

Orange County Sanitation District

# Biosolids Management Compliance Report

Year 2016

EPA 40 CFR Part 503



**2016 BIOSOLIDS MANAGEMENT COMPLIANCE REPORT**

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# **2016 BIOSOLIDS MANAGEMENT COMPLIANCE REPORT**

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**Introduction**  
**Organization and Function**  
**Treatment Plants and Program Updates**  
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## **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, 2016.

## **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.

Operating under National Pollutant Discharge Elimination System (NPDES) Permit No. CA0110604, OCSD treated an average daily sewage influent flow of 182 million gallons per day (MGD), five percent less than the previous year. OCSD produced approximately 293,891 wet tons of biosolids (54,027 dry metric tons), which equates to an average of 805 wet tons per day of biosolids, including digester cleanings managed as biosolids. Typical biosolids production, excluding digester cleanings, averaged 780 tons per day.

## **Treatment Plants and Program Updates**

Reclamation Plant No. 1, located in the city of Fountain Valley, treated an average of 116 MGD of wastewater. Treatment Plant No. 2, located in the City of Huntington Beach, treated an average of 66 MGD of wastewater during the reporting period.

Notable changes and accomplishments for this year include:

- Plant No. 1's primary clarifiers 3-5 reached the end of their asset life and were removed from service. OCSD's Engineering Department is in the early stages of planning the replacement of these clarifiers.
- Plant No. 1 digesters 12 and 14 were cleaned. The rehabilitation capital improvement program project completed the cleaning portion of the project. Rehabilitation is anticipated to be complete in 2017. Plant No. 1 digester cleanings will be managed through routine maintenance contracts in the future.
- The rehabilitation of Plant No. 2 dissolved air flotation tanks (DAFTs) was completed. These DAFTs create thickened secondary sludges to feed the digesters.
- Plant No. 2 digesters H and E were cleaned.

- The local limits ordinance for OCSD's pretreatment program was updated to include molybdenum and selenium, which will further enhance OCSD's biosolids quality.

In 2015, about 20 MGD of influent sewage was diverted to Plant No. 1 from Plant No. 2 to support the Orange County Water District's (OCWD) Ground Water Replenishment System (GWRS) expansion. GWRS purifies OCSD's secondary treated water from Plant No. 1 to meet drinking water standards. Last year, OCSD provided GWRS an average of 121 MGD of secondary effluent to produce purified water for reuse.

During this reporting period, Reclamation Plant No. 1 produced 24,388 dry metric tons of biosolids, including 2,516 dry metric tons of digester cleanings (from digesters 12 and 14). These biosolids were anaerobically digested for an average of 18 days at 37 degrees Celsius (98 degrees Fahrenheit) resulting in an average volatile solids reduction of 60 percent over this reporting period with an average total solids of 18%. Under the established operational parameters, Plant No. 1 diverted a daily average of 58,154 cubic feet or 0.44 MGD of primary sludge from Plant No. 1 to Plant No. 2 via our inter-plant sludge line, along with about 2.05 MGD of Plant No. 1 biosolids belt-press dewatering filtrate.

Treatment Plant No. 2 produced 29,534 dry metric tons of biosolids, including 1,250 dry metric tons of digester cleanings (from digesters H and E). The process at Plant No. 2 is similar to Plant No. 1 in that the biosolids were anaerobically digested for an average of 21 days at 37 degrees Celsius (98 degrees Fahrenheit). Biosolids from Plant No. 2 had an average volatile solids reduction of 62 percent and an average total solids of 21%.

This year's solids production increased by 2% versus the previous year (763 average tons per day in 2015 and 780 tons per day in 2016) in part because 56% more primary sludge was diverted from Plant No. 1 to Plant No. 2 due to limited digestion capacity at Plant No. 1 and in support of the GWRS expansion.

Plants Nos. 1 and 2 processes 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 plant fails to meet the Vector Attraction Reduction standard.

## Biosolids Production History

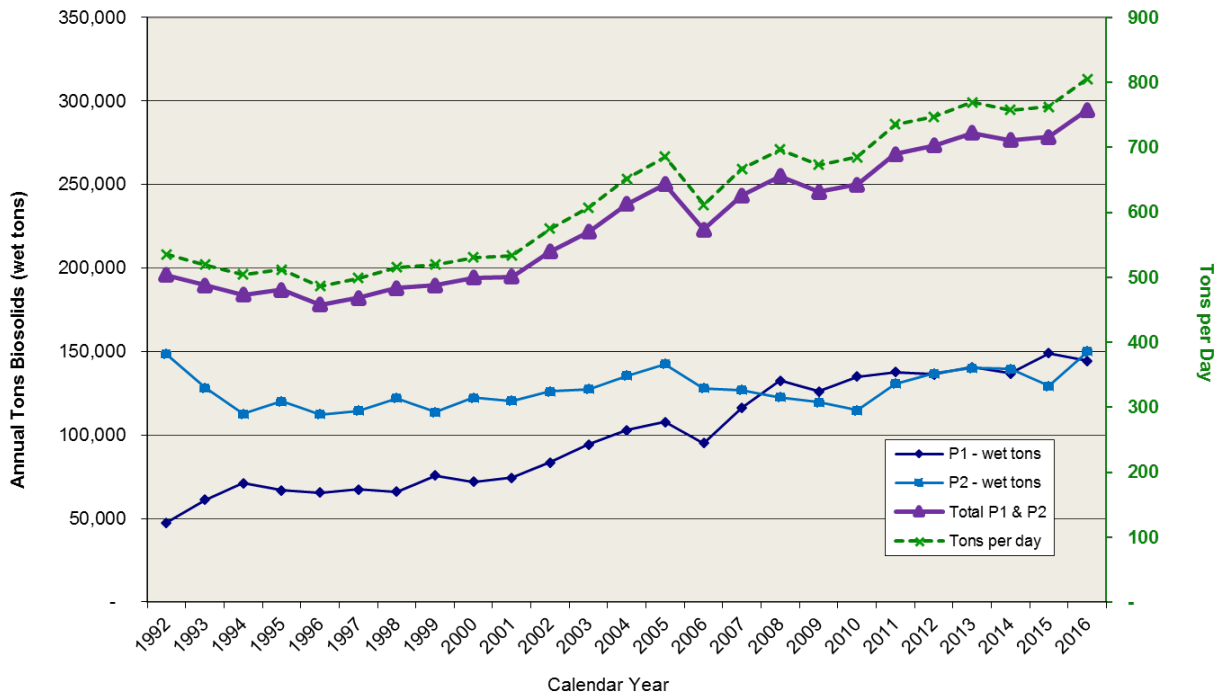


Figure 1: Biosolids Production History from January 1992 – December 2016

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 December 2017. This cessation is anticipated to reduce Plant No. 1’s influent solids by ten to fifteen percent.

OCSD is replacing the belt filter presses with new dewatering centrifuge facilities, which are scheduled to start service in 2018 for Plant No. 1 and by 2020 for Plant No. 2. As a result, the total percent solids of digested biosolids is anticipated to increase from 18% (Plant No. 1) and 22% (Plant No. 2) to 28-30%, resulting in approximately one-third fewer wet-weight solids to manage. In addition, this project is also bringing pre-digestion thickening centrifuges to replace the dissolved air floatation thickening at Plant No. 1, and it is rehabilitating the Plant No. 1 truck loading facility.

### Biosolids Management

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

In 2016, OCSD started managing its biosolids at two new composting facilities. A two-step request for qualifications-bid process was completed and two new composting contractors, Nursery Products and Liberty Compost, were awarded the contracts in

November 2016. Soon after the contract was awarded to Nursery Products, Synagro purchased Nursery Products. The contractors started hauling OCSD biosolids in December 2016.

<b>Table 1- Biosolids Management Contractors</b>
<p><b>Tule Ranch / Ag-Tech</b>            4324 E. Ashlan Ave.            Fresno, CA 93726            Contact: Shaen Magan            Phone: (559) 970-9432            Email: kurt@westexp.com</p>
<p><b>Synagro – South Kern Compost Manufacturing Facility</b>            P.O. Box 265            Taft, CA 93268            Contact: Chad Buechel            Phone: (661) 765-2200 x223            Email: cbuechel@SYNAGRO.com</p>
<p><b>Synagro – Arizona Soils</b>            5615 S. 91st Avenue            Tolleson, AZ 85353            Contact: Craig Geyer            Phone: (623) 936-6328            Email: CGeyer@SYNAGRO.com</p>
<p><b>Synagro - Nursery Products</b>            PO Box 1439            Helendale, CA 92342            Contact: Chad Buechel            Phone: (661) 378-2515            Email: cbuechel@SYNAGRO.com</p>
<p><b>Inland Empire Regional Composting Authority</b>            12645 6th Street            Rancho Cucamonga, CA 91739            Contact: Jeff Ziegenbein            Phone: (909) 993-1981            Email: jziegenbein@ieua.org</p>
<p><b>Orange County Waste and Recycling            Prima Deshecha Landfill</b>            32250 La Pata Ave.            San Juan Capistrano, CA 92675            Contact: Greg Dayak, Landfill Operations Superintendent            Phone: (949) 728-3050            Email: Greg.Dayak@ocwr.ocgov.com</p>
<p><b>Liberty Compost</b>            12421 Holloway Rd.            Lost Hills, CA 93249            Contact: Patrick McCarthy            Phone: (661) 797-2914            Email: patrickmccarthy@mccarthyfarms.com</p>

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 following areas:

Destination	Beneficial Reuse Method or Product	Biosolids Contractor and Site Name	Amount of Biosolids Managed <sup>1</sup> (dry metric tons)	
			Plant No. 1	Plant No. 2
Yuma County, AZ	Class B land application	Tule Ranch AgTech and Desert Ridge	718	26,183
Kern County, CA	Compost	Synagro South Kern Compost Manufacturing Facility	12,867	1,168
La Paz County, AZ	Compost	Synagro Arizona Soils	6,077	0
San Bernardino County, CA	Compost	Synagro Nursery Products	751	29
Kern County, CA	Compost	Liberty Compost Liberty Compost	147	0
San Bernardino County, CA	Compost	Inland Empire Regional Composting Authority Inland Empire Regional Composting Facility	50	905
Orange County, CA	Landfill	Orange County Waste & Recycling Prima Deshecha Landfill	1,260	0
<b>Digester Cleaning Totals</b>				
La Paz County, AZ	Compost	Synagro Arizona Soils	2,516	1,215
San Bernardino County, CA	Compost	Synagro Nursery Products	0	35
			24,388	29,534
<b>Compost</b> 49%	<b>Land Application</b> 48%	<b>Landfill</b> 3%	<b>Total</b>	<b>53,922</b>

## 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](http://ocsd.com/SCAnnual) (part 2, Chapter 9)).

Tables 1 through 3 in the compliance data section (Appendix A) compare the concentration limits of the pollutants listed in 40 CFR 503 to OCSD's average biosolids concentrations for each plant. The average concentrations of all pollutants in OCSD's biosolids are below the conservative *Table-1 Ceiling Limits* and *Table 3 Exceptional Quality Limits* found in 40 CFR Part 503.



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**

### Legal Definition

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.

### Determination

OCSD's biosolids are tested at least annually for the determination of hazardousness. OCSD's produces biosolids with pollutant concentrations below the limits as referenced above. See OCSD's biosolids monitoring data in Appendix C, Summary of Priority Pollutants and Trace Constituents Analysis. As a result of this determination, *OCSD's biosolids are non-hazardous.*

## **Biosolids Management System**

OCSD continues to utilize its biosolids management system to effectively administer its biosolids program. One example of OCSD's continued commitment to our biosolids management system is our continued transparent communications. Three interested party newsletters were emailed and posted on OCSD's website, and OCSD continues to post the monthly regulatory data online. OCSD shared timely updates on our Biosolids Master Plan and the compost contract opportunity with our interested stakeholders and online throughout the year.

OCSD has also continued our strong contractor oversight program, including tracking and resolving 15 contractor issues and performing 11 contractor site inspections and 61 hauler inspections.

## Goals and Targets

OCSD's November 2013 Strategic Plan contained numerous agency-wide goals and levels of service targets. The December 2015 Plan update provided progress to date, including the completion of two of the six strategic goals. One goal, "Future Biosolids Management Options," is expected to be completed in 2017 as part of OCSD's Biosolids Master Plan. See [www.ocsd.com/5yearstrategicplan](http://www.ocsd.com/5yearstrategicplan)) for more information.

## Biosolids Program Policy

Originally adopted in 1999 and amended in 2006 and 2013, OCSD's Resolution 13-03 ([www.ocsd.com/policy](http://www.ocsd.com/policy)) established a policy that commits the agency to support biosolids beneficial reuse (organics recycling).

The resolution's commitments and OCSD's performance relative to these commitments are reported below. A similar discussion is included in the 2017 Biosolids Master Plan.

