	--	9100
					Annual Mean	130000		
	CYCLOTETRASILOXANE, OCTAMETHYL-	EPA 8270C	µg/kg dry	Plant 1 Cake	10/04/2017	23000	--	3800
					Annual Mean	23000		
	HEPTADECANE, 9-OCTYL-	EPA 8270C	µg/kg dry	Plant 1 Cake	10/04/2017	20000	--	3800
					Annual Mean	20000		
	n-Hexadecanoic acid	EPA 8270C	µg/kg dry	Plant 1 Cake	04/05/2017	1100000	--	26000
					07/06/2017	1300000	--	54000
					10/04/2017	130000	--	3800
						170000	--	7600
					Annual Mean	680000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	04/05/2017	3100000	--	46000
					07/06/2017	2700000	--	48000
					10/04/2017	150000	--	3600
						230000	--	9100
					Annual Mean	1500000		
	OCTADECANOIC ACID	EPA 8270C	µg/kg dry	Plant 1 Cake	04/05/2017	370000	--	26000
					07/06/2017	400000	--	54000
					10/04/2017	41000	--	3800
						61000	--	7600
					Annual Mean	220000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	04/05/2017	940000	--	46000
					07/06/2017	700000	--	48000
					10/04/2017	80000	--	9100
					Annual Mean	570000		
	Squalene	EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	190000	--	25000
					10/04/2017	140000	--	3600
					Annual Mean	160000		
	Tetracosane	EPA 8270C	µg/kg dry	Plant 2 Cake	10/04/2017	56000	--	3600
					Annual Mean	56000		
	Tetradecane	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	180000	--	26000
					Annual Mean	180000		
	TETRADECANOIC ACID	EPA 8270C	µg/kg dry	Plant 2 Cake	07/06/2017	230000	--	48000
					Annual Mean	230000		
	UNKNOWN	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	240000	--	26000
					04/05/2017	400000	--	26000
					07/06/2017	580000	--	54000
					10/04/2017	120000	--	3800
						87000	--	7600
					Annual Mean	N/A		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	450000	--	25000
					04/05/2017	720000	--	46000
					07/06/2017	370000	--	48000
					10/04/2017	150000	--	3600
						330000	--	9100
					Annual Mean	N/A		
	VITAMIN E	EPA 8270C	µg/kg dry	Plant 1 Cake	01/04/2017	180000	--	26000
					Annual Mean	180000		
		EPA 8270C	µg/kg dry	Plant 2 Cake	01/04/2017	270000	--	25000
					Annual Mean	270000		

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.

APPENDIX D

EPA Biosolids Annual Report Electronic Form for Reporting Year 2017, Plant No. 1
EPA Biosolids Annual Report Electronic Form for Reporting Year 2017, Plant No. 2

Sewage Sludge (Biosolids) Annual Report

EPA Regulations – 503.18, 503.28, 503.48

INSTRUCTIONS

EPA's sewage sludge regulations (40 CFR part 503) require certain POTWs and Class I sewage sludge management facilities to submit to an annual biosolids report. POTWs that must submit an annual report include POTWs with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more. This is the biosolids annual report form for POTWs and Class I sewage sludge management facilities in the 42 states and all tribes and territories where EPA administers the Federal biosolids program.

For the purposes of this form, the term 'sewage sludge' 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.

Please note that questions with a (*) are required. Please also note that EPA may contact you after you submit this report for more information regarding your sewage sludge program.

Questions regarding this form should be directed to the NPDES Electronic Reporting Helpdesk at:

- NPDESeReporting@epa.gov OR
- 1-877-227-8965

What action would you like to take? *

New Biosolids Program Report

1. Program Information

Please select the NPDES ID number below for this Sewage Sludge (Biosolids) Annual Report. *

CAL110604: Orange County SD #1

IMPORTANT - If you do not see the NPDES ID associated with your facility (i.e., you only see a blue bar in the above drop down list), you MUST follow the instructions in the "Biosolids User's Guide." A shorter set of instructions to fix this issue are in the "Important Instructions on Accessing Your NPDES ID" document. Both documents are located at: https://epanet.zendesk.com/hc/en-us/sections/207108787-General-Biosolids.

Facility Name: Orange County SD #1

Street: 10844 Ellis Avenue

City: FOUNTAIN VALLEY

State: CA

Zip Code: 92708-7018

1.1 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 503. The facility is: *

- [x] a POTW with a design flow rate equal to or greater than one million gallons per day
- [x] a POTW that serves 10,000 people or more
- [x] a Class I Sludge Management Facility as defined in 40 CFR 503.9
- [ ] otherwise required to report (e.g., permit condition, enforcement action)
- [ ] none of the above

1.2 Reporting Period Start and End Dates

Start Date of Reporting Period *	End Date of Reporting Period *
01-01-2017	12-31-2017

2. Facility Information

2.1 Biosolids or Sewage Sludge Treatment Processes

Please check the box next to the following biosolids or sewage sludge treatment processes that you used on the sewage sludge or biosolids generated or produced at your facility during the reporting period (check one or more that apply). *

Pathogen Reduction Operations (see Appendix B to Part 503)

Processes to Significantly Reduce Pathogens (PSRP)

- ☐ Aerobic Digestion
- ☐ Air Drying (or "sludge drying beds")
- ☒ Anaerobic Digestion
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization

Processes 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 (or 180°C) or higher for 30 min.)
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization

Physical Treatment Operations

- ☒ Preliminary Operations (e.g., sludge grinding, degritting, blending)
- ☒ Thickening (e.g., gravity and/or flotation thickening, centrifugation, belt filter press, vacuum filter)
- ☐ Sludge Lagoon

Other Processes to Manage Sewage Sludge

- ☐ Temporary Sludge Storage (sewage sludge stored on land 2 years or less, not in sewage sludge unit)
- ☐ Long-term Sludge Storage (sewage sludge stored on land 2 years or more, not in sewage sludge unit)
- ☒ Methane or Biogas Capture and Recovery
- ☐ Other Treatment Process:

2.2 Biosolids or Sewage Sludge Analytical Methods

EPA regulations specify that representative samples of sewage sludge that is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator must be collected and analyzed. These regulations also specify the analytical methods that must be used to analyze samples of sewage sludge. For example, EPA requires facilities to monitor for the certain parameters, which are listed in Tables 1, 2, 3, and 4 at 40 CFR 503.13 and Tables 1 and 2 40 CFR 503.23. See also 40 CFR 503.8.

Please check the box next to the following analytic methods used on the sewage sludge or biosolids generated or produced by you or your facility during the reporting period (check one or more that apply). *

Parameter	Method Number or Author	Description Text for Certification Section
Pathogens		
Ascaris ova.	☐ Sludge Monitoring - Ascaris ova. ☐ Other Ascaris ova. Analytical Method:	Sludge Monitoring - Ascaris ova., "Test Method for Detecting, Enumerating, and Determining the Viability Ascaris in Sludge (Appendix I)," Control of Pathogens and Vector Attraction in Sewage Sludge", EPA-625-R-92-013, July 2003

Parameter	Method Number or Author	Description Text for Certification Section
Enteric viruses	☐ ASTM Method D4994 - Enteric Viruses	ASTM Method D4994 - Enteric Viruses, "Standard Practice for Recovery of Viruses From Wastewater Sludges," ASTM International
	☐ Other Enteric Viruses Analytical Method:	
Fecal coliform	☐ Standard Method 9222 - Fecal Coliform	Standard Method 9222 - Fecal Coliform, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association [Note: This method is only allowable for Class B sewage sludge]
	☐ Standard Method 9221 - Fecal Coliform	Standard Method 9221 - Fecal Coliform, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ EPA Method 1680 - Fecal Coliform	EPA Method 1680 - Fecal Coliform, "Fecal Coliforms in Sewage Sludge by Multiple-Tube Fermentation using Lauryl Tryptose Broth and EC Medium," EPA-821-R-10-003, April 2010
	☐ EPA Method 1681 - Fecal Coliform	EPA Method 1681 - Fecal Coliform, Fecal Coliforms in Sewage Sludge (Biosolids) by MultipleTube Fermentation using A-1 medium, EPA-821-R-04-027, June 2005
	☐ Other Fecal Coliform Analytical Method:	
Helminth ova.	☐ W.A. Yanko Method - Helminth ova.	W.A. Yanko Method - Helminth Ova., "Occurrence of Pathogens in Distribution and Marketing Municipal Sludges," EPA-600-1-87-014, 1987
	☐ Other Helminth ova. Analytical Method:	
Salmonella sp. Bacteria	☐ Standard Method 9260 - Salmonella	Standard Method 9260 - Salmonella, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ EPA Method 1682 - Salmonella	EPA Method 1682, "Salmonella in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis (MSRV) Medium," EPA-821-R-06-014, July 2006
	☐ Kenner and Clark Method - Salmonella	Kenner and Clark Method - Salmonella, "Detection and Enumeration of Salmonella and Pseudomonas aeruginosa," J. Water Pollution Control Federation, 46(9):2163-2171, 1974
	☐ Other Salmonella sp. Bacteria Analytical Method:	
Total Culturable Viruses	☐ Class A Sludge Monitoring - Total Culturable Viruses	EPA Class A Sludge Monitoring - Total Culturable Viruses, "Method for the Recovery and Assay of Total Culturable Viruses from Sludge (Appendix H)," Control of Pathogens and Vector Attraction in Sewage Sludge, EPA-625-R-92-013, July 2003
	☐ Other Total Culturable Viruses Analytical Method:	
Metals		
Arsenic	☒ EPA Method 6010 - Arsenic (ICP-OES)	EPA Method 6010 - Arsenic (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Arsenic (ICP-MS)	EPA Method 6020 - Arsenic (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Arsenic (GF-AAS)	EPA Method 7010 - Arsenic (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7061 - Arsenic (AA-GH)	EPA Method 7061 - Arsenic (Atomic Absorption - Gaseous Hydride), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Arsenic Analytical Method:	
Beryllium	☒ EPA Method 6010 - Beryllium (ICP-OES)	EPA Method 6010 - Beryllium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Beryllium (ICP-MS)	EPA Method 6020 - Beryllium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Beryllium (FAAS)	EPA Method 7000 - Beryllium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Beryllium (GF-AAS)	EPA Method 7010 - Beryllium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Beryllium Analytical Method	

Parameter	Method Number or Author	Description Text for Certification Section
Cadmium	☒ EPA Method 6010 - Cadmium (ICP-OES)	EPA Method 6010 - Cadmium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Cadmium (ICP-MS)	EPA Method 6020 - Cadmium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Cadmium (FAAS)	EPA Method 7000 - Cadmium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Cadmium (GF-AAS)	EPA Method 7010 - Cadmium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7131 - Cadmium (GF-AAS)	EPA Method 7131 - Cadmium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Cadmium Analytical Method:	
Chromium	☒ EPA Method 6010 - Chromium (ICP-OES)	EPA Method 6010 - Chromium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Chromium (ICP-MS)	EPA Method 6020 - Chromium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Chromium (FAAS)	EPA Method 7000 - Chromium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Chromium (GF-AAS)	EPA Method 7010 - Chromium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7191 - Chromium (AA-FT)	EPA Method 7191 - Chromium (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ Other Chromium Analytical Method:	
Copper	☒ EPA Method 6010 - Copper (ICP-OES)	EPA Method 6010 - Copper (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Copper (ICP-MS)	EPA Method 6020 - Copper (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Copper (FAAS)	EPA Method 7000 - Copper (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Copper (GF-AAS)	EPA Method 7010 - Copper (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Copper Analytical Method:	
Lead	☒ EPA Method 6010 - Lead (ICP-OES)	EPA Method 6010 - Lead (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Lead (ICP-MS)	EPA Method 6020 - Lead (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Lead (FAAS)	EPA Method 7000 - Lead (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Lead (GF-AAS)	EPA Method 7010 - Lead (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7421 - Lead (AA-FT)	EPA Method 7421 - Lead (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Lead Analytical Method:	
Mercury	☒ EPA Method 7471 - Mercury (CVAA)	EPA Method 7471 - Mercury in Solid or Semi-Solid Waste (Cold Vapor Atomic Absoprtion), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Mercury Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Molybdenum	☒ EPA Method 6010 - Molybdenum (ICP-OES)	EPA Method 6010 - Molybdenum (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Molybdenum (ICP-MS)	EPA Method 6020 - Molybdenum (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Molybdenum (FAAS)	EPA Method 7000 - Molybdenum (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Molybdenum (GF-AAS)	EPA Method 7010 - Molybdenum (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7481 - Molybdenum (AA-FT)	EPA Method 7481 - Molybdenum (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Molybdenum Analytical Method:	
Nickel	☒ EPA Method 6010 - Nickel (ICP-OES)	EPA Method 6010 - Nickel (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Nickel (ICP-MS)	EPA Method 6020 - Nickel (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Nickel (FAAS)	EPA Method 7000 - Nickel (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Nickel (GF-AAS)	EPA Method 7010 - Nickel (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Nickel Analytical Method:	
Selenium	☒ EPA Method 6010 - Selenium (ICP-OES)	EPA Method 6010 - Selenium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Selenium (ICP-MS)	EPA Method 6020 - Selenium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Selenium (GF-AAS)	EPA Method 7010 - Selenium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7740 - Selenium (AA-FT)	EPA Method 7741A - Selenium (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7741 - Selenium (AA-GH)	EPA Method 7741 - Selenium (Atomic Absorption - Gaseous Hydride), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Selenium Analytical Method:	
Zinc	☒ EPA Method 6010 - Zinc (ICP-OES)	EPA Method 6010 - Zinc (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Zinc (ICP-MS)	EPA Method 6020 - Zinc (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Zinc (FAAS)	EPA Method 7000 - Zinc (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Zinc (GF-AAS)	EPA Method 7010 - Zinc (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Zinc Analytical Method:	
Nitrogen Compounds		
Ammonia Nitrogen	☐ EPA Method 350.1 - Ammonia Nitrogen	EPA Method 350.1 - Ammonia Nitrogen, "Determination of Ammonia Nitrogen by Semi-Automated Colorimetry," August 1993
	☒ Standard Method 4500-NH3 - Ammonia Nitrogen	Standard Method 4500-NH3 - Ammonia Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Ammonia Nitrogen Analytical Method	

Parameter	Method Number or Author	Description Text for Certification Section
Nitrate Nitrogen	☐ EPA Method 9056 - Nitrate Nitrogen (IC)	EPA Method 9056 - Nitrate Nitrogen (Ion Chromatography), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 9210 - Nitrate Nitrogen (ISE)	EPA Method 9210 - Nitrate Nitrogen (Ion-Selective Electrode), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☒ Other Nitrate Nitrogen Analytical Method:	EPA 300.0
Nitrogen	☒ Standard Method 4500-N - Nitrogen	Standard Method 4500-N - Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Nitrogen Analytical Method:	
Organic Nitrogen	☐ Standard Method 4500-Norg - Organic Nitrogen	Standard Method 4500-Norg - Organic Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☒ Other Organic Nitrogen Analytical Method:	Calculation: Until July 2017, OCSD was calculating based on Total Organic Nitrogen is the sum of TKN, Nitrate and Nitrite. TKN is analyzed by EPA 351.2; Nitrate and Nitrite by EPA 300.0 as stated above.
Total Kjeldahl Nitrogen	☒ EPA Method 351.2 - Total Kjeldahl Nitrogen	EPA Method 351.2 - Total Kjeldahl Nitrogen, "Determination of Total Kjeldahl Nitrogen by Semi-Automated Colorimetry," August 1993
	☐ Other Total Kjeldahl Nitrogen Analytical Method:	
Other Analytes		
Fixed Solids	☐ Standard Method 2540 - Fixed Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Fixed Solids Analytical Method:	
Paint Filter Test	☒ EPA Method 9095 - Paint Filter Liquids Test	EPA Method 9095 - Paint Filter Liquids Test, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Paint Filter Test Analytical Method:	
pH	☐ EPA Method 9040 - pH (≤ 7% solids)	EPA Method 9040 - pH (≤ 7% solids), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☒ EPA Method 9045 - pH (> 7% solids)	EPA Method 9045 - pH (> 7% solids), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other pH Analytical Method:	
Specific Oxygen Uptake Rate	☐ Standard Method 2710 - SOUR	Standard Method 2710 - Specific Oxygen Uptake Rate, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Specific Oxygen Uptake Rate Analytical Method:	
TCLP	☒ EPA Method 1311 - Toxicity Characteristic Leaching Procedure	EPA Method 1311 - Toxicity Characteristic Leaching Procedure, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other TCLP Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Temperature	☐ Standard Method 2550 - Temperature	Standard Method 2550 - Temperature, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Temperature Analytical Method:	
Total Solids	☒ Standard Method 2540 - Total Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Total Solids Analytical Method:	
Volatile Solids	☒ Standard Method 2540 - Volatile Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Volatile Solids Analytical Method:	
No Analytical Methods	☐ No Analytical Methods Used	

2.3 What is the estimated total volume of biosolids or sewage sludge produced at your facility for the reporting period (in dry metric tons)? *

21017

3. Biosolids or Sewage Sludge Management

EPA NPDES regulations at 40 CFR 503 only require reporting for land application, surface disposal, or incineration. You have the option to select "Other Management Practice" if you wish to provide more information on how you manage your sewage sludge or biosolids.
Please use the selections below to identify how sewage sludge or biosolids generated or produced at your facility was managed, used, or disposed by you or your facility for the reporting period. You can use the button below to add as many Sewage Sludge Unique Identifier (SSUID) sections as needed to describe how you manage your sewage sludge.

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 001

Management Practice Type *	Handler, Preparer, or Applier Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Handler or Applier	Agricultural Land Applicaton

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ. “Off-Site Third-Party Handler or Applier” refers to third parties which do not change the quality of the Biosolids. “Off-Site Third-Party Preparer” refers to a third party which changes the quality of the Biosolids.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class B	363

Pollutant Concentrations:

Did the facility land apply bulk sewage sludge when one or more pollutant concentrations in the sewage sludge exceeded a monthly average pollutant concentration in Table 3 of 40 CFR 503.13? *

○ Yes ◉ No ○ Unknown

Name of Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier.You may optionally look up a NPDES ID to auto-populate this information. If fields remain blank after clicking the Lookup button, then no data exists and you must enter the information.

Off-Site Third-Party Handler, Preparer, or Applier Information

NPDES ID (if known)

Facility/Company Name *

Tule Ranch / Ag-Tech

Address *

4324 E. Ashlan Ave.

City *	State *	Zip Code *
Fresno	California	93726

Off-Site Third-Party Handler, Preparer, or Applier Contact Information

First Name *	Last Name *	Title *
Shaen	Magan	Owner

Phone (10-digits, No dashes) *	Ext.	E-Mail Address
5599709432		kurt@westexp.com

Biosolids or Sewage Sludge Pathogen Reduction Options

Please use the selections below to identify the pathogen reduction options used by your facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

	Code	Pathogen Reduction Option Class A (must also demonstrate that meet fecal coliform or salmonella limits)
☐	B1	Class B-Alternative 1: Fecal Coliform Geometric Mean
☐	B21	Class B-Alternative 2 PSRP 1: Aerobic Digestion
☐	B22	Class B-Alternative 2 PSRP 2: Air Drying
☒	B23	Class B-Alternative 2 PSRP 3: Anaerobic Digestion
☐	B24	Class B-Alternative 2 PSRP 4: Composting
☐	B25	Class B-Alternative 2 PSRP 5: Lime Stabilization
☐	B3	Class B-Alternative 3: PSRP Equivalency
☐	pH	pH Adjustment (Domestic Septage)

Biosolids or Sewage Sludge Vector Attraction Reduction Options

Please use the selections below to identify the vector attraction reduction options used by your facility or another person/facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Vector Attraction Reduction Options

- [x] VR1 Option 1-Volatile Solids Reduction
- [ ] VR2 Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)
- [ ] VR3 Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less)
- [ ] VR4 Option 4-Specific Oxygen Uptake Rate
- [ ] VR5 Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)
- [ ] VR6 Option 6-Alkaline Treatment
- [ ] VR7 Option 7-Drying (Equal to or Greater than 75 Percent)
- [ ] VR8 Option 8-Drying (Equal to or Greater than 90 Percent)
- [ ] VR9 Option 9-Sewage Sludge Injection
- [x] VR10 Option 10-Sewage Sludge Timely Incorporation into Land
- [ ] VR11 Option 11-Sewage sludge Covered at the End of Each Operating Day

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see 40 CFR 503) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations (40 CFR 503) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see 40 CFR 503.7).

Land Application

- [ ] Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of 40 CFR 503.13).
- [ ] Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and 40 CFR 503.8).
- [ ] Facility had deficiencies with pathogen reduction (see 40 CFR 503.32).
- [ ] Facility had deficiencies with vector attraction reduction (see 40 CFR 503.33).
- [ ] Land application of bulk sewage sludge likely to adversely affected a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat (see 40 CFR 503.14(a)).
- [ ] Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site that was flooded, frozen, or snow-covered such that the bulk sewage sludge entered a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to Section 402 or 404 of the CWA (see 40 CFR 503.14(b)).
- [ ] Bulk sewage sludge was applied to agricultural land, forest, or a reclamation site was 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority (see 40 CFR 503.14(c)).
- [ ] Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that was greater than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority (see 40 CFR 503.14(d)).

☐ One or more label or information sheet requirements were not met for sewage sludge that was sold or given away for land application (see 40 CFR 503.14(e)).

☐ Bulk sewage sludge was applied to land where the cumulative pollutant loading rates in §503.13(b)(2) have been reached.

☐ The required notice and information was not provided to the land application applier (see 40 CFR 503.12(f) and (g)).

☐ The required notice and information was not provided to the owner or lease holder of the land on which bulk sewage sludge was applied (see 40 CFR 503.12(h)).

☐ The required notice was not provided to the permitting authority for the State in which bulk sewage sludge was applied if the bulk sewage sludge was applied to land in a State other than the State in which the bulk sewage sludge was prepared (see 40 CFR 503.12(i) and (j)).

☐ The facility failed to keep the necessary records for preparers and appliers during the reporting period (see 40 CFR 503.27).

When sewage sludge that meets Class B pathogen reduction requirements, but not Class A, is applied to the land, additional site restrictions must be met. Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge Class B pathogen reduction requirements (see 40 CFR 503.32) for this facility during the reporting period.

☐ Food crops with harvested parts that touched the sewage sludge/soil mixture (such as melons, cucumbers, squash, etc.) were harvested within 14 months after application of sewage sludge (see 40 CFR 503.32(b)(5)(i)).

☐ Food crops with harvested parts below the soil surface (root crops such as potatoes, carrots, radishes) were harvested within 20 months after application of sewage sludge and the sewage sludge remained on the land surface for four months or longer prior to incorporation into the soil (see 40 CFR 503.32(b)(5)(ii)).

☐ Food crops with harvested parts below the soil surface (root crops such as potatoes, carrots, radishes) were harvested within 38 months after application of the sewage sludge and the sewage sludge remained on the land surface for less than four months prior to incorporation into the soil (see 40 CFR 503.32(b)(5)(iii)).

☐ Food crops, feed crops, and fiber crops were harvested within 30 days after application of sewage sludge (see 40 CFR 503.32(b)(5)(iv)).

☐ Animals were grazed on a site within 30 days after application of sewage sludge (see 40 CFR 503.32(b)(5)(v)).

☐ Turf was harvested within 1 year after application of sewage sludge if the turf was placed on land with a high potential for public exposures or a lawn, unless otherwise specified by the permitting authority (see 40 CFR 503.32(b)(5)(vi)).

☐ Public access to land with high potential for public exposure was not restricted for 1 year after application of sewage sludge (see 40 CFR 503.32(b)(5)(vii)).

☐ Public access to land with a low potential for public exposure was not restricted for 30 days after application of sewage sludge (see 40 CFR 503.32(b)(5)(viii)).

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 002

Management Practice Type *	Handler, Preparer, or Applier Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Preparer	Distribution and Marketing - Compost

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ. "Off-Site Third-Party Handler or Applier" refers to third parties which do not change the quality of the Biosolids. "Off-Site Third-Party Preparer" refers to a third party which changes the quality of the Biosolids.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class A EQ (sale/give away)	14803

Pollutant Concentrations:

Did the facility land apply bulk sewage sludge when one or more pollutant concentrations in the sewage sludge exceeded a monthly average pollutant concentration in Table 3 of 40 CFR 503.13? *

○ Yes ◉ No ○ Unknown

Name of Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier.You may optionally look up a NPDES ID to auto-populate this information. If fields remain blank after clicking the Lookup button, then no data exists and you must enter the information.