<b>Table 3 – Policy Performance</b>	
<b>Policy Commitment</b>	<b>2016 Performance</b>
<p>Commit to sustainable biosolids program.</p> <p>Support the recycling of biosolids.</p>	<p>OCSD has demonstrated effective pretreatment, water and solids treatment operations, compliance, capital improvements, technology research and planning, and biosolids contractor oversight programs.</p> <p>This year's accomplishments include:</p> <ul style="list-style-type: none"> <li>• Recycling of 97% of OCSD's biosolids;               <ul style="list-style-type: none"> <li>• OCSD started worked through a consulting contract to help us develop a comprehensive Biosolids Master Plan that will provide a long-term framework for a sustainable, cost-effective biosolids management program. The Plan is expected to be complete in early 2017.</li> </ul> </li> <li>• Quarterly research meetings with sister agencies to evaluate new technologies that could be considered by OCSD.</li> </ul>
<p>Strive to balance financial, environmental, and societal considerations when making biosolids decisions.</p>	<p>On a day-to-day basis, OCSD is weighing these considerations and looking out for issues that would alter the balance. For instance, allocating our biosolids to our diverse locations considers this "triple bottom line." The November 2016 compost service contract award will reduce composting costs up to \$27 per ton, while maintaining our high contractor performance and oversight standards.</p>
<p>Utilize a biosolids management system to maintain a sustainable and</p>	<p>OCSD continues to maintain our biosolids management system.</p>

publicly supported biosolids program.	See the Biosolids Management System section above and the History Appendix (Appendix E).
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. OCSD maintained more than 10 times (1000%) of our daily biosolids production in failsafe facility capacity. OCSD also maintained about 25% extra hauling capacity.
Research and implement ways to reduce the volume of biosolids at the treatment plants to minimize the need for offsite management.	<p>OCSD’s Research group actively seeks opportunities for process area improvements, including solids.</p> <p>Supercritical Water Oxidation – OCSD’s Board of Directors approved a vendor to determine the feasibility of this technology (<a href="http://www.scfi.eu">www.scfi.eu</a>).</p> <p>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 the next few years.</p> <p>OCSD awarded a professional engineering services contract for developing a new Biosolids Master Plan. The Biosolids Master Plan will include evaluation and design of capital facilities, which may result in a reduced amount of biosolids hauled offsite.</p>
Support continuing research of biosolids benefits and potential safety concerns.	OCSD continued to be part of the Northwest Biosolids library ( <a href="http://www.nwbiosolids.org">www.nwbiosolids.org</a> ). The library contains references to over 2,600 biosolids-related research articles references. Northwest Biosolids sends a monthly summary of research to its members, which OCSD shares internally in our monthly biosolids report. NBMA also has a free monthly e-Bulletin for non-members. In 2015, based on extensive research, the Northwest Biosolids association published <a href="#">a public-friendly risk brochure explaining</a> how long it takes for workers and other “exposed populations” to build up a dose-equivalent pharmaceuticals or personal care products from exposure to biosolids (most in the thousands to hundred-thousands of years).
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 landscape contractor to demonstrate the benefits of compost.

	<p>OCSD encourage employees to share their compost use photos.</p> <p>OCSD is establishing a compost demonstration area beside the final effluent sampling building as part of the landscaping part of the building's rehabilitation project.</p>
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## **APPENDIX A**

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**Table 1: OCSD Biosolids Monitoring and Reporting for 2016, Plant No. 1**  
**Table 2: OCSD Biosolids Monitoring and Reporting for 2016, Plant No. 2**  
**Notice and Necessary Information Certification Forms, January – December 2016**

# Table 1 - OCSD Biosolids Monitoring and Reporting for 2016

Reclamation Plant No. 1, Fountain Valley, CA													40 CFR 503 Criteria		
40 CFR 503 Analyses													Constituent Dry Weight (mg/Kg)		
Constituent (mg/Kg) Dry	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Annual Mean	Ceiling (Table 1)	Monthly Average (Table 3)
Arsenic (avg)	6.3	6.4	8.3	7.0	6.7	12	8.0	6.7	7.6	6.7	7.6	7.7	7.6	75	41
Arsenic (max)	6.7	6.7	11	7.3	7.6	12	8.6	7.0	8.6	6.8	7.6	8.2			
Cadmium (avg)	1.6	<2.3	2.4	1.3	1.3	2.7	3.1	2.6	3.6	6.1	6.0	4.2	3.2	85	39
Cadmium (max)	1.8	2.3	2.9	1.5	1.3	2.7	3.4	2.9	4.0	6.8	7.6	8.2			
Chromium (avg)	32	31	72	89	47	44	46	30	38	40	34	35	45	3000	N/A
Copper (avg)	390	440	450	480	410	450	490	400	520	490	440	420	450	4300	1500
Copper (max)	450	520	490	480	410	480	540	410	540	520	460	420			
Lead (avg)	<11	<23	<11	14	<12	<25	<12	<13	<13	11	14	<12	13	840	300
Lead (max)	11	<23	12	14	<12	<25	<12	<13	12	12	17	<25			
Mercury (avg)	0.62	0.87	0.60	0.64	1.7	1.3	0.82	0.53	0.94	0.87	0.82	1.0	0.89	57	17
Mercury (max)	0.70	1.0	0.61	0.65	1.9	1.5	0.88	0.55	0.96	0.95	0.95	1.3			
Molybdenum (avg)	12	11	12	15	13	15	16	12	21	16	15	14	14	75	N/A
Molybdenum (max)	14	13	13	15	13	16	17	12	25	17	16	14			
Nickel (avg)	44	29	31	36	34	43	39	25	37	30	27	27	34	420	420
Nickel (max)	55	31	36	36	34	46	43	25	37	33	29	27			
Selenium (avg)	9.7	9.8	9.1	10	4.4	9.3	8.0	9.3	8.8	8.1	8.6	5.4	8.4	100	100
Selenium (max)	10	14	9.7	11	5.1	12	8.2	12	12	9.9	11	6.7			
Zinc (avg)	540	500	560	640	540	630	670	550	700	670	600	610	600	7500	2800
Zinc (max)	620	570	620	640	550	670	710	560	750	710	630	610			
Organic Nitrogen (avg)	53,000	59,000	61,000	49,000	45,000	56,000	54,000	55,000	58,000	51,000	50,000	55,000	45,000	No limit	
Ammonia Nitrogen (avg)	6,200	6,000	6,200	6,600	6,400	6,200	6,400	6,300	6,600	6,200	6,400	6,500	6,300	No limit	
Process Assessment <sup>1</sup>													Pathogen and vector reduction requirements (Class B, Option 1)		
Digester Detention Time (days)	18	17	17	20	19	17	17	17	17	17	17	17	18	15 day minimum	
Digester Temperature (° F)	97	97	97	98	98	99	98	98	98	98	98	98	98	95 - 131 °F	
Digester Temperature (°C)	36	36	36	37	37	37	37	37	37	37	37	37	37	35 - 55 °C	
Volatile Solids Reduction (%)	62	63	61	59	58	54	60	61	62	62	62	60	60	38% minimum	
Biosolids Total Solids (%)	18	18	18	18	17	17	17	16	17	19	18	17	18	N/A	
Quantity Generated	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total	Total Biosolids Managed	
Synagro CA - compost (wet tons)	7,760	7,357	7,678	7,576	7,194	6,889	7,131	7,308	6,723	5,612	6,728	3,081	81,037	<b>WET TONS</b>	<b>143,714</b>
Synagro CA - compost (dry metric tons)	1,267	1,201	1,253	1,237	1,109	1,062	1,100	1,061	1,037	967	1,098	475	12,867		
Synagro AZ - compost (wet tons)	3,886	3,672	3,760	3,535	3,735	3,171	2,824	3,306	2,983	2,400	2,542	2,488	38,303		
Synagro AZ - compost (dry metric tons)	634	600	614	577	576	489	435	480	460	414	415	384	6,077		
Inland Empire Regional Composting (wet tons)	0	0	0	0	0	0	0	0	0	0	50	274	324		
Inland Empire Regional Composting (dry metric tons)	0	0	0	0	0	0	0	0	0	0	8	42	50		
Tule Ranch AZ - land application (wet tons)	906	1,479	1,260	0	0	374	0	0	0	0	402	0	4,421		
Tule Ranch AZ - land application (dry metric tons)	148	241	206	0	0	58	0	0	0	0	66	0	718		

Quantity Generated													Total	Total Biosolids Managed			
	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec					
OCWR CA Landfill (wet tons)	0	0	0	0	0	764	1,623	1,185	1,461	1,554	1,203	200	7,991	DRY METRIC TONS	24,493		
OCWR CA Landfill (dry metric tons)	0	0	0	0	0	118	250	172	225	268	196	31	1,260				
Synagro - Nusery Products CA - compost (wet tons)	0	0	0	0	0	0	0	0	0	0	0	4,873	4,873				
Synagro - Nusery Products CA - compost (dry metric tons)	0	0	0	0	0	0	0	0	0	0	0	751	751				
Liberty Compost CA (wet tons)	0	0	0	0	0	0	0	0	0	0	0	955	955				
Liberty Compost CA (dry metric tons)	0	0	0	0	0	0	0	0	0	0	0	147	147				
Total Wet Tons	12,551	12,508	12,698	11,111	10,929	11,199	11,578	11,800	11,167	9,566	10,925	11,873	137,904				
Total Dry Metric Tons	2,049	2,042	2,073	1,814	1,685	1,727	1,785	1,712	1,722	1,648	1,784	1,831	21,872				
Digester Cleanings													Total				
						Dig 12	Dig 12	Dig 12	Dig 12		Dig 14	Dig 14	Dig 14				
Total Solids(%)						45	54	55	49		41	52	47				
Synagro, AZ (compost) (wet tons)	0	0	0	0	256	988	791	777	0	1050	1468	480	5,810				
Synagro, AZ (dry metric tons)	0	0	0	0	105	484	395	345	0	395	694	204	2,620				
Total Dry Metric Tons (Biosolids plus Digester Cleanings)	2,049	2,042	2,073	1,814	1,790	2,210	2,180	2,058	1,722	2,043	2,477	2,034	24,493				

## Table 2 - OCSD Biosolids Monitoring and Reporting for 2016

Wastewater Treatment Plant No. 2, Huntington Beach, CA													40 CFR 503 Criteria				
40 CFR 503 Analyses													Annual Mean	Constituent Dry Weight (mg/Kg)			
Constituent (mg/Kg) Dry	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec		Ceiling (Table 1)	Monthly Average (Table 3)		
Arsenic (avg)	6.8	8.5	8.7	8.8	7.5	10	7.5	5.6	6.7	7.2	6.4	6.3	<b>7.5</b>	75	41		
Arsenic (max)	6.8	9.5	10	9.1	8.1	11	8.3	5.7	7.2	7.6	6.4	6.6					
Cadmium (avg)	2.3	2.9	3.1	2.2	2.0	3.1	3.5	3.6	4.5	6.1	6.7	5.2	<b>3.8</b>	85	39		
Cadmium (max)	2.5	3.3	3.4	2.4	2.2	3.4	3.6	3.8	5.1	9.1	7.6	5.3					
Chromium (avg)	34	34	60	55	44	47	44	40	43	39	39	40	<b>43</b>	3000	N/A		
Copper (avg)	410	450	490	520	460	460	510	480	510	490	530	490	<b>480</b>	4300	1500		
Copper (max)	450	500	510	550	470	470	550	480	520	490	570	420					
Lead (avg)	9.7	<18	12	15	11	<20	<10	12	14	13	15	13	<b>13</b>	840	300		
Lead (max)	11	<18	12	15	11	<20	<10	12	14	13	15	14					
Mercury (avg)	0.65	1.1	0.85	0.91	0.94	1.2	0.94	0.72	1.2	0.52	0.88	0.82	<b>0.89</b>	57	17		
Mercury (max)	0.70	1.2	1.0	1.2	0.94	1.3	1.0	0.74	1.2	0.92	0.89	0.82					
Molybdenum (avg)	11	13	14	16	15	16	17	15	17	16	15	15	<b>15</b>	75	N/A		
Molybdenum (max)	12	14	14	16	15	16	18	15	18	16	16	16					
Nickel (avg)	41	31	33	31	29	32	30	30	35	30	32	27	<b>32</b>	420	420		
Nickel (max)	49	33	33	31	30	32	31	30	35	30	36	28					
Selenium (avg)	9.4	7.6	8.4	10	5.5	8.8	7.8	6.7	8.3	6.9	6.0	3.8	<b>7.4</b>	100	100		
Selenium (max)	11	12	8.9	11	6.2	10	8.0	8.4	8.4	6.9	8.5	4.6					
Zinc (avg)	620	640	730	760	700	720	790	730	750	740	760	760	<b>710</b>	7500	2800		
Zinc (max)	680	710	740	790	700	740	840	730	790	740	830	820					
Organic Nitrogen (avg)	44,000	45,000	45,000	44,000	41,000	44,000	52,000	50,000	45,000	45,000	42,000	41,000	<b>39,000</b>	No limit			
Ammonia Nitrogen (avg)	5,000	5,200	5,300	5,500	5,100	5,200	5,100	4,700	5,100	5,300	5,100	7,800	<b>5,200</b>	No limit			
Process Assessment <sup>1</sup>														Pathogen and vector reduction requirements (Class B, Option 1)			
Digester Detention Time (days)	20	20	20	20	21	24	22	21	21	20	21	20	<b>21</b>	15 day minimum			
Digester Temperature (° F)	96	97	98	98	98	99	98	99	98	98	98	96	<b>98</b>	95 - 131 °F			
Digester Temperature (°C)	36	36	37	37	37	37	37	37	37	37	37	36	<b>37</b>	35 - 55 °C			
Volatile Solids Reduction (%)	65	60	62	59	63	62	59	60	59	68	65	62	<b>62</b>	38% minimum			
Biosolids Total Solids (%)	22	22	22	21	21	21	20	21	21	21	21	21	<b>21</b>	N/A			
Quantity Generated	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total	Total Biosolids Managed			
Synagro CA - compost (wet tons)	0	0	151	51	680	553	554	505	833	1,819	984	25	6,154	<b>WET TONS</b>	<b>150,177</b>		
Synagro CA - compost (dry metric tons)	0	0	30	10	129	105	100	96	159	347	187	5	1,168				
Synagro AZ - compost (wet tons)	0	0	0	0	0	0	0	0	0	0	0	0	0				
Synagro AZ - compost (dry metric tons)	0	0	0	0	0	0	0	0	0	0	0	0	0				
Inland Empire Regional Composting (wet tons)	0	0	0	0	0	0	0	619	1,065	1,045	1,000	1,022	4,750				
Inland Empire Regional Composting (dry metric tons)	0	0	0	0	0	0	0	118	203	199	190	195	905				
Tule Ranch AZ - land application (wet tons)	11,468	10,199	11,732	11,702	12,243	11,810	11,209	11,961	10,826	10,388	10,325	12,545	136,407				
Tule Ranch AZ - land application (dry metric tons)	2,288	2,035	2,341	2,229	2,332	2,249	2,033	2,278	2,062	1,979	1,967	2,389	26,183				
OCWR CA Landfill (wet tons)	0	0	0	0	0	0	0	0	0	0	0	0	0				