Off-Site Third-Party Handler, Preparer, or Applier Information

NPDES ID (if known)

Facility/Company Name *

Synagro - Nursery Products

Address *

PO Box 1439

City *	State *	Zip Code *
Helendale	California	92342

Off-Site Third-Party Handler, Preparer, or Applier Contact Information

First Name *	Last Name *	Title *
Venny	Vasquez	Site Manager

Phone (10-digits, No dashes) *	Ext.	E-Mail Address
7602655210		vvasquez@synagro.com

Biosolids or Sewage Sludge Pathogen Reduction Options

Please use the selections below to identify the pathogen reduction options used by your facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

	Code	**Pathogen Reduction Option** **Class A (must also demonstrate that meet fecal coliform or salmonella limits)**
☐	A1	Class A-Alternative 1: Time/Temperature
☐	A2	Class A-Alternative 2: pH/Temperature/Percent Solids
☐	A3	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters
☐	A4	Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids
☒	A51	Class A-Alternative 5 PFRP 1: Composting
☐	A52	Class A-Alternative 5 PFRP 2: Heat Drying
☐	A53	Class A-Alternative 5 PFRP 3: Liquid Heat Treatment
☐	A54	Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)
☐	A55	Class A-Alternative 5 PFPR 5: Beta Ray Irradiation
☐	A56	Class A-Alternative 5 PFPR 6: Gamma Ray Irradiation
☐	A57	Class A-Alternative 5 PFRP 7: Pasteurization
☐	A6	Class A-Alternative 6: PFRP Equivalency
☐	pH	pH Adjustment (Domestic Septage)

Biosolids or Sewage Sludge Vector Attraction Reduction Options

Please use the selections below to identify the vector attraction reduction options used by your facility or another person/facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Vector Attraction Reduction Options

- ☒ VR1 Option 1-Volatile Solids Reduction
- ☐ VR2 Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)
- ☐ VR3 Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less)
- ☐ VR4 Option 4-Specific Oxygen Uptake Rate
- ☒ VR5 Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)
- ☐ VR6 Option 6-Alkaline Treatment
- ☐ VR7 Option 7-Drying (Equal to or Greater than 75 Percent)
- ☐ VR8 Option 8-Drying (Equal to or Greater than 90 Percent)

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see 40 CFR 503) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations (40 CFR 503) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see 40 CFR 503.7).

Land Application

- ☐ Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of 40 CFR 503.13).
- ☐ Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and 40 CFR 503.8).
- ☐ Facility had deficiencies with pathogen reduction (see 40 CFR 503.32).
- ☐ Facility had deficiencies with vector attraction reduction (see 40 CFR 503.33).
- ☐ Land application of bulk sewage sludge likely to adversely affected a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat (see 40 CFR 503.14(a)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site that was flooded, frozen, or snow-covered such that the bulk sewage sludge entered a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to Section 402 or 404 of the CWA (see 40 CFR 503.14(b)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, or a reclamation site was 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority (see 40 CFR 503.14(c)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that was greater than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority (see 40 CFR 503.14(d)).
- ☐ One or more label or information sheet requirements were not met for sewage sludge that was sold or given away for land application (see 40 CFR 503.14(e)).
- ☐ Bulk sewage sludge was applied to land where the cumulative pollutant loading rates in §503.13(b)(2) have been reached.
- ☐ The required notice and information was not provided to the land application applier (see 40 CFR 503.12(f) and (g)).

☐ The required notice and information was not provided to the owner or lease holder of the land on which bulk sewage sludge was applied (see 40 CFR 503.12(h)).

☐ The required notice was not provided to the permitting authority for the State in which bulk sewage sludge was applied if the bulk sewage sludge was applied to land in a State other than the State in which the bulk sewage sludge was prepared (see 40 CFR 503.12(i) and (j)).

☐ The facility failed to keep the necessary records for preparers and appliers during the reporting period (see 40 CFR 503.27).

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 003

Management Practice Type *	Handler, Preparer, or Applier Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Preparer	Distribution and Marketing - Compost

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ. "Off-Site Third-Party Handler or Applier" refers to third parties which do not change the quality of the Biosolids. "Off-Site Third-Party Preparer" refers to a third party which changes the quality of the Biosolids.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class A EQ (sale/give away)	5376

Pollutant Concentrations:

Did the facility land apply bulk sewage sludge when one or more pollutant concentrations in the sewage sludge exceeded a monthly average pollutant concentration in Table 3 of 40 CFR 503.13? *

○ Yes ◉ No ○ Unknown

Name of Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier.You may optionally look up a NPDES ID to auto-populate this information. If fields remain blank after clicking the Lookup button, then no data exists and you must enter the information.

Off-Site Third-Party Handler, Preparer, or Applier Information

NPDES ID (if known)

Facility/Company Name *

Liberty Compost

Address *

12421 Holloway Rd.

City *	State *	Zip Code *
Lost Hills	California	93249

Off-Site Third-Party Handler, Preparer, or Applier Contact Information

First Name *	Last Name *	Title *
Patrick	McCarthy	Site Manager

Phone (10-digits, No dashes) *	Ext.	E-Mail Address
6617972914		patrickmccarthy@mccarthyfarms.com

Biosolids or Sewage Sludge Pathogen Reduction Options

Please use the selections below to identify the pathogen reduction options used by your facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Code	Pathogen Reduction Option Class A (must also demonstrate that meet fecal coliform or salmonella limits)
☐ A1	Class A-Alternative 1: Time/Temperature
☐ A2	Class A-Alternative 2: pH/Temperature/Percent Solids
☐ A3	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters
☐ A4	Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids
☒ A51	Class A-Alternative 5 PFRP 1: Composting
☐ A52	Class A-Alternative 5 PFRP 2: Heat Drying
☐ A53	Class A-Alternative 5 PFRP 3: Liquid Heat Treatment
☐ A54	Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)
☐ A55	Class A-Alternative 5 PFPR 5: Beta Ray Irradiation
☐ A56	Class A-Alternative 5 PFPR 6: Gamma Ray Irradiation
☐ A57	Class A-Alternative 5 PFRP 7: Pasteurization
☐ A6	Class A-Alternative 6: PFRP Equivalency
☐ pH	pH Adjustment (Domestic Septage)

Biosolids or Sewage Sludge Vector Attraction Reduction Options

Please use the selections below to identify the vector attraction reduction options used by your facility or another person/facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Vector Attraction Reduction Options	
☒ VR1	Option 1-Volatile Solids Reduction
☐ VR2	Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)
☐ VR3	Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less)
☐ VR4	Option 4-Specific Oxygen Uptake Rate
☒ VR5	Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)
☐ VR6	Option 6-Alkaline Treatment
☐ VR7	Option 7-Drying (Equal to or Greater than 75 Percent)
☐ VR8	Option 8-Drying (Equal to or Greater than 90 Percent)

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see 40 CFR 503) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations (40 CFR 503) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see 40 CFR 503.7).

Land Application

☐ Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of 40 CFR 503.13).

☐ Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and 40 CFR 503.8).

☐ Facility had deficiencies with pathogen reduction (see 40 CFR 503.32).

☐ Facility had deficiencies with vector attraction reduction (see 40 CFR 503.33).

☐ Land application of bulk sewage sludge likely to adversely affected a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat (see 40 CFR 503.14(a)).

☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site that was flooded, frozen, or snow-covered such that the bulk sewage sludge entered a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to Section 402 or 404 of the CWA (see 40 CFR 503.14(b)).

☐ Bulk sewage sludge was applied to agricultural land, forest, or a reclamation site was 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority (see 40 CFR 503.14(c)).

☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that was greater than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority (see 40 CFR 503.14(d)).

☐ One or more label or information sheet requirements were not met for sewage sludge that was sold or given away for land application (see 40 CFR 503.14(e)).

☐ Bulk sewage sludge was applied to land where the cumulative pollutant loading rates in §503.13(b)(2) have been reached.

☐ The required notice and information was not provided to the land application applier (see 40 CFR 503.12(f) and (g)).

☐ The required notice and information was not provided to the owner or lease holder of the land on which bulk sewage sludge was applied (see 40 CFR 503.12(h)).

☐ The required notice was not provided to the permitting authority for the State in which bulk sewage sludge was applied if the bulk sewage sludge was applied to land in a State other than the State in which the bulk sewage sludge was prepared (see 40 CFR 503.12(i) and (j)).

☐ The facility failed to keep the necessary records for preparers and appliers during the reporting period (see 40 CFR 503.27).

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 004

Management Practice Type *	Handler, Preparer, or Applier Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Preparer	Distribution and Marketing - Compost

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ. "Off-Site Third-Party Handler or Applier" refers to third parties which do not change the quality of the Biosolids. "Off-Site Third-Party Preparer" refers to a third party which changes the quality of the Biosolids.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class A EQ (sale/give away)	475

Pollutant Concentrations:

Did the facility land apply bulk sewage sludge when one or more pollutant concentrations in the sewage sludge exceeded a monthly average pollutant concentration in Table 3 of 40 CFR 503.13? *

○ Yes ◉ No ○ Unknown

Name of Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier.You may optionally look up a NPDES ID to auto-populate this information. If fields remain blank after clicking the Lookup button, then no data exists and you must enter the information.

Off-Site Third-Party Handler, Preparer, or Applier Information

NPDES ID (if known)

Facility/Company Name *

Synagro – Arizona Soils

Address *

5615 S. 91st Avenue

City *	State *	Zip Code *
Tolleson	Arizona	85353

Off-Site Third-Party Handler, Preparer, or Applier Contact Information

First Name *	Last Name *	Title *
Craig	Geyer	Senior Operations Manager

Phone (10-digits, No dashes) *	Ext.	E-Mail Address
6239366328		CGeyer@SYNAGRO.com

Biosolids or Sewage Sludge Pathogen Reduction Options

Please use the selections below to identify the pathogen reduction options used by your facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

	Code	Pathogen Reduction Option Class A (must also demonstrate that meet fecal coliform or salmonella limits)
☐	A1	Class A-Alternative 1: Time/Temperature
☐	A2	Class A-Alternative 2: pH/Temperature/Percent Solids
☐	A3	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters
☐	A4	Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids
☒	A51	Class A-Alternative 5 PFRP 1: Composting
☐	A52	Class A-Alternative 5 PFRP 2: Heat Drying
☐	A53	Class A-Alternative 5 PFRP 3: Liquid Heat Treatment
☐	A54	Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)
☐	A55	Class A-Alternative 5 PFPR 5: Beta Ray Irradiation
☐	A56	Class A-Alternative 5 PFPR 6: Gamma Ray Irradiation
☐	A57	Class A-Alternative 5 PFRP 7: Pasteurization
☐	A6	Class A-Alternative 6: PFRP Equivalency
☐	pH	pH Adjustment (Domestic Septage)

Biosolids or Sewage Sludge Vector Attraction Reduction Options

Please use the selections below to identify the vector attraction reduction options used by your facility or another person/facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Vector Attraction Reduction Options

- ☒ VR1 Option 1-Volatile Solids Reduction
- ☐ VR2 Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)
- ☐ VR3 Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less)
- ☐ VR4 Option 4-Specific Oxygen Uptake Rate
- ☒ VR5 Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)
- ☐ VR6 Option 6-Alkaline Treatment
- ☐ VR7 Option 7-Drying (Equal to or Greater than 75 Percent)
- ☐ VR8 Option 8-Drying (Equal to or Greater than 90 Percent)

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see 40 CFR 503) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations (40 CFR 503) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see 40 CFR 503.7).

Land Application

- ☐ Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of 40 CFR 503.13).
- ☐ Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and 40 CFR 503.8).
- ☐ Facility had deficiencies with pathogen reduction (see 40 CFR 503.32).
- ☐ Facility had deficiencies with vector attraction reduction (see 40 CFR 503.33).
- ☐ Land application of bulk sewage sludge likely to adversely affected a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat (see 40 CFR 503.14(a)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site that was flooded, frozen, or snow-covered such that the bulk sewage sludge entered a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to Section 402 or 404 of the CWA (see 40 CFR 503.14(b)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, or a reclamation site was 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority (see 40 CFR 503.14(c)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that was greater than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority (see 40 CFR 503.14(d)).
- ☐ One or more label or information sheet requirements were not met for sewage sludge that was sold or given away for land application (see 40 CFR 503.14(e)).
- ☐ Bulk sewage sludge was applied to land where the cumulative pollutant loading rates in §503.13(b)(2) have been reached.
- ☐ The required notice and information was not provided to the land application applier (see 40 CFR 503.12(f) and (g)).

☐ The required notice and information was not provided to the owner or lease holder of the land on which bulk sewage sludge was applied (see 40 CFR 503.12(h)).