Quantity Generated	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total	Total Biosolids Managed			
	OCWR CA Landfill (dry metric tons)	0	0	0	0	0	0	0	0	0	0	0	0	0	DRY METRIC TONS	29,534	
Synagro - Nusery Products CA - compost (wet tons)	0	0	0	0	0	0	0	0	0	0	0	151	151				
Synagro - Nusery Products CA - compost (dry metric tons)	0	0	0	0	0	0	0	0	0	0	0	29	29				
Liberty Compost CA (wet tons)	0	0	0	0	0	0	0	0	0	0	0	0	0				
Liberty Compost CA (dry metric tons)	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total Wet Tons	11,468	10,199	11,883	11,752	12,923	12,362	11,763	13,085	12,723	13,252	12,309	13,743	28,285				
Total Dry Metric Tons	2,288	2,035	2,371	2,238	2,462	2,355	2,134	2,492	2,423	2,524	2,344	2,618	147,462				
Digester Cleanings													Total				
					Dig H	Dig H	Dig H					Dig E	Dig E				
Total Solids(%)	0	0	0	0	47	47	47	0	0	0	58	58					
AZ Soils (Compost) (wet tons)	0	0	0	0	68	1334	387	0	0	0	87	772	2,649				
Synagro, AZ (dry metric tons)	0	0	0	0	29	569	165	0	0	0	46	406	1,215				
Nursery Products (Compost) (wet tons)	0	0	0	0	0	0	0	0	0	0	0	66	66				
Nursery Products, CA (dry metric tons)	0	0	0	0	0	0	0	0	0	0	0	35	35				
<b>Total Dry Metric Tons (Biosolids plus Digester Cleanings)</b>	<b>2,288</b>	<b>2,035</b>	<b>2,371</b>	<b>2,238</b>	<b>2,491</b>	<b>2,923</b>	<b>2,299</b>	<b>2,492</b>	<b>2,423</b>	<b>2,524</b>	<b>2,390</b>	<b>3,058</b>	<b>29,534</b>				

<sup>1</sup> Reported values are averages



## Notice and Necessary Information – Revised\*\*\*

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

**Monitoring Period:** January 1- 31, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages) on 100% dry weight basis.

**Sampling date(s):** 01/06/2016, 01/13/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	6.3	1.6	390	<11	0.62	12	44	9.7	540	53,000	6,200	32	18
<b>Result Plant 2</b>	6.8	2.3	410	9.7	0.65	11	41	9.4	620	44,000	5,000	34	22
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR Part 503 and Arizona Administrative Code R18-9-1006€ have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1**	18	20	97 - 98
Plant 2	20	22	96 - 100

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR Part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona-certified laboratory to comply with Option 1.

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.6	1.4	62
Plant 2	3.8	1.4	65

### 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.*

2/6/2017

2/6/2017

2/6/2017

X

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## Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

**Monitoring Period:** January 1- 31, 2016

#### OCSD Plant 1\*\*

	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (days)*</b>	18	18	18	18		18	19	19		
<b>Minimum Temperature (°F)</b>	98	98	98	98		97	97	97		

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.

#### OCSD Plant 2

	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (days)*</b>	20	21	19	20	20	20	20		20		20	20	20		20	21	21
<b>Minimum Temperature (°F)</b>	96	96	96	96	98	97	100		99		98	97	98		100	98	97

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.

\*\* In March 2016, an error was discovered with the primary sludge flow meters at Plant 1 that had the potential to affect digester mean cell residence time when the flow exceeded a certain volume. The error is believed to have started in May 2012. Corrective actions have been implemented and primary flow values and digester detention times have been recalculated for all affected days in 2016. Per the calculations, compliance was maintained at all times thus far in 2016.

\*\*\* During annual reporting, an error was discovered with the rounding of some values that caused the reported result to be inaccurate by one digit. The affected values for Arsenic, Copper, Mercury and Selenium have been revised.



## Notice and Necessary Information – Revised\*\*\*

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

**Monitoring Period:** February 1- 29, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages) on 100% dry weight basis.

**Sampling date(s):** 02/03/2016, 02/10/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	6.4	<2.3	440	<23	0.87	11	29	9.8	500	59,000	6,000	31	18
<b>Result Plant 2</b>	8.5	2.9	450	<18	1.1	13	31	7.6	640	45,000	5,200	34	22
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR Part 503 and Arizona Administrative Code R18-9-1006(E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1**	17	22	97 - 98
Plant 2	20	21	97 - 100

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR Part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1:

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.6	1.4	63
Plant 2	3.2	1.3	60

### 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.*

2/6/2017

2/7/2017

2/7/2017

X

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## Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

**Monitoring Period:** February 1- 29, 2016

#### OCSD Plant 1\*\*

	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (days)*</b>	17	17	17	17		17	17	17		
<b>Minimum Temperature (°F)</b>	98	97	97	98		97	97	97		

Shaded box represents Digester is Out of Service.

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

#### OCSD Plant 2

	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (days)*</b>	20	20	19	19	19	19	20		20		20	19	19		19	20	20
<b>Minimum Temperature (°F)</b>	98	99	98	98	99	98	100		99		97	98	99		100	99	99

Shaded box represents Digester is Out of Service.

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

\*\* In March 2016, an error was discovered with the primary sludge flow meters at Plant 1 that had the potential to affect digester mean cell residence time when the flow exceeded a certain volume. The error is believed to have started in May 2012. Corrective actions have been implemented and primary flow values and digester detention times have been recalculated for all affected days in 2016. Per the calculations, compliance was maintained at all times thus far in 2016.

\*\*\* During annual reporting, an error was discovered with the rounding of some values that caused the reported result to be inaccurate by one digit. The affected values for Arsenic, Copper, Mercury, Molybdenum and Nickel have been revised.



## Biosolids Notice and Necessary Information

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

**Monitoring Period:** March 1- 31, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages on 100% dry weight basis).

**Sampling date(s):** 03/02/2016,03/09/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	8.3	2.4	450	<11	0.60	12	31	9.1	560	61,000	6,200	72	18
<b>Result Plant 2</b>	8.7	3.1	490	12	0.85	14	33	8.4	730	45,000	5,300	60	22
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR part 503 and Arizona Administrative Code R18-9-1006 (E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1	17	20	97 - 98
Plant 2	20	22	98 - 100

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR part 503 and Arizona Administrative Code R18-9-1010 (A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1.

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.6	1.4	61
Plant 2	3.8	1.5	62

### 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.*

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7/5/2016

7/12/2016

7/12/2016

X

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## Biosolids Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

Monitoring Period: March 1- 31, 2016

#### OCSD Plant 1

	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 (days)*	16	17	17	17		16	17	17	242***	
Minimum Temperature (°F)	97	97	97	98		97	98	97	98	

Shaded box represents Digester is Out of Service.

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

#### OCSD Plant 2

	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 (days)*	20	20	20	20	20	20	20		20		20	20	20		20	20	20
Minimum Temperature (°F)	99	99	99	98	100	98	100		99		99	99	99		100	99	99

Shaded box represents Digester is Out of Service.

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

\*\* In March 2016, an error was discovered with the primary sludge flow meters at Plant 1 that had the potential to affect digester mean cell residence time when the flow exceeded a certain volume. The error is believed to have started in May 2012. Corrective actions have been implemented and primary flow values and digester detention times have been recalculated for all affected days in 2016. Per the calculations, compliance was maintained at all times thus far in 2016.

\*\*\* Following cleaning and rehabilitation, digester 15 was filled with digested sludge and then placed in service on March 28, 2016.

## Biosolids Notice and Necessary Information

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

**Monitoring Period:** April 1- 30, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages on 100% dry weight basis).

**Sampling date(s):** 04/06/2016,04/13/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	7.0	1.3	480	14	0.64	15	36	10	640	49,000	6,600	89	18
<b>Result Plant 2</b>	8.8	2.2	520	15	0.91	16	31	10	760	44,000	5,500	55	21
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR part 503 and Arizona Administrative Code R18-9-1006 (E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1	20	21	98
Plant 2	20	22	98 - 100

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1:

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.6	1.5	59
Plant 2	3.8	1.6	59

### 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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8/3/2016

8/3/2016

7/28/2016

X 

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## Biosolids Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

Monitoring Period: April 1- 30, 2016

#### OCSD Plant 1

	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 (days)*	18	18	18	18		17		18	24**	
Minimum Temperature (°F)	98	98	98	98		98		98	98	

Shaded box represents Digester is Out of Service.

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

#### OCSD Plant 2

	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 (days)*	21	21	20	20	21	21	21		21		21	21	21		21	21	21
Minimum Temperature (°F)	100	100	99	99	99	98	100		99		99	98	98		100	99	100

Shaded box represents Digester is Out of Service.

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

\*\* Following cleaning and rehabilitation, digester 15 was filled with digested sludge and then placed in service on March 28, 2016.

## Biosolids Notice and Necessary Information

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

**Monitoring Period:** May 1- 31, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages on 100% dry weight basis).

**Sampling date(s):** 05/04/2016,05/11/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	6.7	1.3	410	<12	1.7	13	34	4.4	540	45,000	6,400	47	17
<b>Result Plant 2</b>	7.5	2.0	460	11	0.94	15	29	5.5	700	41,000	5,100	44	21
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR part 503 and Arizona Administrative Code R18-9-1006 (E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1	19	20	98 - 99
Plant 2	21	24	98 - 101

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1.

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.6	1.5	58
Plant 2	3.6	1.4	63

### 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.*

8/22/2016

8/23/2016

8/18/2016

X 

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(714)593-7081

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James E. Colston  
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X Ron Coss

Ronald Coss  
Enviro Lab and O&M Manager  
Signed by: Coss, Ronald  
rcoss@ocsd.com  
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## Biosolids Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

**Monitoring Period:** May 1- 31, 2016

#### OCSD Plant 1

	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (days)*</b>	17	17	18	18		19		17	18	47**
<b>Minimum Temperature (°F)</b>	98	98	98	98		99		98	99	99

Shaded box represents Digester is Out of Service.

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

#### OCSD Plant 2

	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (days)*</b>	21	21	20	20	21		21		21		21	21	22	23	20	21	21
<b>Minimum Temperature (°F)</b>	99	100	98	99	99		100		99		99	98	98	100	100	99	101

Shaded box represents Digester is Out of Service.

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

\*\* Following cleaning and rehabilitation, digester 16 was filled with digested sludge and then placed in service on May 13, 2016.



## Biosolids Notice and Necessary Information

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

**Monitoring Period:** June 1- 30, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages on 100% dry weight basis).

**Sampling date(s):** 06/01/2016,06/08/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	12	2.7	450	<25	1.3	15	43	9.3	630	56,000	6,200	44	17
<b>Result Plant 2</b>	10	3.1	460	<20	1.2	16	32	8.8	720	44,000	5,200	47	21
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR part 503 and Arizona Administrative Code R18-9-1006-(E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1	17	19	99
Plant 2	24	24	99 - 101

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1.

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.1	1.5	54
Plant 2	3.8	1.5	62

### 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.*

9/28/2016

10/3/2016

10/2/2016

X

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X Ronald Coss

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Signed by: Coss, Ronald



## Biosolids Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

**Monitoring Period:** June 1- 30, 2016

#### OCSD Plant 1

	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (days)*</b>	17	16	17	17				16	18	18
<b>Minimum Temperature (°F)</b>	99	99	99	99				99	99	99

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.

#### OCSD Plant 2

	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T
<b>Minimum Mean Cell Residence Time (days)*</b>	23	23	21	22	22		23		23		22	22	22	23	22	22	23
<b>Minimum Temperature (°F)</b>	100	100	100	99	100		100		99		99	99	100	100	101	100	100

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.



## Biosolids Notice and Necessary Information

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

**Monitoring Period:** July 1- 31, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages on 100% dry weight basis).

**Sampling date(s):** 07/06/2016,07/13/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	8.0	3.1	490	<12	0.82	16	39	8.0	670	54,000	6,400	46	17
<b>Result Plant 2</b>	7.5	3.5	510	<10	0.94	17	30	7.8	790	52,000	5,100	44	20
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR part 503 and Arizona Administrative Code R18-9-1006 (E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1	17	18	98 - 99
Plant 2	22	23	98 - 102

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1.

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.5	1.4	60
Plant 2	3.6	1.5	59

### 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.*

9/26/2016

9/29/2016

9/26/2016

X

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Signed by: Colston, Jim

X Ronald Coss

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Signed by: Coss, Ronald



## Biosolids Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

**Monitoring Period:** July 1- 31, 2016

#### OCSD Plant 1

	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (days)*</b>	17	17	17	17				17	18	18
<b>Minimum Temperature (°F)</b>	98	98	98	98				99	98	98

Shaded box represents Digester is Out of Service.

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

#### OCSD Plant 2

	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T	
<b>Minimum Mean Cell Residence Time (days)*</b>	22	22	21	21	22		22		22		22	22	22	22	21	22	22	
<b>Minimum Temperature (°F)</b>	99	101	99	101	102		100		99		100	99	98	100	100	100	100	

Shaded box represents Digester is Out of Service.