☐ The required notice was not provided to the permitting authority for the State in which bulk sewage sludge was applied if the bulk sewage sludge was applied to land in a State other than the State in which the bulk sewage sludge was prepared (see 40 CFR 503.12(i) and (j)).

☐ The facility failed to keep the necessary records for preparers and appliers during the reporting period (see 40 CFR 503.27).

☒ **Please select this checkbox to continue completing the form.**
If you wish to change the SSUID section(s) above, uncheck this box. *

Biosolids Monitoring Data

INSTRUCTIONS: These monitoring data should be representative of the sewage sludge that was applied to land or placed on a surface disposal site during the reporting year see 40 CFR 503.8(a). This section uses the frequency of monitoring requirements in 40 CFR 503.16 and 503.26. The following codes can be used as data qualifiers: T = Too Numerous to Count, E = Estimated, N = No Data.

Land Application Monthly Sample Table

Sample	Sample Period Start Date	Sample Period End Date
Sample 1 Time Period	01-01-2017	01-31-2017
Sample 2 Time Period	02-01-2017	02-28-2017
Sample 3 Time Period	03-01-2017	03-31-2017
Sample 4 Time Period	04-01-2017	04-30-2017
Sample 5 Time Period	05-01-2017	05-31-2017
Sample 6 Time Period	06-01-2017	06-30-2017
Sample 7 Time Period	07-01-2017	07-31-2017
Sample 8 Time Period	08-01-2017	08-31-2017
Sample 9 Time Period	09-01-2017	09-30-2017
Sample 10 Time Period	10-01-2017	10-31-2017
Sample 11 Time Period	11-01-2017	11-30-2017
Sample 12 Time Period	12-01-2017	12-31-2017

Maximum Pollutant Concentration Data for All Sewage Sludge Applied to Land *

This section summarizes the maximum pollutant concentrations in sewage sludge that was applied to land during the reporting year. In accordance with 40 CFR 503.13(a), EPA's sewage sludge 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 (see Table 1 of 40 CFR 503.13). In order to identify noncompliance, EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13.

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Arsenic	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 10	= 16	= 7.5	= 7.5	= 9.1	= 8.8
Sample 7	**Sample 8**	**Sample 9**	**Sample 10**	**Sample 11**	**Sample 12**
= 7.4	= 8.0	= 7.5	= 9.3	= 9.5	= 11

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Cadmium	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 4.2	= 6.0	= 4.6	= 3.7	= 4.5	= 3.3
Sample 7	**Sample 8**	**Sample 9**	**Sample 10**	**Sample 11**	**Sample 12**
= 5.2	= 3.7	= 4.1	= 3.3	= 3.3	= 3.3

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Copper	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 440	= 490	= 470	= 410	= 440	= 450
Sample 7	**Sample 8**	**Sample 9**	**Sample 10**	**Sample 11**	**Sample 12**
= 430	= 450	= 460	= 420	= 460	= 390

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Lead	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
E 10	= 14	= 13	= 11	= 11	= 12
Sample 7	**Sample 8**	**Sample 9**	**Sample 10**	**Sample 11**	**Sample 12**
= 12	= 11	= 13	= 11	E 10	= 12

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Mercury	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 1.1	= 1.3	= 0.73	= 2.0	= 1.2	= 0.69

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 1.1	= 0.92	= 1.0	= 1.3	= 0.86	= 0.74

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Molybdenum	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 14	= 18	= 16	= 15	= 15	= 15

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 15	= 15	= 15	= 14	= 16	= 15

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Nickel	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 28	= 41	= 40	= 31	= 25	= 32

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 34	= 35	= 32	= 31	= 32	= 29

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Selenium	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 4.9	= 8.1	= 12	= 5.9	= 12	= 8.0

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 6.5	= 5.9	= 7.8	= 6.8	= 9.6	E 5.3

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Zinc	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 670	= 730	= 680	= 580	= 630	= 600

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 650	= 670	= 690	= 630	= 720	= 540

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Total Nitrogen (TKN plus Nitrate-Nitrite)	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	57000	=	56000	=	50000	=	49000	=	56000	=	57000

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	49000	=	46000	=	54000	=	50000	=	52000	=	57000

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

This section summarizes the monitoring-period average pollutant concentrations in sewage sludge that was applied to land during the reporting year.

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Arsenic	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	9.7	=	12	E	11	=	6.9	=	8.3	=	7.2

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	7.2	=	8.0	=	7.2	=	7.7	=	8.4	=	8.9

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Cadmium	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	4.0	=	5.5	=	4.5	=	3.6	=	4.2	=	3.3

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	4.4	=	8.0	=	3.9	=	2.9	=	3.0	=	3.0

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Copper	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	420	=	440	=	450	=	410	=	410	=	430

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	430	=	450	=	450	=	400	=	400	=	380

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Lead	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
E	9.2	=	13	=	13	E	11	E	9.0	E	11

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
E	10	E	11	E	11	=	11	E	9.7	=	12

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Mercury	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	0.99	=	1.2	=	0.69	=	1.4	=	1.2	=	0.66

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	0.92	=	0.78	=	0.99	=	1.1	=	0.75	=	0.74

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Nickel	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	28	=	35	=	39	=	30	=	25	=	32

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	34	=	34	=	32	=	28	=	30	=	28

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Selenium	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	4.7	E	5.6	E	7.4	=	5.9	=	11	=	7.0

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	6.2	=	5.8	=	7.6	=	6.0	=	7.8	E	3.0

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Zinc	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	640	=	650	=	680	=	580	=	590	=	600

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	650	=	670	=	680	=	610	=	640	=	520

Pathogens: Class A, Fecal Coliform *

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Fecal Coliform	Maximum	MPN/gram	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
N		N		N		N		N		N	

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
N		N		N		N		N		N	

Pathogens: Class A, Salmonella *

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Salmonella	Maximum	MPN per 4 grams	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
N		N		N		N		N		N	

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
N		N		N		N		N		N	

Vector Attraction Reduction - Volatile Solids Options (Options 1-3) *

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Solids, total volatile percent removal	Minimum	Percent	CALCTD

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	57	=	52	=	60	=	61	=	56	=	55

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	51	=	60	=	46	=	60	=	59	=	60

Additional Information

Please enter any additional information in the comment box below (limit to 3,900 characters) that you would like to provide.

See OCSD's attached annual biosolids compliance report.

Additional Attachments (maximum size 25 MB)

File: 2017_OCSD_Annual_Biosolids_Compliance_Report_503.pdf

Certification Information

I certify, under penalty of law, that the information in this report was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Certifier E-Mail *	Form Action *
rcoss@ocsd.com	Approve

Sewage Sludge (Biosolids) Annual Report

EPA Regulations – 503.18, 503.28, 503.48

INSTRUCTIONS

EPA's sewage sludge regulations (40 CFR part 503) require certain POTWs and Class I sewage sludge management facilities to submit to an annual biosolids report. POTWs that must submit an annual report include POTWs with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more. This is the biosolids annual report form for POTWs and Class I sewage sludge management facilities in the 42 states and all tribes and territories where EPA administers the Federal biosolids program.

For the purposes of this form, the term 'sewage sludge' 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.

Please note that questions with a (*) are required. Please also note that EPA may contact you after you submit this report for more information regarding your sewage sludge program.

Questions regarding this form should be directed to the NPDES Electronic Reporting Helpdesk at:

- NPDESeReporting@epa.gov OR
- 1-877-227-8965

What action would you like to take? *

New Biosolids Program Report

1. Program Information

Please select the NPDES ID number below for this Sewage Sludge (Biosolids) Annual Report. *

CAL120604: Orange County SD #2

IMPORTANT - If you do not see the NPDES ID associated with your facility (i.e., you only see a blue bar in the above drop down list), you MUST follow the instructions in the "Biosolids User's Guide." A shorter set of instructions to fix this issue are in the "Important Instructions on Accessing Your NPDES ID" document. Both documents are located at: https://epanet.zendesk.com/hc/en-us/sections/207108787-General-Biosolids.

Facility Name: Orange County SD #2

Street: 10844 Ellis Avenue

City: FOUNTAIN VALLEY

State: CA

Zip Code: 92708-7018

1.1 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 503. The facility is: *

- [x] a POTW with a design flow rate equal to or greater than one million gallons per day
- [x] a POTW that serves 10,000 people or more
- [x] a Class I Sludge Management Facility as defined in 40 CFR 503.9
- [ ] otherwise required to report (e.g., permit condition, enforcement action)
- [ ] none of the above

1.2 Reporting Period Start and End Dates

Start Date of Reporting Period *	End Date of Reporting Period *
01-01-2017	12-31-2017

2. Facility Information

2.1 Biosolids or Sewage Sludge Treatment Processes

Please check the box next to the following biosolids or sewage sludge treatment processes that you used on the sewage sludge or biosolids generated or produced at your facility during the reporting period (check one or more that apply). *

Pathogen Reduction Operations (see Appendix B to Part 503)

Processes to Significantly Reduce Pathogens (PSRP)

- ☐ Aerobic Digestion
- ☐ Air Drying (or "sludge drying beds")
- ☒ Anaerobic Digestion
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization

Processes 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 (or 180°C) or higher for 30 min.)
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization

Physical Treatment Operations

- ☒ Preliminary Operations (e.g., sludge grinding, degritting, blending)
- ☒ Thickening (e.g., gravity and/or flotation thickening, centrifugation, belt filter press, vacuum filter)
- ☐ Sludge Lagoon

Other Processes to Manage Sewage Sludge

- ☐ Temporary Sludge Storage (sewage sludge stored on land 2 years or less, not in sewage sludge unit)
- ☐ Long-term Sludge Storage (sewage sludge stored on land 2 years or more, not in sewage sludge unit)
- ☒ Methane or Biogas Capture and Recovery
- ☐ Other Treatment Process:

2.2 Biosolids or Sewage Sludge Analytical Methods

EPA regulations specify that representative samples of sewage sludge that is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator must be collected and analyzed. These regulations also specify the analytical methods that must be used to analyze samples of sewage sludge. For example, EPA requires facilities to monitor for the certain parameters, which are listed in Tables 1, 2, 3, and 4 at 40 CFR 503.13 and Tables 1 and 2 40 CFR 503.23. See also 40 CFR 503.8.

Please check the box next to the following analytic methods used on the sewage sludge or biosolids generated or produced by you or your facility during the reporting period (check one or more that apply). *

Parameter	Method Number or Author	Description Text for Certification Section
Pathogens		
Ascaris ova.	☐ Sludge Monitoring - Ascaris ova. ☐ Other Ascaris ova. Analytical Method:	Sludge Monitoring - Ascaris ova., "Test Method for Detecting, Enumerating, and Determining the Viability Ascaris in Sludge (Appendix I)," Control of Pathogens and Vector Attraction in Sewage Sludge", EPA-625-R-92-013, July 2003

Parameter	Method Number or Author	Description Text for Certification Section
Enteric viruses	☐ ASTM Method D4994 - Enteric Viruses	ASTM Method D4994 - Enteric Viruses, "Standard Practice for Recovery of Viruses From Wastewater Sludges," ASTM International
	☐ Other Enteric Viruses Analytical Method:	
Fecal coliform	☐ Standard Method 9222 - Fecal Coliform	Standard Method 9222 - Fecal Coliform, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association [Note: This method is only allowable for Class B sewage sludge]
	☐ Standard Method 9221 - Fecal Coliform	Standard Method 9221 - Fecal Coliform, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ EPA Method 1680 - Fecal Coliform	EPA Method 1680 - Fecal Coliform, "Fecal Coliforms in Sewage Sludge by Multiple-Tube Fermentation using Lauryl Tryptose Broth and EC Medium," EPA-821-R-10-003, April 2010
	☐ EPA Method 1681 - Fecal Coliform	EPA Method 1681 - Fecal Coliform, Fecal Coliforms in Sewage Sludge (Biosolids) by MultipleTube Fermentation using A-1 medium, EPA-821-R-04-027, June 2005
	☐ Other Fecal Coliform Analytical Method:	
Helminth ova.	☐ W.A. Yanko Method - Helminth ova.	W.A. Yanko Method - Helminth Ova., "Occurrence of Pathogens in Distribution and Marketing Municipal Sludges," EPA-600-1-87-014, 1987
	☐ Other Helminth ova. Analytical Method:	
Salmonella sp. Bacteria	☐ Standard Method 9260 - Salmonella	Standard Method 9260 - Salmonella, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ EPA Method 1682 - Salmonella	EPA Method 1682, "Salmonella in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis (MSRV) Medium," EPA-821-R-06-014, July 2006
	☐ Kenner and Clark Method - Salmonella	Kenner and Clark Method - Salmonella, “Detection and Enumeration of Salmonella and Pseudomonas aeruginosa,” J. Water Pollution Control Federation, 46(9):2163-2171, 1974
	☐ Other Salmonella sp. Bacteria Analytical Method:	
Total Culturable Viruses	☐ Class A Sludge Monitoring - Total Culturable Viruses	EPA Class A Sludge Monitoring - Total Culturable Viruses, "Method for the Recovery and Assay of Total Culturable Viruses from Sludge (Appendix H)," Control of Pathogens and Vector Attraction in Sewage Sludge, EPA-625-R-92-013, July 2003
	☐ Other Total Culturable Viruses Analytical Method:	
Metals		
Arsenic	☒ EPA Method 6010 - Arsenic (ICP-OES)	EPA Method 6010 - Arsenic (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Arsenic (ICP-MS)	EPA Method 6020 - Arsenic (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Arsenic (GF-AAS)	EPA Method 7010 - Arsenic (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7061 - Arsenic (AA-GH)	EPA Method 7061 - Arsenic (Atomic Absorption - Gaseous Hydride), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Arsenic Analytical Method:	
Beryllium	☒ EPA Method 6010 - Beryllium (ICP-OES)	EPA Method 6010 - Beryllium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Beryllium (ICP-MS)	EPA Method 6020 - Beryllium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Beryllium (FAAS)	EPA Method 7000 - Beryllium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Beryllium (GF-AAS)	EPA Method 7010 - Beryllium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Beryllium Analytical Method	