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



## Biosolids Notice and Necessary Information

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

**Monitoring Period:** August 1- 31, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages on 100% dry weight basis).

**Sampling date(s):** 08/03/2016,08/10/2016,08/17/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	6.7	2.6	400	<13	0.53	12	25	9.3	550	55,000	6,300	30	16
<b>Result Plant 2</b>	5.6	3.6	480	12	0.72	15	30	6.7	730	50,000	4,700	40	21
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR part 503 and Arizona Administrative Code R18-9-1006 (E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1	17	18	98
Plant 2	21	23	99 - 100

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1.

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.4	1.4	61
Plant 2	3.6	1.5	60

### 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.*

10/17/2016

10/17/2016

10/17/2016

X

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Signed by: Coss, Ronald





## Biosolids Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

Monitoring Period: August 1- 31, 2016

#### OCSD Plant 1

	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 (days)*	17	17	17	17				17	18	18
Minimum Temperature (°F)	98	98	98	98				98	98	98

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.

#### OCSD Plant 2

	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 (days)*	21	21	20	21	21		21		21		21	21	21	21	21	21	21	
Minimum Temperature (°F)	99	100	99	100	100		100		99		99	99	99	100	100	100	100	

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.



## Biosolids Notice and Necessary Information

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

**Monitoring Period:** September 1- 30, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages on 100% dry weight basis).

**Sampling date(s):** 09/07/2016,09/14/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	7.6	3.6	520	<13	0.94	21	37	8.8	700	58,000	6,600	38	17
<b>Result Plant 2</b>	6.7	4.5	510	14	1.2	17	35	8.3	750	45,000	5,100	43	21
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR part 503 and Arizona Administrative Code R18-9-1006 (E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1	17	18	98
Plant 2	21	21	98 - 101

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1.

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.3	1.3	62
Plant 2	3.5	1.5	59

### 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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11/28/2016

11/29/2016

11/29/2016

X

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Signed by: Coss, Ronald



## Biosolids Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

Monitoring Period: September 1- 30, 2016

#### OCSD Plant 1

	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 (days)*	16	16	17	17				16	17	17
Minimum Temperature (°F)	98	98	98	98				98	98	98

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.

#### OCSD Plant 2

	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 (days)*	21	21	20	20	21		21		21		21	20	20	21	20	20	21	
Minimum Temperature (°F)	100	100	99	100	100		100		99		99	99	98	100	100	99	101	

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.



## Biosolids Notice and Necessary Information

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

**Monitoring Period:** October 1- 31, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages on 100% dry weight basis).

**Sampling date(s):** 10/05/2016,10/12/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	6.7	6.1	490	11	0.87	16	30	8.1	670	51,000	6,200	40	19
<b>Result Plant 2</b>	7.2	6.1	490	13	0.52	16	30	6.9	740	45,000	5,300	39	21
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR part 503 and Arizona Administrative Code R18-9-1006 (E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1	17	19	98
Plant 2	20	21	98 - 101

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1.

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.3	1.3	62
Plant 2	4.3	1.4	68

### 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.*

12/27/2016

12/30/2016

12/21/2016

X

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## Biosolids Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

**Monitoring Period:** October 1- 31, 2016

#### OCSD Plant 1

	Dig. 7	Dig. 8	Dig. 9	Dig. 10	Dig. 11	Dig. 12	Dig. 13	Dig. 14	Dig. 15	Dig. 16
<b>Minimum Mean Cell Residence Time (days)*</b>	16	16	17	17	20				17	17
<b>Minimum Temperature (°F)</b>	98	98	98	98	98				98	98

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.

#### OCSD Plant 2

	Dig. C	Dig. D	Dig. E	Dig. F	Dig. G	Dig. H	Dig. I	Dig. J	Dig. L	Dig. M	Dig. N	Dig. O	Dig. P	Dig. Q	Dig. R	Dig. S	Dig. T	
<b>Minimum Mean Cell Residence Time (days)*</b>	21	21	20	20	20		20	24**	21		21	20	20	21	20	20	21	
<b>Minimum Temperature (°F)</b>	98	100	99	100	99		100	101	99		99	99	100	100	99	99	101	

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.

\*\* Digester J was placed into service on October 20, 2016.



## Biosolids Notice and Necessary Information

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

**Monitoring Period:** November 1- 30, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages on 100% dry weight basis).

**Sampling date(s):** 11/02/2016,11/09/2016,11/10/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	7.6	6.0	440	14	0.82	15	27	8.6	600	50,000	6,400	34	18
<b>Result Plant 2</b>	6.4	6.7	530	15	0.88	15	32	6.0	760	42,000	5,100	39	21
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR part 503 and Arizona Administrative Code R18-9-1006 (E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1	17	19	98
Plant 2	21	23	98 - 101

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1.

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.3	1.3	62
Plant 2	3.9	1.4	65

### 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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12/27/2016

1/4/2017

12/21/2016

X

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## Biosolids Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

Monitoring Period: November 1- 30, 2016

#### OCSD Plant 1

	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 (days)*	16	16	17	17	18				17	17
Minimum Temperature (°F)	98	98	98	98	98				98	98

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.

#### OCSD Plant 2

	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 (days)*	21	20		20	21		20	21	22		21	21	21	21	20	21	21	
Minimum Temperature (°F)	98	98		99	98		100	101	99		98	98	98	100	98	98	99	

Shaded box represents Digester is Out of Service.  
 \*MCRT based on a 15-Day Rolling Average.



## Biosolids Notice and Necessary Information

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

**Monitoring Period:** December 1- 31, 2016

**Pollutant and Nitrogen concentrations** (reported results may be averages) on 100% dry weight basis.

**Sampling date(s):** 12/07/2016,12/14/2016,12/21/2016

	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)	Org-N (mg/kg)	Ammonia (mg/kg)	Cr (mg/kg)	% solids
<b>Result Plant 1</b>	7.7	4.2	420	<12	1.0	14	27	5.4	610	55,000	6,500	35	17
<b>Result Plant 2</b>	6.3	5.2	490	13	0.82	15	27	3.8	760	41,000	7,800	40	21
<b>Table 3</b>	41	39	1,500	300	17	N/A	420	100	2,800	N/A	N/A	N/A	N/A
<b>Table 1</b>	75	85	4,300	840	57	75	420	100	7,500	N/A	N/A	3,000	N/A

### Class B Pathogen Reduction

Class B pathogen reduction requirements from 40 CFR part 503 and Arizona Administrative Code R18-9-1006 (E) have been met via anaerobic digestion under the following parameters:

	Mean Residence Time (days)		Mean minimum Temperature (°F) (All digesters)
	Min	Max	
Plant 1	17	19	98 - 99
Plant 2	20	22	96 - 101

### Vector Attraction Reduction

The vector attraction reduction requirements of 40 CFR part 503 and Arizona Administrative Code R18-9-1010(A) have been met using data (may be averages) analyzed by an Arizona certified laboratory to comply with Option 1.

	% Volatile Solids		
	In	Out	Reduction
Plant 1	3.0	1.2	60
Plant 2	3.5	1.4	62

### 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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1/24/2017

1/24/2017

1/18/2017

X

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## Biosolids Notice and Necessary Information – Addendum

### Individual Digester Mean Cell Residence Times and Minimum Temperatures

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

Monitoring Period: December 1- 31, 2016

#### OCSD Plant 1

	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 (days)*	17	16	17	17	17**				17**	17**
Minimum Temperature (°F)	99	99	99	99	99				99	98

Shaded box represents Digester is Out of Service.

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

#### OCSD Plant 2

	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 (days)*	21	20		20	20		19	21	21		20	20	20	20	20	20	21	
Minimum Temperature (°F)	96	98		97	97		100	101	99		98	98	96	98	98	98	100	

Shaded box represents Digester is Out of Service.

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

\*\* On 11/3/2016, instrumentation staff discovered a flowmeter calibration error for digesters 11-16 that had occurred when the meter was rescaled on 5/19/2016. As a result, during that period, the reported digestion times were slightly less than actual digestion times. Since recalculation of digestion times would not negatively affect compliance determination, the data will not be corrected and re-reported.

## **APPENDIX B**

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**SOLIDS MANAGEMENT PROGRAM**

**Introduction**  
**Biosolids Quality**

## 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 [OCSEwers.com/503](http://OCSEwers.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 2015/16, OCSD biosolids met the EQ limits for all the regulated parameters.

Metal	Fiscal Year	Exceptional Quality Limits	Plant No. 1			Plant No. 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Arsenic		41						
	2006-07		2.7	7.2	5.3	5.1	11	7.3
	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	10.0	5.2	4.4	10.0	7.2
	2010-11		7.2	9.7	8.4	8.6	12	10.4
	2011-12		2.3	11	7.4	6.6	66	21.5
	2012-13		0	7.8	4.7	2	10	7
	2013-14		2.2	9.4	5.4	5.4	11	8.4
	2014-15		4.5	11.0	7.2	7.8	12	9.3
2015-16		3.8	12	8.0	6.2	12	9.2	

**TABLE 9.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2007-2016**  
**(Concentration in mg/kg, dry weight)**  
 Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant No. 1			Plant No. 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Cadmium		39						
	2006-07		3.7	6.1	5	2	4	3.3
	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	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	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	
Chromium		**						
	2006-07		51	77	62	47	86	60
	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	
Copper		1,500						
	2006-07		600	800	686	540	620	576
	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	

**TABLE 9.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2007-2016**  
**(Concentration in mg/kg, dry weight)**  
 Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant No. 1			Plant No. 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Lead		300						
	2006-07		23	30	26	14	24	21
	2007-08		6	30	20	6	24	14
	2008-09		11	25	21	6	21	15
	2009-10		9	44	23	9	20	17
	2010-11		21	24	23	9	30	20
	2011-12		ND	24.5	9	ND	32	13
	2012-13		7.5	19	15	7.5	16.5	13.7
	2013-14		12.5	17.5	14	12.5	16.5	14.4
	2014-15		8.7	15	13	9	17	13
2015-16		8.3	20	12	8	17	13	
Mercury		17						
	2006-07		1.1	2.4	1.6	1.3	2.5	1.7
	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	1.5	1.08	1	1.5	1
2015-16		0.60	1.7	0.93	0.64	1.2	1	
Molybdenum		**						
	2006-07		13	22	18	14	18	16
	2007-08		12	17	13	12	18	15
	2008-09		12	16	15	8	16	14
	2009-10		6	16	13	6	14	10
	2010-11		12	19	15	4.8	18	14
	2011-12		6.5	18	12.9	12	20	17
	2012-13		9.8	20	14.2	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	

**TABLE 9.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2007-2016**  
**(Concentration in mg/kg, dry weight)**  
 Orange County Sanitation District, Resource Protection Division

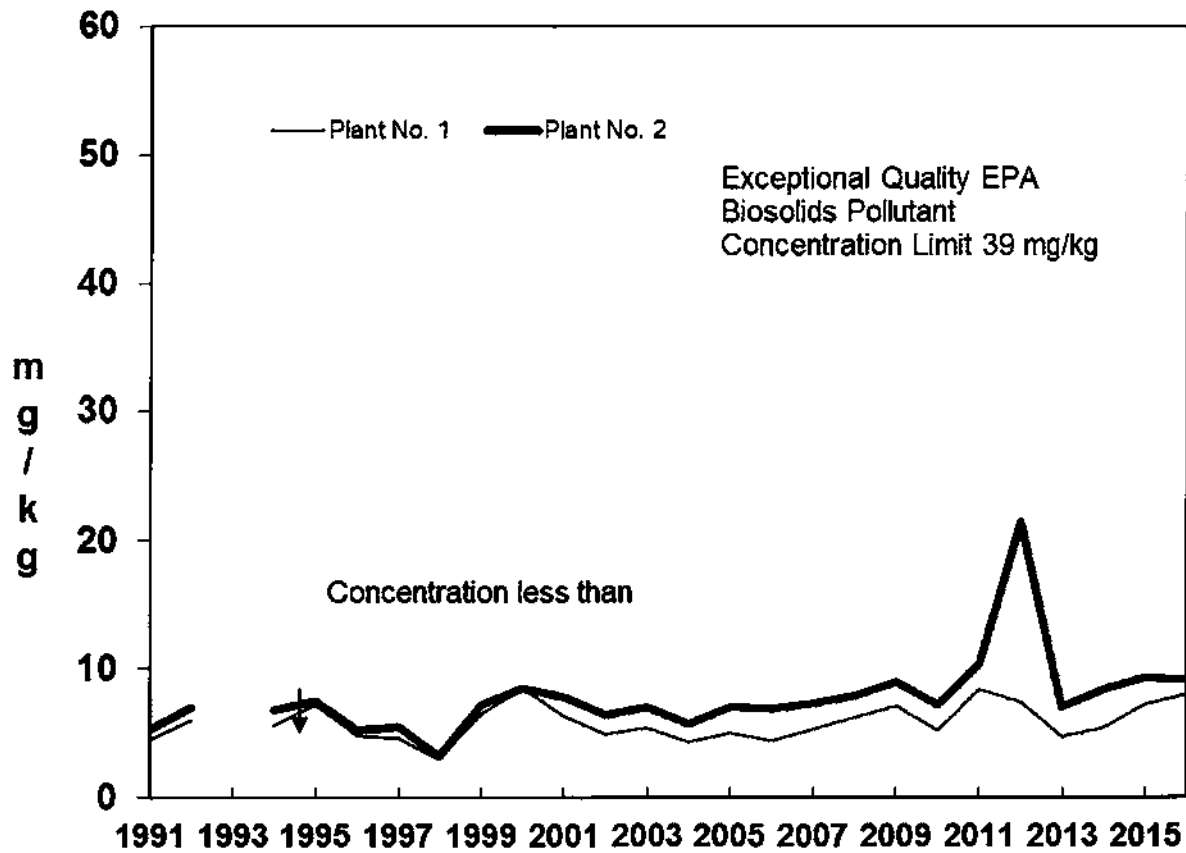
Metal	Fiscal Year	Exceptional Quality Limits	Plant No. 1			Plant No. 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Nickel		420						
	2006-07		44	60	54	28	44	34
	2007-08		34	58	45	24	56	31
	2008-09		30	41	35	22	37	29
	2009-10		12	36	28	9	27	21
	2010-11		28	46	37	14	38	32
	2011-12		15	48	35	20	39	31
	2012-13		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	
Selenium		100						
	2006-07		4.7	13	8.2	1.8	14	5.8
	2007-08		3.0	14	8	1.4	11	5.6
	2008-09		2.5	14.0	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	ND	19	9
	2012-13		0	20	9	0	20	8
	2013-14		1.9	13	7.3	2.7	13	7.7
	2014-15		2.9	13.0	6.8	4	15.0	7
2015-16		2.4	10	7.7	2.2	10	7	
Silver		**						
	2006-07		28	36	31	ND	ND	ND
	2007-08		19	25	22	10	15	13
	2008-09		19	24	20.8	9.5	13	11.6
	2009-10		10	18	15	7.4	13	10
	2010-11		10	17	13	5.2	12	9.57
	2011-12		7	14	10	4	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	8.6	7
2015-16		4.6	7.7	6.1	4.2	8.0	6	

**TABLE 9.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2007-2016**  
**(Concentration in mg/kg, dry weight)**  
 Orange County Sanitation District, Resource Protection Division

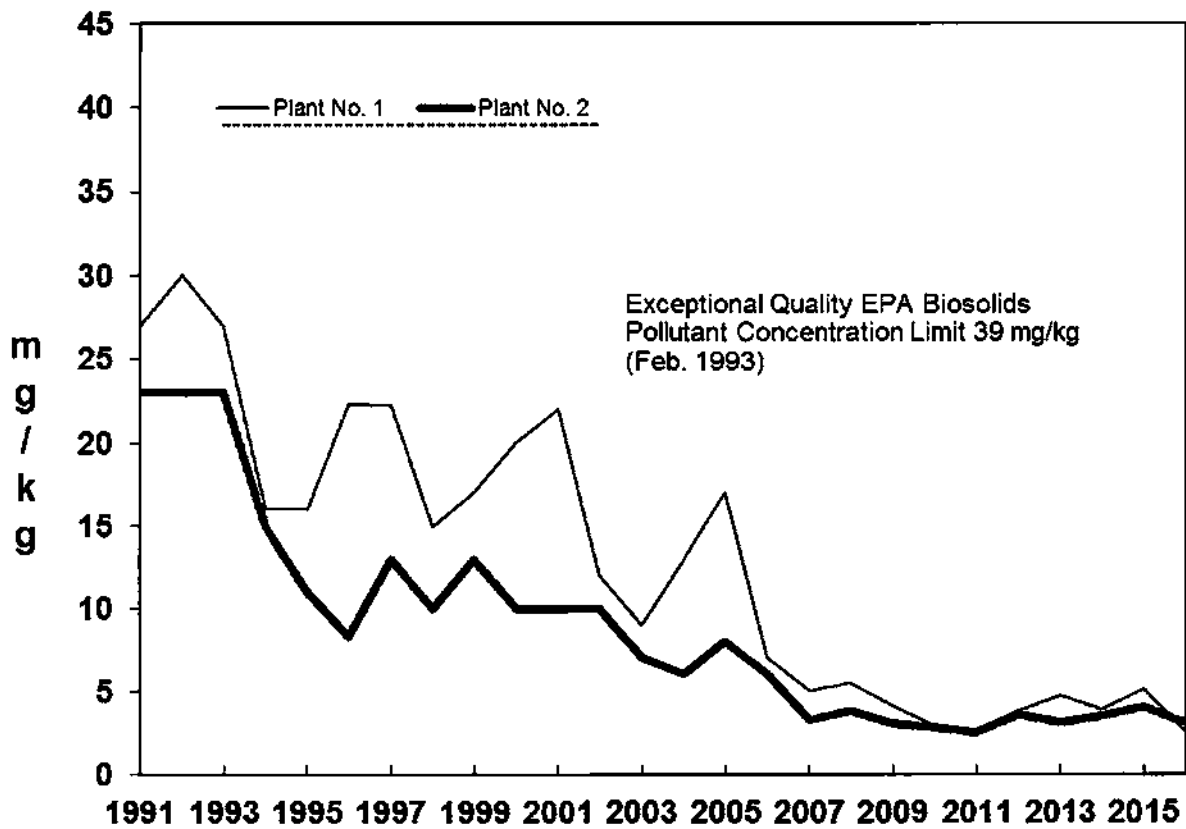
Metal	Fiscal Year	Exceptional Quality Limits	Plant No. 1			Plant No. 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Zinc		2,800						
	2005-06		700	910	801	680	900	760
	2006-07		820	1100	900	720	930	790
	2007-08		740	890	806	680	790	716
	2008-09		720	870	785	700	800	749
	2009-10		560	810	741	520	790	710
	2010-11		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

\*\* No 40 CFR Part 503 Exceptional Quality Criteria.  
 ND = Non-detectable

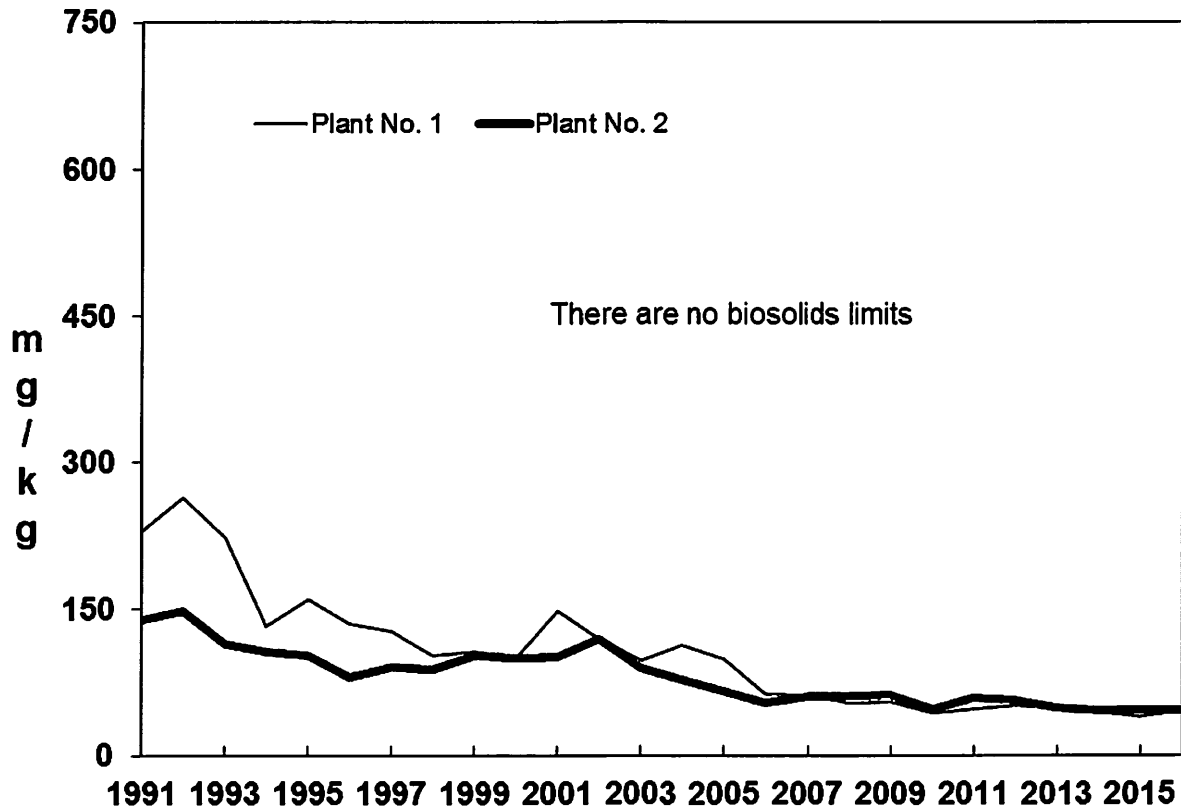




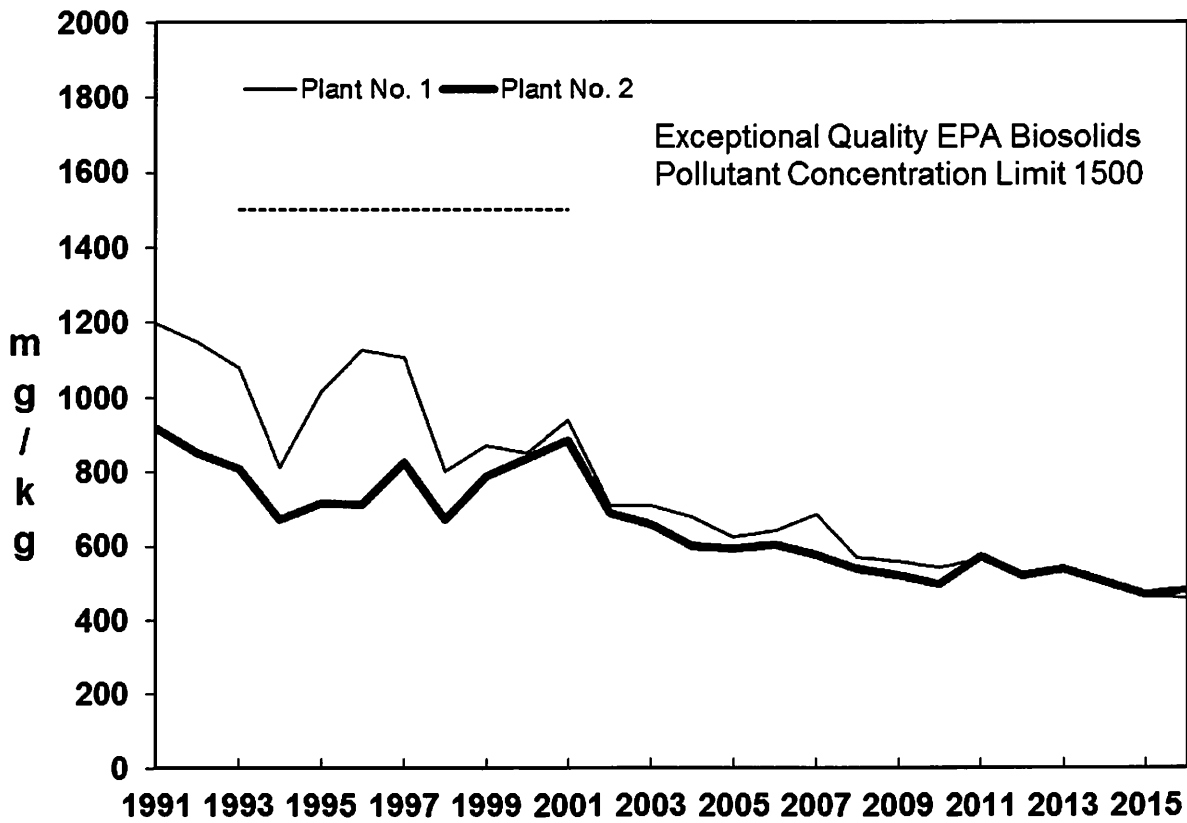
**Figure 9-1 Trends in Concentrations of Arsenic in Biosolids, Fiscal Years 1991-2016  
Orange County Sanitation District, Resource Protection Division**



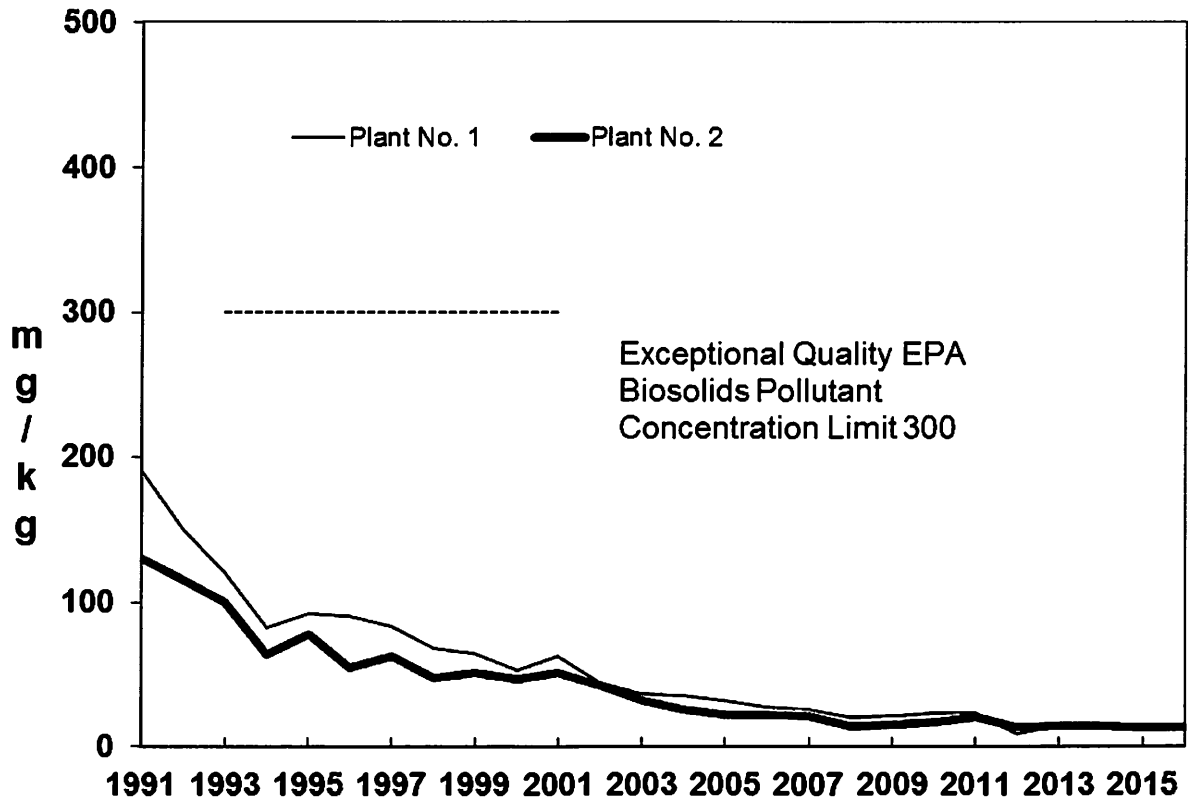
**Figure 9-2 Trends in Concentrations of Cadmium in Biosolids, Fiscal Years 1991-2016  
Orange County Sanitation District, Resource Protection Division**