Parameter	Method Number or Author	Description Text for Certification Section
Cadmium	☒ EPA Method 6010 - Cadmium (ICP-OES)	EPA Method 6010 - Cadmium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Cadmium (ICP-MS)	EPA Method 6020 - Cadmium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Cadmium (FAAS)	EPA Method 7000 - Cadmium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Cadmium (GF-AAS)	EPA Method 7010 - Cadmium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7131 - Cadmium (GF-AAS)	EPA Method 7131 - Cadmium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Cadmium Analytical Method:	
Chromium	☒ EPA Method 6010 - Chromium (ICP-OES)	EPA Method 6010 - Chromium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Chromium (ICP-MS)	EPA Method 6020 - Chromium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Chromium (FAAS)	EPA Method 7000 - Chromium (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Chromium (GF-AAS)	EPA Method 7010 - Chromium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7191 - Chromium (AA-FT)	EPA Method 7191 - Chromium (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ Other Chromium Analytical Method:	
Copper	☒ EPA Method 6010 - Copper (ICP-OES)	EPA Method 6010 - Copper (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Copper (ICP-MS)	EPA Method 6020 - Copper (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Copper (FAAS)	EPA Method 7000 - Copper (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Copper (GF-AAS)	EPA Method 7010 - Copper (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Copper Analytical Method:	
Lead	☒ EPA Method 6010 - Lead (ICP-OES)	EPA Method 6010 - Lead (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Lead (ICP-MS)	EPA Method 6020 - Lead (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Lead (FAAS)	EPA Method 7000 - Lead (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Lead (GF-AAS)	EPA Method 7010 - Lead (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7421 - Lead (AA-FT)	EPA Method 7421 - Lead (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Lead Analytical Method:	
Mercury	☒ EPA Method 7471 - Mercury (CVAA)	EPA Method 7471 - Mercury in Solid or Semi-Solid Waste (Cold Vapor Atomic Absoprtion), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Mercury Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Molybdenum	☒ EPA Method 6010 - Molybdenum (ICP-OES)	EPA Method 6010 - Molybdenum (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Molybdenum (ICP-MS)	EPA Method 6020 - Molybdenum (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Molybdenum (FAAS)	EPA Method 7000 - Molybdenum (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Molybdenum (GF-AAS)	EPA Method 7010 - Molybdenum (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7481 - Molybdenum (AA-FT)	EPA Method 7481 - Molybdenum (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Molybdenum Analytical Method:	
Nickel	☒ EPA Method 6010 - Nickel (ICP-OES)	EPA Method 6010 - Nickel (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Nickel (ICP-MS)	EPA Method 6020 - Nickel (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Nickel (FAAS)	EPA Method 7000 - Nickel (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Nickel (GF-AAS)	EPA Method 7010 - Nickel (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Nickel Analytical Method:	
Selenium	☒ EPA Method 6010 - Selenium (ICP-OES)	EPA Method 6010 - Selenium (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Selenium (ICP-MS)	EPA Method 6020 - Selenium (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Selenium (GF-AAS)	EPA Method 7010 - Selenium (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7740 - Selenium (AA-FT)	EPA Method 7741A - Selenium (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7741 - Selenium (AA-GH)	EPA Method 7741 - Selenium (Atomic Absorption - Gaseous Hydride), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Selenium Analytical Method:	
Zinc	☒ EPA Method 6010 - Zinc (ICP-OES)	EPA Method 6010 - Zinc (Inductively Coupled Plasma - Optical Emission Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 6020 - Zinc (ICP-MS)	EPA Method 6020 - Zinc (Inductively Coupled Plasma - Mass Spectrometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7000 - Zinc (FAAS)	EPA Method 7000 - Zinc (Flame Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 7010 - Zinc (GF-AAS)	EPA Method 7010 - Zinc (Graphite Furnace Atomic Absorption Spectrophotometry), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Zinc Analytical Method:	
Nitrogen Compounds		
Ammonia Nitrogen	☐ EPA Method 350.1 - Ammonia Nitrogen	EPA Method 350.1 - Ammonia Nitrogen, "Determination of Ammonia Nitrogen by Semi-Automated Colorimetry," August 1993
	☒ Standard Method 4500-NH3 - Ammonia Nitrogen	Standard Method 4500-NH3 - Ammonia Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Ammonia Nitrogen Analytical Method	

Parameter	Method Number or Author	Description Text for Certification Section
Nitrate Nitrogen	☐ EPA Method 9056 - Nitrate Nitrogen (IC)	EPA Method 9056 - Nitrate Nitrogen (Ion Chromatography), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ EPA Method 9210 - Nitrate Nitrogen (ISE)	EPA Method 9210 - Nitrate Nitrogen (Ion-Selective Electrode), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☒ Other Nitrate Nitrogen Analytical Method:	EPA 300.0
Nitrogen	☒ Standard Method 4500-N - Nitrogen	Standard Method 4500-N - Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Nitrogen Analytical Method:	
Organic Nitrogen	☐ Standard Method 4500-Norg - Organic Nitrogen	Standard Method 4500-Norg - Organic Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☒ Other Organic Nitrogen Analytical Method:	Calculation
Total Kjeldahl Nitrogen	☒ EPA Method 351.2 - Total Kjeldahl Nitrogen	EPA Method 351.2 - Total Kjeldahl Nitrogen, "Determination of Total Kjeldahl Nitrogen by Semi-Automated Colorimetry," August 1993
	☐ Other Total Kjeldahl Nitrogen Analytical Method:	
Other Analytes		
Fixed Solids	☐ Standard Method 2540 - Fixed Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Fixed Solids Analytical Method:	
Paint Filter Test	☒ EPA Method 9095 - Paint Filter Liquids Test	EPA Method 9095 - Paint Filter Liquids Test, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other Paint Filter Test Analytical Method:	
pH	☐ EPA Method 9040 - pH (≤ 7% solids)	EPA Method 9040 - pH (≤ 7% solids), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☒ EPA Method 9045 - pH (> 7% solids)	EPA Method 9045 - pH (> 7% solids), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other pH Analytical Method:	
Specific Oxygen Uptake Rate	☐ Standard Method 2710 - SOUR	Standard Method 2710 - Specific Oxygen Uptake Rate, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Specific Oxygen Uptake Rate Analytical Method:	
TCLP	☒ EPA Method 1311 - Toxicity Characteristic Leaching Procedure	EPA Method 1311 - Toxicity Characteristic Leaching Procedure, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	☐ Other TCLP Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Temperature	☐ Standard Method 2550 - Temperature	Standard Method 2550 - Temperature, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Temperature Analytical Method:	
Total Solids	☒ Standard Method 2540 - Total Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Total Solids Analytical Method:	
Volatile Solids	☒ Standard Method 2540 - Volatile Solids	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	☐ Other Volatile Solids Analytical Method:	
No Analytical Methods	☐ No Analytical Methods Used	

2.3 What is the estimated total volume of biosolids or sewage sludge produced at your facility for the reporting period (in dry metric tons)? *

28102

3. Biosolids or Sewage Sludge Management

EPA NPDES regulations at 40 CFR 503 only require reporting for land application, surface disposal, or incineration. You have the option to select "Other Management Practice" if you wish to provide more information on how you manage your sewage sludge or biosolids.
Please use the selections below to identify how sewage sludge or biosolids generated or produced at your facility was managed, used, or disposed by you or your facility for the reporting period. You can use the button below to add as many Sewage Sludge Unique Identifier (SSUID) sections as needed to describe how you manage your sewage sludge.

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 001

Management Practice Type *	Handler, Preparer, or Applier Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Handler or Applier	Agricultural Land Applicaton

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ. “Off-Site Third-Party Handler or Applier” refers to third parties which do not change the quality of the Biosolids. “Off-Site Third-Party Preparer” refers to a third party which changes the quality of the Biosolids.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class B	23570

Pollutant Concentrations:

Did the facility land apply bulk sewage sludge when one or more pollutant concentrations in the sewage sludge exceeded a monthly average pollutant concentration in Table 3 of 40 CFR 503.13? *

○ Yes ◉ No ○ Unknown

Name of Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier.You may optionally look up a NPDES ID to auto-populate this information. If fields remain blank after clicking the Lookup button, then no data exists and you must enter the information.

Off-Site Third-Party Handler, Preparer, or Applier Information

NPDES ID (if known)

Facility/Company Name *

Tule Ranch / Ag-Tech

Address *

4324 E. Ashlan Ave.

City *	State *	Zip Code *
Fresno	California	93726

Off-Site Third-Party Handler, Preparer, or Applier Contact Information

First Name *	Last Name *	Title *
Shaen	Magan	Owner

Phone (10-digits, No dashes) *	Ext.	E-Mail Address
5599709432		kurt@westexp.com

Biosolids or Sewage Sludge Pathogen Reduction Options

Please use the selections below to identify the pathogen reduction options used by your facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

	Code	Pathogen Reduction Option Class A (must also demonstrate that meet fecal coliform or salmonella limits)
☐	B1	Class B-Alternative 1: Fecal Coliform Geometric Mean
☐	B21	Class B-Alternative 2 PSRP 1: Aerobic Digestion
☐	B22	Class B-Alternative 2 PSRP 2: Air Drying
☒	B23	Class B-Alternative 2 PSRP 3: Anaerobic Digestion
☐	B24	Class B-Alternative 2 PSRP 4: Composting
☐	B25	Class B-Alternative 2 PSRP 5: Lime Stabilization
☐	B3	Class B-Alternative 3: PSRP Equivalency
☐	pH	pH Adjustment (Domestic Septage)

Biosolids or Sewage Sludge Vector Attraction Reduction Options

Please use the selections below to identify the vector attraction reduction options used by your facility or another person/facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Vector Attraction Reduction Options

- [x] VR1 Option 1-Volatile Solids Reduction
- [ ] VR2 Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)
- [ ] VR3 Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less)
- [ ] VR4 Option 4-Specific Oxygen Uptake Rate
- [ ] VR5 Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)
- [ ] VR6 Option 6-Alkaline Treatment
- [ ] VR7 Option 7-Drying (Equal to or Greater than 75 Percent)
- [ ] VR8 Option 8-Drying (Equal to or Greater than 90 Percent)
- [ ] VR9 Option 9-Sewage Sludge Injection
- [x] VR10 Option 10-Sewage Sludge Timely Incorporation into Land
- [ ] VR11 Option 11-Sewage sludge Covered at the End of Each Operating Day

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see 40 CFR 503) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations (40 CFR 503) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see 40 CFR 503.7).

Land Application

- [ ] Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of 40 CFR 503.13).
- [ ] Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and 40 CFR 503.8).
- [ ] Facility had deficiencies with pathogen reduction (see 40 CFR 503.32).
- [ ] Facility had deficiencies with vector attraction reduction (see 40 CFR 503.33).
- [ ] Land application of bulk sewage sludge likely to adversely affected a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat (see 40 CFR 503.14(a)).
- [ ] Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site that was flooded, frozen, or snow-covered such that the bulk sewage sludge entered a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to Section 402 or 404 of the CWA (see 40 CFR 503.14(b)).
- [ ] Bulk sewage sludge was applied to agricultural land, forest, or a reclamation site was 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority (see 40 CFR 503.14(c)).
- [ ] Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that was greater than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority (see 40 CFR 503.14(d)).