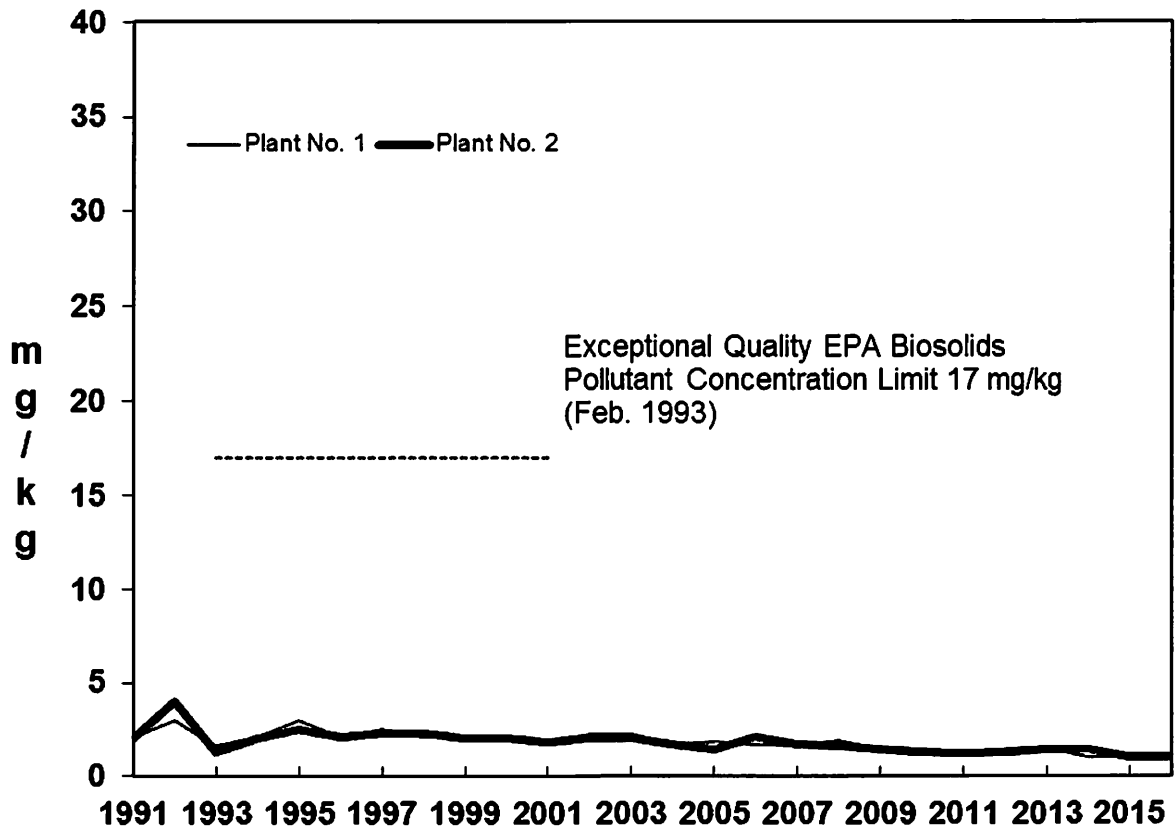
**Figure 9-3 Trends in Concentrations of Chromium in Biosolids, Fiscal Years 1991-2016 Orange County Sanitation District, Resource Protection Division**



**Figure 9-4 Trends in Concentrations of Copper in Biosolids, Fiscal Years 1991-2016 Orange County Sanitation District, Resource Protection Division**



**Figure 9-5 Trends in Concentrations of Lead in Biosolids, Fiscal Years 1991-2016  
Orange County Sanitation District, Resource Protection Division**



**Figure 9-6 Trends in Concentrations of Mercury in Biosolids, Fiscal Years 1991-2016  
Orange County Sanitation District**

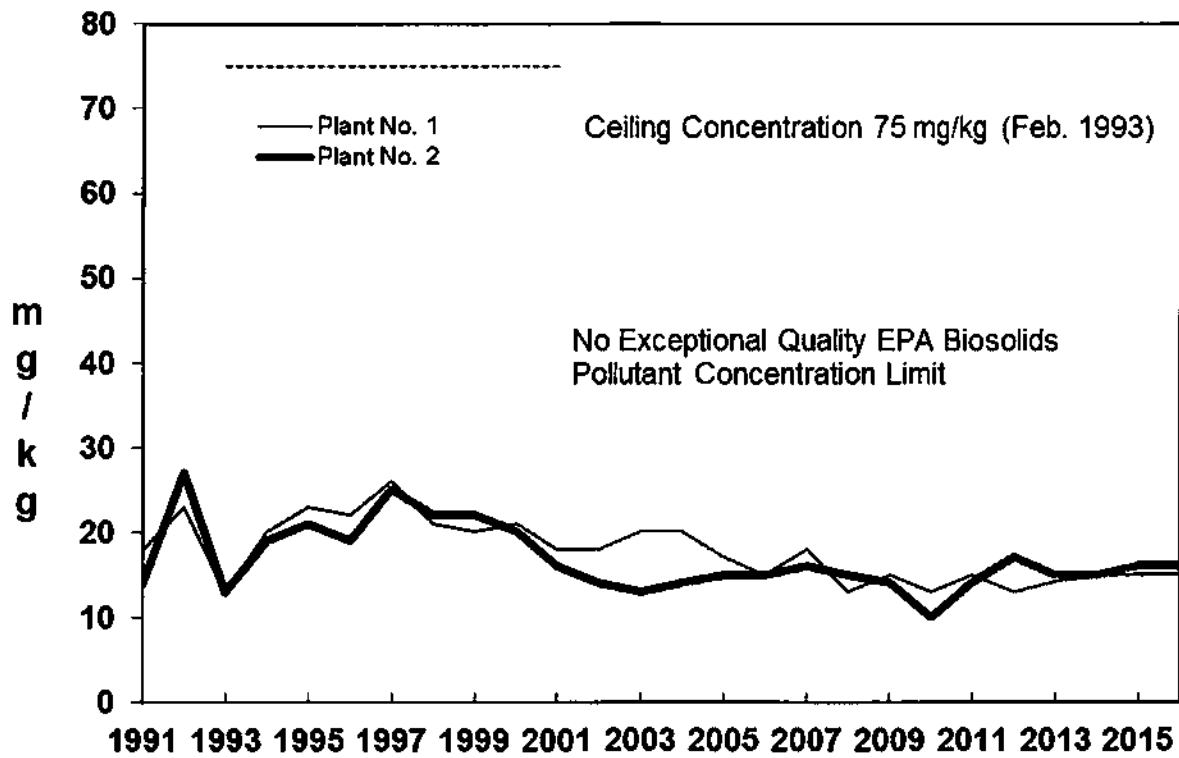


Figure 9-7 Trends in Concentrations of Molybdenum in Biosolids, Fiscal Years 1991-2016 Orange County Sanitation District, Resource Protection Division

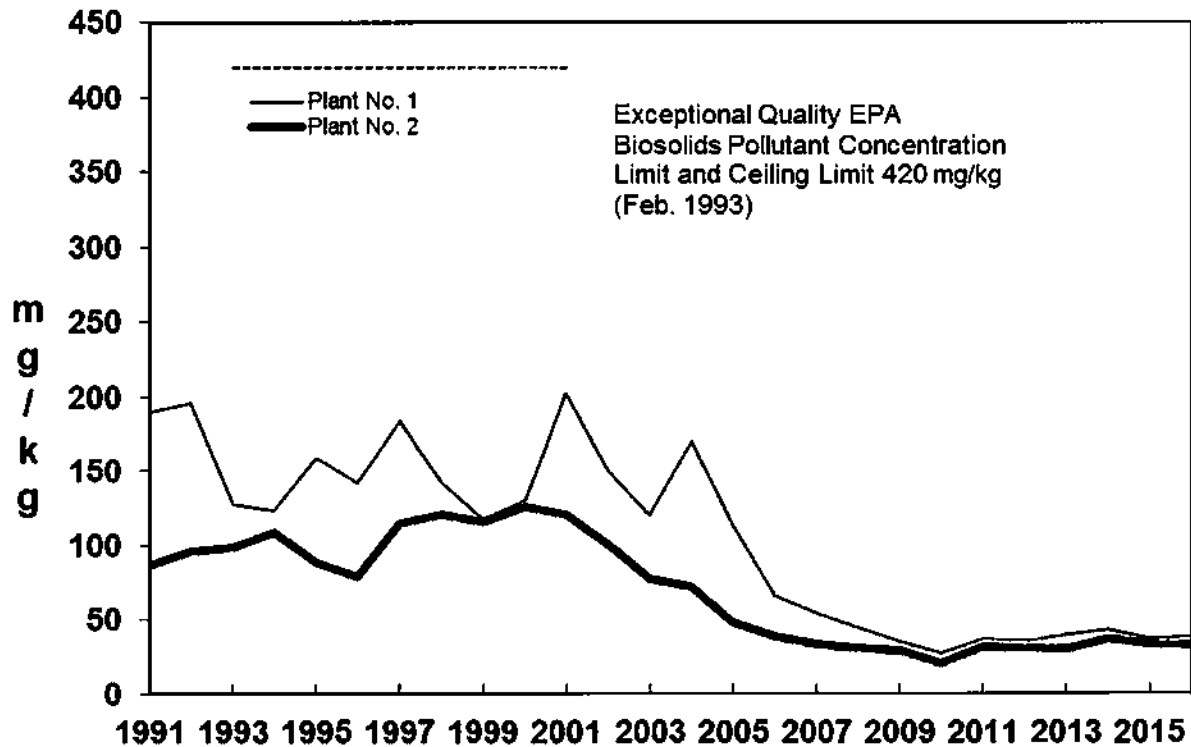


Figure 9-8 Trends in Concentrations of Nickel in Biosolids, Fiscal Years, 1991-2016 Orange County Sanitation District, Resource Protection Division

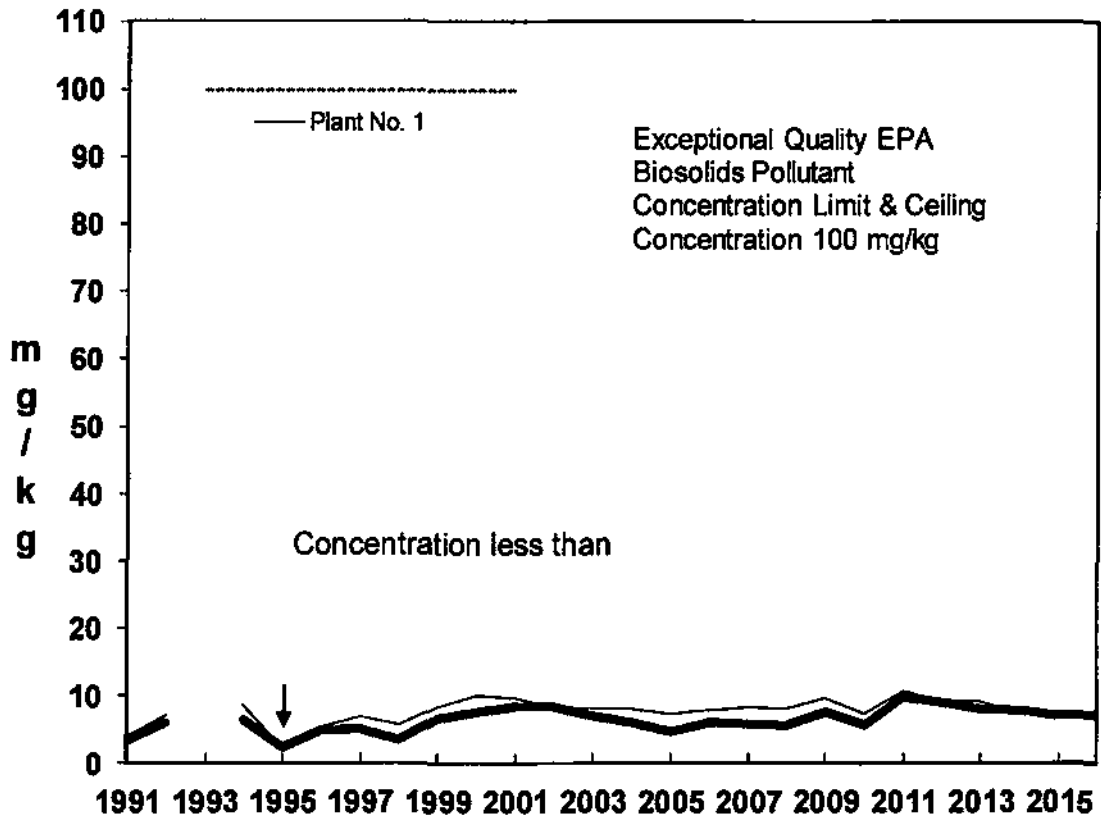


Figure 9-9 Trends in Concentrations of Selenium in Biosolids, Fiscal Years 1991-2016 Orange County Sanitation District, Resource Protection Division

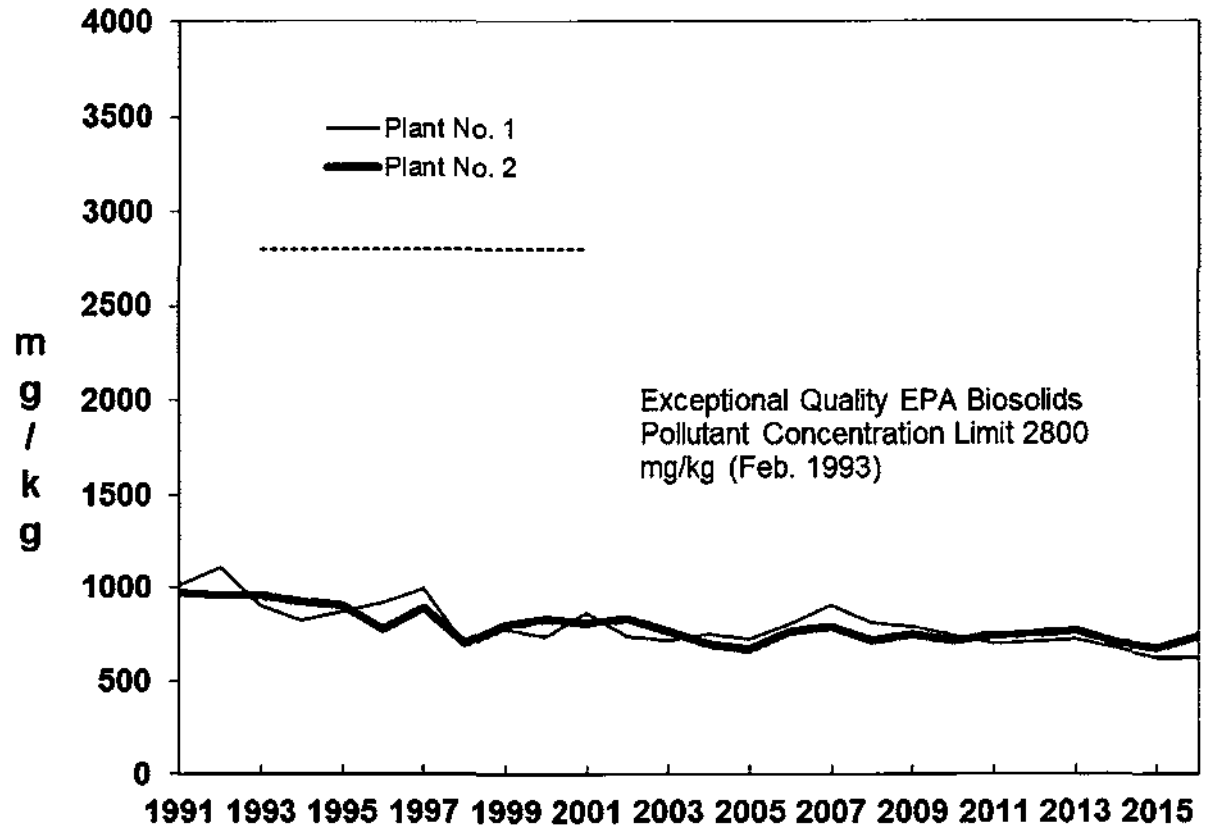


Figure 9-10 Trends in Concentrations of Zinc in Biosolids, Fiscal Years 1991-2016 Orange County Sanitation District, Resource Protection Division

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## **APPENDIX C**

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**Summary of Priority Pollutants and  
Trace Constituents Analysis 2015 for Biosolids**

Orange County Sanitation District - 2016 Biosolids Compliance Report  
Appendix C - Summary of Priority Pollutants and Trace Constituents for Biosolids

Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016		
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
<b>General Chemistry</b>														
<b>Hexavalent Chromium</b>														
Plant 1 Cake	EPA 7196A	mg/kg dry	ND	290	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 7196A	mg/kg dry	ND	220	--	--	--	--	ND	120	--	--	--	--
<b>Total Cyanide</b>														
Plant 1 Cake	EPA 9014	mg/kg dry	ND	2.8	--	--	--	--	ND	2.9	--	--	--	--
Plant 2 Cake	EPA 9014	mg/kg dry	3.3	2.2	--	--	--	--	ND	2.4	--	--	--	--
<b>Corrosivity</b>														
Plant 1 Cake	EPA 9045C	-	NEG	--	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 9045C	-	NEG	--	--	--	--	--	--	--	--	--	--	--
<b>Nitrate</b>														
Plant 1 Cake	EPA 300.0	mg/kg dry	ND	6.3	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 300.0	mg/kg dry	11	4.8	--	--	--	--	--	--	--	--	--	--
<b>Ammonia Nitrogen</b>														
Plant 1 Cake	SM 4500 NH3 D	mg/kg dry	6150	1400	6000	1400	6150	1400	6550	1500	6400	1600	6200	1500
Plant 2 Cake	SM 4500 NH3 D	mg/kg dry	5000	1100	5150	1100	5300	1100	5450	1200	5050	1200	5200	1300
<b>Organic Nitrogen</b>														
Plant 1 Cake	CALC	mg/kg dry	53350	--	59000	--	61350	--	49450	--	44600	--	55800	--
Plant 2 Cake	CALC	mg/kg dry	44000	--	44850	--	45200	--	44050	--	40950	--	43800	--
<b>Organic Lead</b>														
Plant 1 Cake	HML 939-M	mg/kg dry	ND	.05	--	--	--	--	ND	.06	--	--	--	--
Plant 2 Cake	HML 939-M	mg/kg dry	ND	.1	--	--	--	--	ND	.048	--	--	--	--
<b>pH</b>														
Plant 1 Cake	EPA 9045C	pH units	8	.1	--	--	--	--	7.48	.1	--	--	--	--
Plant 2 Cake	EPA 9045C	pH units	7.92	.1	--	--	--	--	7.61	.1	--	--	--	--
<b>Sulfide</b>														
Plant 1 Cake	EPA 9034	mg/kg dry	ND	230	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 9034	mg/kg dry	250	180	--	--	--	--	--	--	--	--	--	--
<b>TKN</b>														
Plant 1 Cake	EPA 351.2	mg/kg dry	59500	7100	65000	7200	67500	6900	56000	7400	51000	7800	62000	7700
Plant 2 Cake	EPA 351.2	mg/kg dry	49000	5700	50000	5600	50500	5700	49500	6000	46000	6100	49000	6300
<b>Total Solids</b>														
Plant 1 Cake	SM 2540G	%	18.5	.05	17.5	.05	18	.05	17.5	.05	17	.05	16.5	.05
Plant 2 Cake	SM 2540G	%	22	.05	22	.05	22	.05	20.5	.05	21	.05	20.5	.05
<b>Trace Elements</b>														
<b>Fluoride</b>														
Plant 1 Cake	EPA 300.0	mg/kg dry	35	29	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 300.0	mg/kg dry	32	22	--	--	--	--	--	--	--	--	--	--
<b>Potassium</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	1100	280	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B	mg/kg dry	900	440	--	--	--	--	--	--	--	--	--	--
<b>Mercury</b>														
Plant 1 Cake	EPA 7471A	mg/kg dry	.615	.11	.865	.12	.595	.11	.64	.12	1.65	.13	1.3	.25
Plant 2 Cake	EPA 7471A	mg/kg dry	.645	.089	1.05	.09	.85	.091	.91	.096	.935	.098	1.15	.21
<b>Antimony</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	4.4	11	--	--	--	--	ND	12	--	--	--	--
Plant 2 Cake	EPA 6010B	mg/kg dry	3.7	8.8	--	--	--	--	ND	9.5	--	--	--	--
<b>Arsenic</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	6.25	1.7	6.4	3.4	8.25	1.7	7	1.8	6.65	1.9	12	3.7
Plant 2 Cake	EPA 6010B	mg/kg dry	6.75	1.4	8.45	2.7	8.65	1.4	8.75	1.5	7.45	1.5	10.45	3.1
<b>Barium</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	470	5.7	--	--	--	--	470	5.9	--	--	--	--
Plant 2 Cake	EPA 6010B	mg/kg dry	980	4.4	--	--	--	--	1100	4.7	--	--	--	--
<b>Beryllium</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	ND	.57	--	--	--	--	ND	.59	--	--	--	--



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Appendix C - Summary of Priority Pollutants and Trace Constituents for Biosolids

	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
<b>General Chemistry</b>														
<b>Hexavalent Chromium</b>														
Plant 1 Cake	mg/kg dry	ND	62	--	--	--	--	ND	130	--	--	--	--	<b>&lt; 290</b>
Plant 2 Cake	mg/kg dry	ND	51	--	--	--	--	ND	230	--	--	--	--	<b>&lt; 230</b>
<b>Total Cyanide</b>														
Plant 1 Cake	mg/kg dry	2.7	3.1	--	--	--	--	ND	2.7	--	--	--	--	<b>2.7</b>
Plant 2 Cake	mg/kg dry	ND	2.5	--	--	--	--	ND	2.3	--	--	--	--	<b>3.3</b>
<b>Corrosivity</b>														
Plant 1 Cake	-	NEG	--	--	--	--	--	--	--	--	--	--	--	<b>NEG</b>
Plant 2 Cake	-	NEG	--	--	--	--	--	--	--	--	--	--	--	<b>NEG</b>
<b>Nitrate</b>														
Plant 1 Cake	mg/kg dry	ND	6.8	--	--	--	--	--	--	--	--	--	--	<b>&lt;6.8</b>
Plant 2 Cake	mg/kg dry	ND	5.6	--	--	--	--	--	--	--	--	--	--	<b>11</b>
<b>Ammonia Nitrogen</b>														
Plant 1 Cake	mg/kg dry	6350	1500	6250	1600	6550	1600	6150	1300	6350	1500	6500	1500	<b>6,300</b>
Plant 2 Cake	mg/kg dry	5050	1300	4700	1200	5050	1200	5300	1200	5100	1200	7800	1300	<b>5,300</b>
<b>Organic Nitrogen</b>														
Plant 1 Cake	mg/kg dry	54150	--	55250	--	58450	--	51350	--	50150	--	54500	--	<b>54,000</b>
Plant 2 Cake	mg/kg dry	52450	--	50300	--	45450	--	45200	--	42400	--	40700	--	<b>45,000</b>
<b>Organic Lead</b>														
Plant 1 Cake	mg/kg dry	ND	.11	--	--	--	--	ND	.28	--	--	--	--	<b>&lt;0.28</b>
Plant 2 Cake	mg/kg dry	ND	.094	--	--	--	--	ND	.26	--	--	--	--	<b>&lt;0.26</b>
<b>pH</b>														
Plant 1 Cake	pH units	7.92	.1	--	--	--	--	7.9	.1	--	--	--	--	<b>7.8</b>
Plant 2 Cake	pH units	7.81	.1	--	--	--	--	8	.1	--	--	--	--	<b>7.8</b>
<b>Sulfide</b>														
Plant 1 Cake	mg/kg dry	3400	250	--	--	--	--	--	--	--	--	--	--	<b>3,400</b>
Plant 2 Cake	mg/kg dry	12000	200	--	--	--	--	--	--	--	--	--	--	<b>6,100</b>
<b>TKN</b>														
Plant 1 Cake	mg/kg dry	60500	7600	61500	8300	65000	7800	57500	6700	56500	7500	61000	7400	<b>60,000</b>
Plant 2 Cake	mg/kg dry	57500	6200	55000	5800	50500	6200	50500	6100	47500	6000	48500	6300	<b>50,000</b>
<b>Total Solids</b>														
Plant 1 Cake	%	17	.05	16	.05	16.5	.05	19	.05	17.5	.05	17	.05	<b>17</b>
Plant 2 Cake	%	20	.05	21	.05	20.5	.05	21	.05	21	.05	20.5	.05	<b>21</b>
<b>Trace Elements</b>														
<b>Fluoride</b>														
Plant 1 Cake	mg/kg dry	37	31	--	--	--	--	--	--	--	--	--	--	<b>36</b>
Plant 2 Cake	mg/kg dry	33	26	--	--	--	--	--	--	--	--	--	--	<b>33</b>
<b>Potassium</b>														
Plant 1 Cake	mg/kg dry	1400	310	--	--	--	--	--	--	--	--	--	--	<b>1300</b>
Plant 2 Cake	mg/kg dry	1000	250	--	--	--	--	--	--	--	--	--	--	<b>950</b>
<b>Mercury</b>														
Plant 1 Cake	mg/kg dry	.815	.12	.525	.13	.935	.13	.865	.11	.815	.12	1.005	.12	<b>0.89</b>
Plant 2 Cake	mg/kg dry	.935	.099	.72	.096	1.15	.099	.52	.098	.88	.096	.815	.1	<b>0.88</b>
<b>Antimony</b>														
Plant 1 Cake	mg/kg dry	ND	12	--	--	--	--	2.6	11	--	--	--	--	<b>3.5</b>
Plant 2 Cake	mg/kg dry	1.8	10	--	--	--	--	3.1	9.1	--	--	--	--	<b>2.9</b>
<b>Arsenic</b>														
Plant 1 Cake	mg/kg dry	7.95	1.9	6.7	2	7.55	1.9	6.7	1.6	7.55	1.8	7.65	1.8	<b>7.6</b>
Plant 2 Cake	mg/kg dry	7.5	1.5	5.6	1.4	6.65	1.5	7.15	1.5	6.4	1.4	6.25	1.5	<b>7.5</b>
<b>Barium</b>														
Plant 1 Cake	mg/kg dry	520	6.2	--	--	--	--	500	5.4	--	--	--	--	<b>490</b>
Plant 2 Cake	mg/kg dry	970	5	--	--	--	--	810	4.6	--	--	--	--	<b>970</b>
<b>Beryllium</b>														
Plant 1 Cake	mg/kg dry	ND	.62	--	--	--	--	ND	.54	--	--	--	--	<b>&lt;0.62</b>