☐ One or more label or information sheet requirements were not met for sewage sludge that was sold or given away for land application (see 40 CFR 503.14(e)).

☐ Bulk sewage sludge was applied to land where the cumulative pollutant loading rates in §503.13(b)(2) have been reached.

☐ The required notice and information was not provided to the land application applier (see 40 CFR 503.12(f) and (g)).

☐ The required notice and information was not provided to the owner or lease holder of the land on which bulk sewage sludge was applied (see 40 CFR 503.12(h)).

☐ The required notice was not provided to the permitting authority for the State in which bulk sewage sludge was applied if the bulk sewage sludge was applied to land in a State other than the State in which the bulk sewage sludge was prepared (see 40 CFR 503.12(i) and (j)).

☐ The facility failed to keep the necessary records for preparers and appliers during the reporting period (see 40 CFR 503.27).

When sewage sludge that meets Class B pathogen reduction requirements, but not Class A, is applied to the land, additional site restrictions must be met. Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge Class B pathogen reduction requirements (see 40 CFR 503.32) for this facility during the reporting period.

☐ Food crops with harvested parts that touched the sewage sludge/soil mixture (such as melons, cucumbers, squash, etc.) were harvested within 14 months after application of sewage sludge (see 40 CFR 503.32(b)(5)(i)).

☐ Food crops with harvested parts below the soil surface (root crops such as potatoes, carrots, radishes) were harvested within 20 months after application of sewage sludge and the sewage sludge remained on the land surface for four months or longer prior to incorporation into the soil (see 40 CFR 503.32(b)(5)(ii)).

☐ Food crops with harvested parts below the soil surface (root crops such as potatoes, carrots, radishes) were harvested within 38 months after application of the sewage sludge and the sewage sludge remained on the land surface for less than four months prior to incorporation into the soil (see 40 CFR 503.32(b)(5)(iii)).

☐ Food crops, feed crops, and fiber crops were harvested within 30 days after application of sewage sludge (see 40 CFR 503.32(b)(5)(iv)).

☐ Animals were grazed on a site within 30 days after application of sewage sludge (see 40 CFR 503.32(b)(5)(v)).

☐ Turf was harvested within 1 year after application of sewage sludge if the turf was placed on land with a high potential for public exposures or a lawn, unless otherwise specified by the permitting authority (see 40 CFR 503.32(b)(5)(vi)).

☐ Public access to land with high potential for public exposure was not restricted for 1 year after application of sewage sludge (see 40 CFR 503.32(b)(5)(vii)).

☐ Public access to land with a low potential for public exposure was not restricted for 30 days after application of sewage sludge (see 40 CFR 503.32(b)(5)(viii)).

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 002

Management Practice Type *	Handler, Preparer, or Applier Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Preparer	Distribution and Marketing - Compost

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ. "Off-Site Third-Party Handler or Applier" refers to third parties which do not change the quality of the Biosolids. "Off-Site Third-Party Preparer" refers to a third party which changes the quality of the Biosolids.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class A EQ (sale/give away)	2736

Pollutant Concentrations:

Did the facility land apply bulk sewage sludge when one or more pollutant concentrations in the sewage sludge exceeded a monthly average pollutant concentration in Table 3 of 40 CFR 503.13? *

○ Yes ◉ No ○ Unknown

Name of Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier.You may optionally look up a NPDES ID to auto-populate this information. If fields remain blank after clicking the Lookup button, then no data exists and you must enter the information.

Off-Site Third-Party Handler, Preparer, or Applier Information

NPDES ID (if known)

Facility/Company Name *

Inland Empire Regional Composting Authority

Address *

12645 6th Street

City *	State *	Zip Code *
Rancho Cucamonga	California	91739

Off-Site Third-Party Handler, Preparer, or Applier Contact Information

First Name *	Last Name *	Title *
Jeff	Ziegenbein	Facility Manager

Phone (10-digits, No dashes) *	Ext.	E-Mail Address
9099931981		jziegenbein@ieua.org

Biosolids or Sewage Sludge Pathogen Reduction Options

Please use the selections below to identify the pathogen reduction options used by your facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

	Code	Pathogen Reduction Option Class A (must also demonstrate that meet fecal coliform or salmonella limits)
☐	A1	Class A-Alternative 1: Time/Temperature
☐	A2	Class A-Alternative 2: pH/Temperature/Percent Solids
☐	A3	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters
☐	A4	Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids
☒	A51	Class A-Alternative 5 PFRP 1: Composting
☐	A52	Class A-Alternative 5 PFRP 2: Heat Drying
☐	A53	Class A-Alternative 5 PFRP 3: Liquid Heat Treatment
☐	A54	Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)
☐	A55	Class A-Alternative 5 PFPR 5: Beta Ray Irradiation
☐	A56	Class A-Alternative 5 PFPR 6: Gamma Ray Irradiation
☐	A57	Class A-Alternative 5 PFRP 7: Pasteurization
☐	A6	Class A-Alternative 6: PFRP Equivalency
☐	pH	pH Adjustment (Domestic Septage)

Biosolids or Sewage Sludge Vector Attraction Reduction Options

Please use the selections below to identify the vector attraction reduction options used by your facility or another person/facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Vector Attraction Reduction Options

- ☒ VR1 Option 1-Volatile Solids Reduction
- ☐ VR2 Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)
- ☐ VR3 Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less)
- ☐ VR4 Option 4-Specific Oxygen Uptake Rate
- ☒ VR5 Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)
- ☐ VR6 Option 6-Alkaline Treatment
- ☐ VR7 Option 7-Drying (Equal to or Greater than 75 Percent)
- ☐ VR8 Option 8-Drying (Equal to or Greater than 90 Percent)

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see 40 CFR 503) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations (40 CFR 503) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see 40 CFR 503.7).

Land Application

- ☐ Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of 40 CFR 503.13).
- ☐ Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and 40 CFR 503.8).
- ☐ Facility had deficiencies with pathogen reduction (see 40 CFR 503.32).
- ☐ Facility had deficiencies with vector attraction reduction (see 40 CFR 503.33).
- ☐ Land application of bulk sewage sludge likely to adversely affected a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat (see 40 CFR 503.14(a)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site that was flooded, frozen, or snow-covered such that the bulk sewage sludge entered a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to Section 402 or 404 of the CWA (see 40 CFR 503.14(b)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, or a reclamation site was 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority (see 40 CFR 503.14(c)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that was greater than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority (see 40 CFR 503.14(d)).
- ☐ One or more label or information sheet requirements were not met for sewage sludge that was sold or given away for land application (see 40 CFR 503.14(e)).
- ☐ Bulk sewage sludge was applied to land where the cumulative pollutant loading rates in §503.13(b)(2) have been reached.
- ☐ The required notice and information was not provided to the land application applier (see 40 CFR 503.12(f) and (g)).

☐ The required notice and information was not provided to the owner or lease holder of the land on which bulk sewage sludge was applied (see 40 CFR 503.12(h)).

☐ The required notice was not provided to the permitting authority for the State in which bulk sewage sludge was applied if the bulk sewage sludge was applied to land in a State other than the State in which the bulk sewage sludge was prepared (see 40 CFR 503.12(i) and (j)).

☐ The facility failed to keep the necessary records for preparers and appliers during the reporting period (see 40 CFR 503.27).

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 003

Management Practice Type *	Handler, Preparer, or Applier Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Preparer	Distribution and Marketing - Compost

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ. “Off-Site Third-Party Handler or Applier” refers to third parties which do not change the quality of the Biosolids. “Off-Site Third-Party Preparer” refers to a third party which changes the quality of the Biosolids.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class A EQ (sale/give away)	1327

Pollutant Concentrations:

Did the facility land apply bulk sewage sludge when one or more pollutant concentrations in the sewage sludge exceeded a monthly average pollutant concentration in Table 3 of 40 CFR 503.13? *

○ Yes ◉ No ○ Unknown

Name of Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier.You may optionally look up a NPDES ID to auto-populate this information. If fields remain blank after clicking the Lookup button, then no data exists and you must enter the information.

Off-Site Third-Party Handler, Preparer, or Applier Information

NPDES ID (if known):

Facility/Company Name *: Liberty Compost

Address *: 12421 Holloway Rd.

City *	State *	Zip Code *
Lost Hills	California	93249

Off-Site Third-Party Handler, Preparer, or Applier Contact Information

First Name *	Last Name *	Title *
Patrick	McCarthy	Site Manager

Phone (10-digits, No dashes) *	Ext.	E-Mail Address
6617972914		patrickmccarthy@mccarthyfarms.com

Biosolids or Sewage Sludge Pathogen Reduction Options

Please use the selections below to identify the pathogen reduction options used by your facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Code		Pathogen Reduction Option Class A (must also demonstrate that meet fecal coliform or salmonella limits)
☐	A1	Class A-Alternative 1: Time/Temperature
☐	A2	Class A-Alternative 2: pH/Temperature/Percent Solids
☐	A3	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters
☐	A4	Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids
☒	A51	Class A-Alternative 5 PFRP 1: Composting
☐	A52	Class A-Alternative 5 PFRP 2: Heat Drying
☐	A53	Class A-Alternative 5 PFRP 3: Liquid Heat Treatment
☐	A54	Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)
☐	A55	Class A-Alternative 5 PFPR 5: Beta Ray Irradiation
☐	A56	Class A-Alternative 5 PFPR 6: Gamma Ray Irradiation
☐	A57	Class A-Alternative 5 PFRP 7: Pasteurization
☐	A6	Class A-Alternative 6: PFRP Equivalency
☐	pH	pH Adjustment (Domestic Septage)

Biosolids or Sewage Sludge Vector Attraction Reduction Options

Please use the selections below to identify the vector attraction reduction options used by your facility or another person/facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

		Vector Attraction Reduction Options
☒	VR1	Option 1-Volatile Solids Reduction
☐	VR2	Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)
☐	VR3	Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less)
☐	VR4	Option 4-Specific Oxygen Uptake Rate
☒	VR5	Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)
☐	VR6	Option 6-Alkaline Treatment
☐	VR7	Option 7-Drying (Equal to or Greater than 75 Percent)
☐	VR8	Option 8-Drying (Equal to or Greater than 90 Percent)

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see 40 CFR 503) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations (40 CFR 503) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see 40 CFR 503.7).

Land Application

- ☐ Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of 40 CFR 503.13).
- ☐ Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and 40 CFR 503.8).
- ☐ Facility had deficiencies with pathogen reduction (see 40 CFR 503.32).
- ☐ Facility had deficiencies with vector attraction reduction (see 40 CFR 503.33).
- ☐ Land application of bulk sewage sludge likely to adversely affected a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat (see 40 CFR 503.14(a)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site that was flooded, frozen, or snow-covered such that the bulk sewage sludge entered a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to Section 402 or 404 of the CWA (see 40 CFR 503.14(b)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, or a reclamation site was 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority (see 40 CFR 503.14(c)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that was greater than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority (see 40 CFR 503.14(d)).
- ☐ One or more label or information sheet requirements were not met for sewage sludge that was sold or given away for land application (see 40 CFR 503.14(e)).
- ☐ Bulk sewage sludge was applied to land where the cumulative pollutant loading rates in §503.13(b)(2) have been reached.
- ☐ The required notice and information was not provided to the land application applier (see 40 CFR 503.12(f) and (g)).
- ☐ The required notice and information was not provided to the owner or lease holder of the land on which bulk sewage sludge was applied (see 40 CFR 503.12(h)).
- ☐ The required notice was not provided to the permitting authority for the State in which bulk sewage sludge was applied if the bulk sewage sludge was applied to land in a State other than the State in which the bulk sewage sludge was prepared (see 40 CFR 503.12(i) and (j)).
- ☐ The facility failed to keep the necessary records for preparers and appliers during the reporting period (see 40 CFR 503.27).

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 004

Management Practice Type *	Handler, Preparer, or Applier Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Preparer	Agricultural Land Applicaton

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ. “Off-Site Third-Party Handler or Applier” refers to third parties which do not change the quality of the Biosolids. “Off-Site Third-Party Preparer” refers to a third party which changes the quality of the Biosolids.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class A EQ (sale/give away)	92

Pollutant Concentrations:

Did the facility land apply bulk sewage sludge when one or more pollutant concentrations in the sewage sludge exceeded a monthly average pollutant concentration in Table 3 of 40 CFR 503.13? *

○ Yes ◉ No ○ Unknown

Name of Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier.You may optionally look up a NPDES ID to auto-populate this information. If fields remain blank after clicking the Lookup button, then no data exists and you must enter the information.

Off-Site Third-Party Handler, Preparer, or Applier Information

NPDES ID (if known)

Facility/Company Name *

Synagro - Nursery Products

Address *

PO Box 1439

City *	State *	Zip Code *
Helendale	California	92342

Off-Site Third-Party Handler, Preparer, or Applier Contact Information

First Name *	Last Name *	Title *
Venny	Vasquez	Site Manager

Phone (10-digits, No dashes) *	Ext.	E-Mail Address
7602655210		vvasquez@synagro.com

Biosolids or Sewage Sludge Pathogen Reduction Options

Please use the selections below to identify the pathogen reduction options used by your facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

	Code	**Pathogen Reduction Option** **Class A (must also demonstrate that meet fecal coliform or salmonella limits)**
☐	A1	Class A-Alternative 1: Time/Temperature
☐	A2	Class A-Alternative 2: pH/Temperature/Percent Solids
☐	A3	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters
☐	A4	Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids
☒	A51	Class A-Alternative 5 PFRP 1: Composting
☐	A52	Class A-Alternative 5 PFRP 2: Heat Drying
☐	A53	Class A-Alternative 5 PFRP 3: Liquid Heat Treatment
☐	A54	Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)
☐	A55	Class A-Alternative 5 PFPR 5: Beta Ray Irradiation
☐	A56	Class A-Alternative 5 PFPR 6: Gamma Ray Irradiation
☐	A57	Class A-Alternative 5 PFRP 7: Pasteurization
☐	A6	Class A-Alternative 6: PFRP Equivalency
☐	pH	pH Adjustment (Domestic Septage)

Biosolids or Sewage Sludge Vector Attraction Reduction Options

Please use the selections below to identify the vector attraction reduction options used by your facility or another person/facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Vector Attraction Reduction Options

- ☒ VR1 Option 1-Volatile Solids Reduction
- ☐ VR2 Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)
- ☐ VR3 Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less)
- ☐ VR4 Option 4-Specific Oxygen Uptake Rate
- ☒ VR5 Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)
- ☐ VR6 Option 6-Alkaline Treatment
- ☐ VR7 Option 7-Drying (Equal to or Greater than 75 Percent)
- ☐ VR8 Option 8-Drying (Equal to or Greater than 90 Percent)

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see 40 CFR 503) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations (40 CFR 503) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see 40 CFR 503.7).

Land Application

- ☐ Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of 40 CFR 503.13).
- ☐ Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and 40 CFR 503.8).
- ☐ Facility had deficiencies with pathogen reduction (see 40 CFR 503.32).
- ☐ Facility had deficiencies with vector attraction reduction (see 40 CFR 503.33).
- ☐ Land application of bulk sewage sludge likely to adversely affected a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat (see 40 CFR 503.14(a)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site that was flooded, frozen, or snow-covered such that the bulk sewage sludge entered a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to Section 402 or 404 of the CWA (see 40 CFR 503.14(b)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, or a reclamation site was 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority (see 40 CFR 503.14(c)).
- ☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that was greater than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority (see 40 CFR 503.14(d)).
- ☐ One or more label or information sheet requirements were not met for sewage sludge that was sold or given away for land application (see 40 CFR 503.14(e)).
- ☐ Bulk sewage sludge was applied to land where the cumulative pollutant loading rates in §503.13(b)(2) have been reached.
- ☐ The required notice and information was not provided to the land application applier (see 40 CFR 503.12(f) and (g)).

☐ The required notice and information was not provided to the owner or lease holder of the land on which bulk sewage sludge was applied (see 40 CFR 503.12(h)).

☐ The required notice was not provided to the permitting authority for the State in which bulk sewage sludge was applied if the bulk sewage sludge was applied to land in a State other than the State in which the bulk sewage sludge was prepared (see 40 CFR 503.12(i) and (j)).

☐ The facility failed to keep the necessary records for preparers and appliers during the reporting period (see 40 CFR 503.27).

SSUID Section

Sewage Sludge Unique Identifier (SSUID): 005

Management Practice Type *	Handler, Preparer, or Applier Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Preparer	Distribution and Marketing - Compost

Please Note: Land Application includes the distribution and marketing (sale or give away) of Class A EQ. “Off-Site Third-Party Handler or Applier” refers to third parties which do not change the quality of the Biosolids. “Off-Site Third-Party Preparer” refers to a third party which changes the quality of the Biosolids.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class A EQ (sale/give away)	377

Pollutant Concentrations:

Did the facility land apply bulk sewage sludge when one or more pollutant concentrations in the sewage sludge exceeded a monthly average pollutant concentration in Table 3 of 40 CFR 503.13? *

○ Yes ◉ No ○ Unknown

Name of Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler, Preparer, or Applier for this Sewage Sludge Unique Identifier.You may optionally look up a NPDES ID to auto-populate this information. If fields remain blank after clicking the Lookup button, then no data exists and you must enter the information.

Off-Site Third-Party Handler, Preparer, or Applier Information

NPDES ID (if known)

Facility/Company Name *

Synagro – Arizona Soils

Address *

5615 S. 91st Avenue

City *	State *	Zip Code *
Tolleson	Arizona	85353

Off-Site Third-Party Handler, Preparer, or Applier Contact Information

First Name *	Last Name *	Title *
Craig	Geyer	Senior Operations Manager

Phone (10-digits, No dashes) *	Ext.	E-Mail Address
6239366328		CGeyer@SYNAGRO.com

Biosolids or Sewage Sludge Pathogen Reduction Options

Please use the selections below to identify the pathogen reduction options used by your facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Code	Pathogen Reduction Option Class A (must also demonstrate that meet fecal coliform or salmonella limits)	
☐	A1	Class A-Alternative 1: Time/Temperature
☐	A2	Class A-Alternative 2: pH/Temperature/Percent Solids
☐	A3	Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters
☐	A4	Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids
☒	A51	Class A-Alternative 5 PFRP 1: Composting
☐	A52	Class A-Alternative 5 PFRP 2: Heat Drying
☐	A53	Class A-Alternative 5 PFRP 3: Liquid Heat Treatment
☐	A54	Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)
☐	A55	Class A-Alternative 5 PFPR 5: Beta Ray Irradiation
☐	A56	Class A-Alternative 5 PFPR 6: Gamma Ray Irradiation
☐	A57	Class A-Alternative 5 PFRP 7: Pasteurization
☐	A6	Class A-Alternative 6: PFRP Equivalency
☐	pH	pH Adjustment (Domestic Septage)

Biosolids or Sewage Sludge Vector Attraction Reduction Options

Please use the selections below to identify the vector attraction reduction options used by your facility or another person/facility for this sewage sludge unique identifier for the reporting period (check one or more that apply).

Vector Attraction Reduction Options		
☒	VR1	Option 1-Volatile Solids Reduction
☐	VR2	Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)
☐	VR3	Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less)
☐	VR4	Option 4-Specific Oxygen Uptake Rate
☒	VR5	Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)
☐	VR6	Option 6-Alkaline Treatment
☐	VR7	Option 7-Drying (Equal to or Greater than 75 Percent)
☐	VR8	Option 8-Drying (Equal to or Greater than 90 Percent)

Noncompliance Reporting

Please use the check boxes below to indicate any noncompliance with EPA's Federal sewage sludge program requirements (see 40 CFR 503) for this facility during the reporting period. EPA notes that any person who prepares sewage sludge (i.e., person who generates sewage sludge or a person who derives a material from sewage sludge) shall ensure that the applicable requirements in EPA's biosolids regulations (40 CFR 503) are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator (see 40 CFR 503.7).

Land Application

☐ Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of 40 CFR 503.13).

☐ Facility failed to properly collect and analyze its sewage sludge in accordance with the required monitoring frequency and approved analytical methods in order to obtain an accurate and representative sample (including appropriate method holding times) (see permit requirements and 40 CFR 503.8).

☐ Facility had deficiencies with pathogen reduction (see 40 CFR 503.32).

☐ Facility had deficiencies with vector attraction reduction (see 40 CFR 503.33).

☐ Land application of bulk sewage sludge likely to adversely affected a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat (see 40 CFR 503.14(a)).

☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site that was flooded, frozen, or snow-covered such that the bulk sewage sludge entered a wetland or other waters of the United States, as defined in 40 CFR 122.2, except as provided in a permit issued pursuant to Section 402 or 404 of the CWA (see 40 CFR 503.14(b)).

☐ Bulk sewage sludge was applied to agricultural land, forest, or a reclamation site was 10 meters or less from waters of the United States, as defined in 40 CFR 122.2, unless otherwise specified by the permitting authority (see 40 CFR 503.14(c)).

☐ Bulk sewage sludge was applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that was greater than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority (see 40 CFR 503.14(d)).

☐ One or more label or information sheet requirements were not met for sewage sludge that was sold or given away for land application (see 40 CFR 503.14(e)).

☐ Bulk sewage sludge was applied to land where the cumulative pollutant loading rates in §503.13(b)(2) have been reached.

☐ The required notice and information was not provided to the land application applier (see 40 CFR 503.12(f) and (g)).

☐ The required notice and information was not provided to the owner or lease holder of the land on which bulk sewage sludge was applied (see 40 CFR 503.12(h)).

☐ The required notice was not provided to the permitting authority for the State in which bulk sewage sludge was applied if the bulk sewage sludge was applied to land in a State other than the State in which the bulk sewage sludge was prepared (see 40 CFR 503.12(i) and (j)).

☐ The facility failed to keep the necessary records for preparers and appliers during the reporting period (see 40 CFR 503.27).

☒ **Please select this checkbox to continue completing the form.**
If you wish to change the SSUID section(s) above, uncheck this box. *

Biosolids Monitoring Data

INSTRUCTIONS: These monitoring data should be representative of the sewage sludge that was applied to land or placed on a surface disposal site during the reporting year see 40 CFR 503.8(a). This section uses the frequency of monitoring requirements in 40 CFR 503.16 and 503.26. The following codes can be used as data qualifiers: T = Too Numerous to Count, E = Estimated, N = No Data.

Land Application Monthly Sample Table

Sample	Sample Period Start Date	Sample Period End Date
Sample 1 Time Period	01-01-2017	01-31-2017
Sample 2 Time Period	02-01-2017	02-28-2017
Sample 3 Time Period	03-01-2017	03-31-2017
Sample 4 Time Period	04-01-2017	04-30-2017
Sample 5 Time Period	05-01-2017	05-31-2017
Sample 6 Time Period	06-01-2017	06-30-2017
Sample 7 Time Period	07-01-2017	07-31-2017
Sample 8 Time Period	08-01-2017	08-31-2017
Sample 9 Time Period	09-01-2017	09-30-2017
Sample 10 Time Period	10-01-2017	10-31-2017
Sample 11 Time Period	11-01-2017	11-30-2017
Sample 12 Time Period	12-01-2017	12-31-2017

Maximum Pollutant Concentration Data for All Sewage Sludge Applied to Land *

This section summarizes the maximum pollutant concentrations in sewage sludge that was applied to land during the reporting year. In accordance with 40 CFR 503.13(a), EPA's sewage sludge 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 (see Table 1 of 40 CFR 503.13). In order to identify noncompliance, EPA will compare the pollutant concentrations in this section against the ceiling concentration limits in Table 1 of 40 CFR 503.13.

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Arsenic	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 9.1	= 18	= 16	= 9.1	= 9.3	= 10

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 9.6	= 12	= 11	= 10	= 8.6	= 12

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Cadmium	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 6.6	= 6.1	= 7.2	= 5.6	= 5.8	= 4.7

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 5.1	= 7.9	= 5.5	= 5.9	= 7.2	= 5.3

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Copper	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 460	= 500	= 450	= 460	= 520	= 460

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 490	= 630	= 500	= 430	= 440	= 440

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Lead	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 12	= 16	= 13	= 11	= 13	= 13

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 11	= 15	= 14	= 12	= 12	= 14

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Mercury	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 1.0	= 0.76	= 0.75	= 0.73	= 0.68	= 0.84

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 0.82	= 1.1	= 1.2	= 0.91	= 0.80	= 0.63

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Molybdenum	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 14	= 17	= 17	= 16	= 15	= 14

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 15	= 19	= 16	= 14	= 15	= 16

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Nickel	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 26	= 32	= 39	= 31	= 27	= 35

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 34	= 41	= 37	= 32	= 34	= 34

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Selenium	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 4.5	= 4.9	= 8.2	= 5.3	= 8.2	= 8.9

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 9.7	= 5.9	= 7.9	= 5.9	= 8.9	= 6.6

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Zinc	Maximum	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 760	= 800	= 1000	= 730	= 840	= 730

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 750	= 960	= 810	= 700	= 750	= 730

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Total Nitrogen (TKN plus Nitrate-Nitrite)	Average	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 49000	= 48000	= 49000	= 50000	= 52000	= 53000

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 47000	= 41000	= 50000	= 46000	= 49000	= 48000

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

This section summarizes the monitoring-period average pollutant concentrations in sewage sludge that was applied to land during the reporting year.

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Arsenic	Average	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 8.7	= 13	= 12	= 8.8	= 9.0	= 7.9

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 8.7	= 11	= 9.6	= 8.4	= 8.5	= 10

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Cadmium	Average	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 6.2	= 5.8	= 6.5	= 5.1	= 5.3	= 4.3

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 4.5	= 7.7	= 5.5	= 5.9	= 6.2	= 5.0

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Copper	Average	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 450	= 460	= 400	= 440	= 470	= 440

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 480	= 590	= 480	= 420	= 420	= 430

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Lead	Average	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 12	= 15	= 12	= 11	E 11	= 13

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 10	= 15	= 13	= 12	= 12	= 14

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Mercury	Average	mg/kg	COMPOS

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 0.76	= 0.72	= 0.74	= 0.63	= 0.65	= 0.76

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 0.76	= 0.92	= 1.1	= 0.81	= 0.78	E .34

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Nickel	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	25	=	28	=	34	=	30	=	26	=	34

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	33	=	38	=	36	=	31	=	32	=	34

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Selenium	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
E	3.1	E	3.9	E	5.5	=	5.3	=	7.4	=	8.0

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	7.9	=	5.7	=	7.7	=	5.6	=	7.0	E	3.6

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Zinc	Average	mg/kg	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
=	740	=	720	=	850	=	710	=	760	=	700

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
=	730	=	910	=	780	=	700	=	720	=	660

Pathogens: Class A, Fecal Coliform *

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Fecal Coliform	Maximum	MPN/gram	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
N		N		N		N		N		N	

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
N		N		N		N		N		N	

Pathogens: Class A, Salmonella *

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Salmonella	Maximum	MPN per 4 grams	COMPOS

Sample 1		Sample 2		Sample 3		Sample 4		Sample 5		Sample 6	
N		N		N		N		N		N	

Sample 7		Sample 8		Sample 9		Sample 10		Sample 11		Sample 12	
N		N		N		N		N		N	

Vector Attraction Reduction - Volatile Solids Options (Options 1-3) *

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type
Solids, total volatile percent removal	Minimum	Percent	CALCTD

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6
= 61	= 60	= 62	= 65	= 58	= 58

Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12
= 65	= 61	= 62	= 59	= 70	= 66

Additional Information

Please enter any additional information in the comment box below (limit to 3,900 characters) that you would like to provide.

Additional Attachments (maximum size 25 MB)

File: 2017_OCSD_Annual_Biosolids_Compliance_Report_503.pdf

Certification Information

I certify, under penalty of law, that the information in this report was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Certifier E-Mail *	Form Action *
rcoss@ocsd.com	Approve

APPENDIX E

Arizona Department of Environmental Quality Biosolids Annual Report Form for Reporting Year 2017

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

BIOSOLIDS OR SEWAGE SLUDGE ANNUAL REPORT FORM

1. Program Information: All preparers (Generators) and Land Applicators Must complete the following.

Reporting Start Date:1/1/2017	**Reporting End Date: 12/31/2017**
Date:2/7/2018	**AZPDES Permit # (if applicable):** Click here to enter text.
Company name (Preparer / Applicator): Orange County Sanitation District	
Contact Name: Ross Coss	**Title: Laboratory, Monitoring and Compliance Manager**
Address: 10844 Ellis Ave., Fountain Valley, CA 92708 **Phone:** 714-593-7508	**E-mail: rcoss@ocsd.com**

Please select one of the following options pertaining to your obligation to submit a Biosolids Annual Report. My facility is a:

☒ POTW with a design flow equal to or greater than 1 MGD Per Day

☒ POTW that serves 10,000 people or more

☒ Class I Sludge Management Facility as defined by 40 CFR 503.9

☐ Biosolids Applicator (Complete Section 5 only)

☐Other Click here to enter text.

What is the estimated total of volume of biosolids or sewage sludge generated at your facility (in dry metric tons)?

49,119

Were all biosolids removed from your facility sent to a landfill for disposal? No

If yes, provide the name and address of the landfill(s). Click here to enter text.

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 bisolids or sewage sludge for land application.

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: [signature] Title: Laboratory, Monitoring & Compliance Manager	Date: Feb 13, 2018

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

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.	Not applicable
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.	Not applicable
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.	Not applicable
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.

3.4. 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.	23,933
Pathogen Testing	Choose an item.	Not applicable
Pathogen Reduction Method	Choose an item.	Alternate 4 - aerobic 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 s sewage sludge incinerator, must be collected and analyzed. These regulations specify the analytical methods that must be used to analyzed samples of sewage sludge.

Parameter	*Method Number or Author*	*Results (if tested)*	*Comments (required if other)*
Pathogens			
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.
Metals			
Arsenic	EPA Method 6010 - Arsenic (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Click here to enter text.

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 E.	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 E.	Click here to enter text.
Lead	EPA Method 6010 - Lead (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Click here to enter text.
Mercury	EPA Method 7471 - Mercury (CVAA)	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Click here to enter text.
Molybdenum	EPA Method 6010 - Molybdenum (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Click here to enter text.
Nickel	EPA Method 6010 - Nickel (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Click here to enter text.
Selenium	EPA Method 6010 - Selenium (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Click here to enter text.
Zinc	EPA Method 6010 - Zinc (ICP-OES)	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Click here to enter text.
Nitrogen Compounds			
Ammonia Nitrogen	Standard Method 4500-NH3 - Ammonia Nitrogen	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Click here to enter text.
Nitrate Nitrogen	Other Nitrate Nitrogen Analytical Method	See attached OCSD Biosolids Management Compliance	EPA 300.0

		Report, appendices A, C, and E.	
Nitrogen	Standard Method 4500-N - Nitrogen	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Click here to enter text.
Organic Nitrogen	Other Organic Nitrogen Analytical Method	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Calculation
Total Kjeldahl Nitrogen	EPA Method 351.2 - Total Kjeldahl Nitrogen	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	Click here to enter text.
Other Analytes			
Fixed Solids	No Analytical Method Used	Click here to enter text.	Click here to enter text.
Paint Filter Test	EPA Method 9095 - Paint Filter Liquids Test	See attached OCSD Biosolids Management Compliance Report, Appendix C.	Click here to enter text.
pH	EPA Method 9045 - pH (> 7% solids)	See attached OCSD Biosolids Management Compliance Report, appendices A, C, and E.	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, Appendix A.	Click here to enter text.
Volatile Solids	Standard Method 2540 - Volatile Solids	See attached OCSD Biosolids Management Compliance Report, Appendix A.	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 Cumulative Concentration of Pollutants (kilograms per hectare) in Soil				
Example: ABC Farms, Aztec AZ	1A	350 tons	Aztec WWTP	Class B Alt. 2	Option 9	Tons or Kg/acre		Corn						
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

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.	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.	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.	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.
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APPENDIX F

Biosolids Program History

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-tern 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;
- Initiate a regular status review of OCSD management program that would provide centralized information in one location;
- 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 Trµck & 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 it's 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, on 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. OCSD diverted the cationic dewatering filtrate to protect GWRS from the dewatering polymers. The sludge diversion is anticipated to continue until the new sludge thickening and dewatering facility (P1-101) at Plant No. 1 is operational in 2018 per the current CIP schedule.

- 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) 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 to100 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.

  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.

- OCSD completed a comprehensive Biosolids Master Plan (ocsd.com/BMP) that is providing a long-term framework for a sustainable, cost-effective biosolids management program. The Plan recommended building two-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 the 2020 requirement to divert all organic (recyclable material) from landfills. 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.

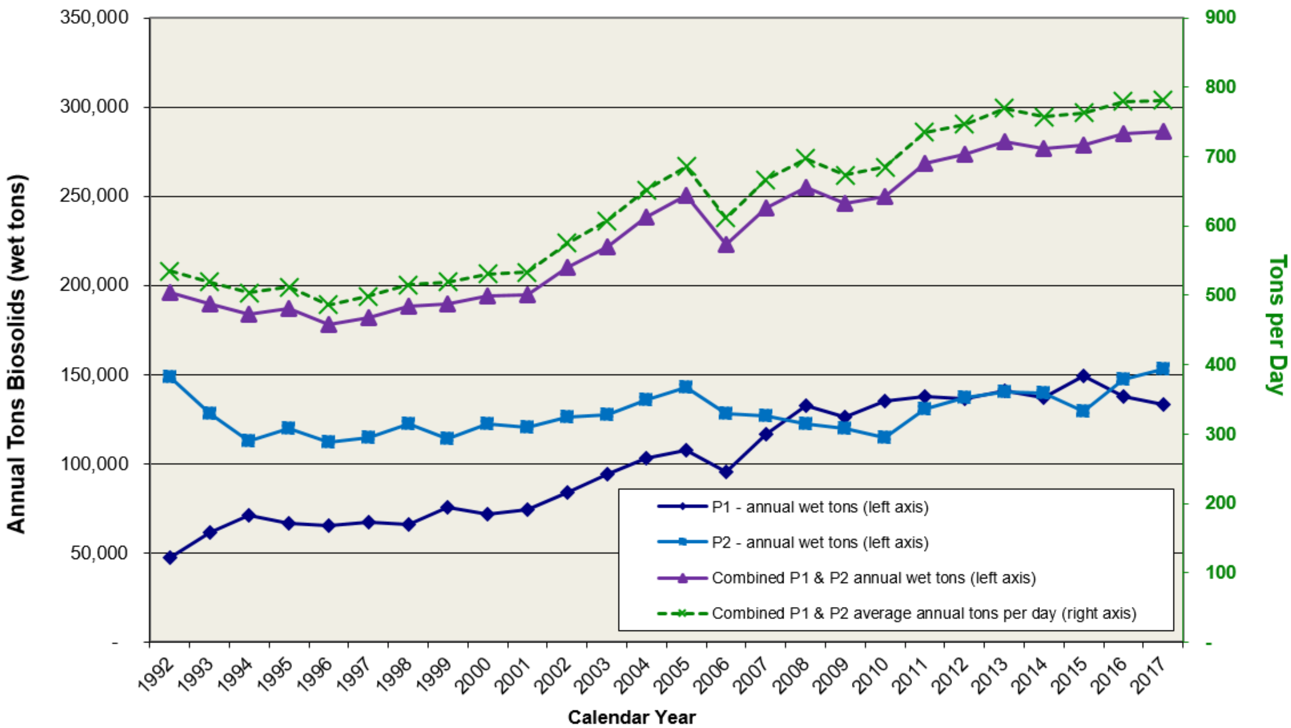
- In 2017, OCSD established a biosolids compost demonstration planter at Plant No. 2 as part of an existing landscaping project. The planter uses the same native plants as nearby control planters that didn't use biosolids. Five and ten percent biosolids compost were amended into the soil. The landscape 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.

- OCSD is constructing new facilities that will replace the belt filter presses with new dewatering centrifuge facilities. The total percent solids of digested biosolids is anticipated to increase from 18% (Plant No. 1) and 20% (Plant No. 2) to 28-30%, resulting in approximately one-third fewer wet-weight solids and biosolids trucks to manage. In addition, this project is also installing pre-digestion thickening centrifuges to replace the dissolved air floatation thickening at Plant No. 1, and rehabilitating the Plant No. 1 truck loading facility. The projects are anticipated to be complete in 2019.

- The Irvine Ranch Water District (IRWD) discharges its untreated solids (sludge) to OCSD. IRWD is currently constructing their own solids treatment facility and plans to cease sending their solids to OCSD by 2019. This cessation is anticipated to reduce Plant No. 1's influent solids by ten to fifteen percent.

Figure 1: Biosolids Production History

January 1992 – December 2017 (not including digester cleanings)



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