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 6010B	mg/kg dry	ND	.44	--	--	--	--	ND	.47	--	--	--	--
<b>Cadmium</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	1.6	1.1	1.8	2.3	2.4	1.1	1.25	1.2	1.3	1.2	2.65	2.5
Plant 2 Cake	EPA 6010B	mg/kg dry	2.3	.9	2.9	1.8	3.1	.93	2.15	.97	2	.99	3.05	2
<b>Chromium</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	32.5	4.6	31	9.2	87.6667	4.5	88.5	4.7	47	5	44	9.8
Plant 2 Cake	EPA 6010B	mg/kg dry	34	3.6	33.5	7.3	66.6667	3.7	55	3.9	44	4	47	8.2
<b>Cobalt</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	2.9	5.7	--	--	--	--	3.2	5.9	--	--	--	--
Plant 2 Cake	EPA 6010B	mg/kg dry	3.1	4.4	--	--	--	--	3.6	4.7	--	--	--	--
<b>Copper</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	385	2.8	440	5.7	450	2.8	475	3	405	3.1	450	6.1
Plant 2 Cake	EPA 6010B	mg/kg dry	405	2.3	445	4.5	490	2.3	520	2.4	455	2.5	460	5.1
<b>Iron</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	55000	34	46000	69	55000	34	64500	35	57500	37	70000	74
Plant 2 Cake	EPA 6010B	mg/kg dry	64500	27	61500	55	68500	28	70500	29	69000	30	71000	61
<b>Lead</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	9.1	11	8.4	23	10.4	11	13.5	12	8.65	12	8.25	25
Plant 2 Cake	EPA 6010B	mg/kg dry	9.7	9	10.15	18	11.5	9.3	14.5	9.7	11	9.9	9.65	20
<b>Magnesium</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	4450	57	3300	110	3650	56	4750	59	4650	62	5200	120
Plant 2 Cake	EPA 6010B	mg/kg dry	5050	88	5200	91	5500	46	5850	49	6050	50	5750	100
<b>Molybdenum</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	12	5.7	11.25	11	12	5.6	14.5	5.9	12.5	6.2	15	12
Plant 2 Cake	EPA 6010B	mg/kg dry	11	4.5	12.5	9.1	13.5	4.6	15.5	4.9	15	5	16	10
<b>Nickel</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	43.5	11	28.5	23	30.5	11	35.5	12	34	12	43	25
Plant 2 Cake	EPA 6010B	mg/kg dry	41	9	31	18	32.5	9.3	30.5	9.7	28.5	9.9	32	20
<b>Phosphorus</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	33000	91	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B	mg/kg dry	26000	71	--	--	--	--	--	--	--	--	--	--
<b>Selenium</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	9.65	2.8	9.8	5.7	9.05	2.8	10.45	3	4.4	3.1	9.3	6.1
Plant 2 Cake	EPA 6010B	mg/kg dry	9.4	4.4	7.6	4.5	8.35	2.3	10.35	2.4	5.45	2.5	8.8	5.1
<b>Silver</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	4.65	1.7	4.85	3.4	5.95	1.7	5.75	1.8	5.1	1.9	5.9	3.7
Plant 2 Cake	EPA 6010B	mg/kg dry	5	1.4	5.6	2.7	6.5	1.4	4.85	1.5	5.15	1.5	4.8	3.1
<b>Thallium</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	ND	17	--	--	--	--	ND	18	--	--	--	--
Plant 2 Cake	EPA 6010B	mg/kg dry	ND	13	--	--	--	--	1	14	--	--	--	--
<b>Vanadium</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	28	5.7	--	--	--	--	25	5.9	--	--	--	--
Plant 2 Cake	EPA 6010B	mg/kg dry	58	4.4	--	--	--	--	49	4.7	--	--	--	--
<b>Zinc</b>														
Plant 1 Cake	EPA 6010B	mg/kg dry	535	4.6	500	9.2	560	4.5	635	4.7	535	5	630	9.8
Plant 2 Cake	EPA 6010B	mg/kg dry	615	3.6	635	7.3	730	3.7	760	3.9	695	4	720	8.2

**TCLP - Trace Elements**

<b>Mercury</b>														
Plant 1 Cake	EPA 7470A-TCLP(1311)	mg/L	ND	.002	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 7470A-TCLP(1311)	mg/L	ND	.002	--	--	--	--	--	--	--	--	--	--
<b>Arsenic</b>														
Plant 1 Cake	EPA 6010B-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--

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Appendix C - Summary of Priority Pollutants and Trace Constituents for Biosolids

	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/kg dry	ND	.5	--	--	--	--	ND	.46	--	--	--	--	<b>&lt;0.50</b>
<b>Cadmium</b>														
Plant 1 Cake	mg/kg dry	3.1	1.2	2.55	1.3	3.55	1.3	6.1333	1.1	5.95	1.2	4.15	1.2	<b>3.0</b>
Plant 2 Cake	mg/kg dry	3.45	1	3.55	.95	4.5	.99	6.0667	.98	6.65	.96	5.15	1	<b>3.7</b>
<b>Chromium</b>														
Plant 1 Cake	mg/kg dry	45.5	4.9	29.5	5.3	38	5	39.5	4.3	34	4.8	35	4.8	<b>46</b>
Plant 2 Cake	mg/kg dry	43.5	4	40	3.8	42.5	4	39	3.9	39	3.9	40	4.1	<b>44</b>
<b>Cobalt</b>														
Plant 1 Cake	mg/kg dry	ND	6.2	--	--	--	--	ND	5.4	--	--	--	--	<b>3.1</b>
Plant 2 Cake	mg/kg dry	ND	5	--	--	--	--	ND	4.6	--	--	--	--	<b>3.4</b>
<b>Copper</b>														
Plant 1 Cake	mg/kg dry	490	3.1	395	3.3	515	3.1	485	2.7	440	3	420	3	<b>450</b>
Plant 2 Cake	mg/kg dry	505	2.5	475	2.4	510	2.5	490	2.4	530	2.4	485	2.5	<b>480</b>
<b>Iron</b>														
Plant 1 Cake	mg/kg dry	61500	37	49500	40	62500	38	80000	32	72500	36	67000	36	<b>62,000</b>
Plant 2 Cake	mg/kg dry	66000	30	67000	29	63000	30	66000	29	70500	29	75000	30	<b>68,000</b>
<b>Lead</b>														
Plant 1 Cake	mg/kg dry	8.6	12	7.9	13	11.5	13	11	11	13.5	12	8.65	12	<b>10</b>
Plant 2 Cake	mg/kg dry	9.1	10	12	9.5	13.5	9.9	13	9.8	14.5	9.6	12.5	10	<b>12</b>
<b>Magnesium</b>														
Plant 1 Cake	mg/kg dry	5450	62	5100	67	4250	63	6150	54	5550	60	4900	60	<b>4800</b>
Plant 2 Cake	mg/kg dry	5850	50	5700	48	6000	50	5650	49	6450	48	6550	51	<b>5800</b>
<b>Molybdenum</b>														
Plant 1 Cake	mg/kg dry	15.5	6.2	12	6.7	21	6.3	16	5.4	14.5	6	13.5	6	<b>14</b>
Plant 2 Cake	mg/kg dry	17	5	14.5	4.8	17	5	15.5	4.9	15	4.8	15	5.1	<b>15</b>
<b>Nickel</b>														
Plant 1 Cake	mg/kg dry	38.5	12	25	13	36.5	13	30	11	26.5	12	27	12	<b>33</b>
Plant 2 Cake	mg/kg dry	29.5	10	30	9.5	35	9.9	29.5	9.8	31.5	9.6	26.5	10	<b>31</b>
<b>Phosphorus</b>														
Plant 1 Cake	mg/kg dry	34000	99	--	--	--	--	--	--	--	--	--	--	<b>34,000</b>
Plant 2 Cake	mg/kg dry	31000	80	--	--	--	--	--	--	--	--	--	--	<b>29,000</b>
<b>Selenium</b>														
Plant 1 Cake	mg/kg dry	7.95	3.1	9.3	3.3	8.75	3.1	8.05	2.7	8.6	3	5.35	3	<b>8.4</b>
Plant 2 Cake	mg/kg dry	7.8	2.5	6.7	2.4	8.25	2.5	6.9	2.4	6	2.4	3.75	2.5	<b>7.4</b>
<b>Silver</b>														
Plant 1 Cake	mg/kg dry	6.2	1.9	3.7	2	5	1.9	5.6	1.6	5.3	1.8	5.2	1.8	<b>5.3</b>
Plant 2 Cake	mg/kg dry	5.65	1.5	4.5	1.4	5.8	1.5	6.55	1.5	6.75	1.4	5.4	1.5	<b>5.5</b>
<b>Thallium</b>														
Plant 1 Cake	mg/kg dry	ND	19	--	--	--	--	ND	16	--	--	--	--	<b>&lt;19</b>
Plant 2 Cake	mg/kg dry	ND	15	--	--	--	--	ND	14	--	--	--	--	<b>1.0</b>
<b>Vanadium</b>														
Plant 1 Cake	mg/kg dry	25	6.2	--	--	--	--	23	5.4	--	--	--	--	<b>25</b>
Plant 2 Cake	mg/kg dry	48	5	--	--	--	--	44	4.6	--	--	--	--	<b>50</b>
<b>Zinc</b>														
Plant 1 Cake	mg/kg dry	665	4.9	545	5.3	700	5	670	4.3	600	4.8	610	4.8	<b>600</b>
Plant 2 Cake	mg/kg dry	785	4	725	3.8	750	4	735	3.9	760	3.9	755	4.1	<b>720</b>
<b>TCLP - Trace Elements</b>														
<b>Mercury</b>														
Plant 1 Cake	mg/L	ND	.002	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.0020</b>
Plant 2 Cake	mg/L	ND	.002	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.0020</b>
<b>Arsenic</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.20</b>
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.20</b>

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Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
<b>Barium</b>													
Plant 1 Cake	EPA 6010B-TCLP(1311)	mg/L	.32	.2	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-TCLP(1311)	mg/L	.47	.2	--	--	--	--	--	--	--	--	--
<b>Cadmium</b>													
Plant 1 Cake	EPA 6010B-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
<b>Chromium</b>													
Plant 1 Cake	EPA 6010B-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
<b>Lead</b>													
Plant 1 Cake	EPA 6010B-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
<b>Selenium</b>													
Plant 1 Cake	EPA 6010B-TCLP(1311)	mg/L	.13	.1	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-TCLP(1311)	mg/L	.12	.1	--	--	--	--	--	--	--	--	--
<b>Silver</b>													
Plant 1 Cake	EPA 6010B-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--
<b>STLC - Trace Elements</b>													
<b>Antimony</b>													
Plant 1 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--
<b>Arsenic</b>													
Plant 1 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--
<b>Barium</b>													
Plant 1 Cake	EPA 6010B-STLC	mg/L	7	.2	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	21	.2	--	--	--	--	--	--	--	--	--
<b>Beryllium</b>													
Plant 1 Cake	EPA 6010B-STLC	mg/L	ND	.08	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	ND	.08	--	--	--	--	--	--	--	--	--
<b>Cadmium</b>													
Plant 1 Cake	EPA 6010B-STLC	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
<b>Chromium</b>													
Plant 1 Cake	EPA 6010B-STLC	mg/L	.47	.1	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	.65	.1	--	--	--	--	--	--	--	--	--
<b>Cobalt</b>													
Plant 1 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--

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		Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
Units		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
<b>Barium</b>														
Plant 1 Cake	mg/L	.19	.2	--	--	--	--	--	--	--	--	--	--	<b>0.26</b>
Plant 2 Cake	mg/L	.47	.2	--	--	--	--	--	--	--	--	--	--	<b>0.47</b>
<b>Cadmium</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.10</b>
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.10</b>
<b>Chromium</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.10</b>
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.10</b>
<b>Lead</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.10</b>
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.10</b>
<b>Selenium</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>0.13</b>
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>0.12</b>
<b>Silver</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.20</b>
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.20</b>
<b>STLC - Trace Elements</b>														
<b>Antimony</b>														
Plant 1 Cake	mg/L	.15	.2	--	--	--	--	--	--	--	--	--	--	<b>0.15</b>
Plant 2 Cake	mg/L	.15	.2	--	--	--	--	--	--	--	--	--	--	<b>0.15</b>
<b>Arsenic</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.20</b>
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.20</b>
<b>Barium</b>														
Plant 1 Cake	mg/L	6.5	.2	--	--	--	--	--	--	--	--	--	--	<b>6.8</b>
Plant 2 Cake	mg/L	8.9	.2	--	--	--	--	--	--	--	--	--	--	<b>15</b>
<b>Beryllium</b>														
Plant 1 Cake	mg/L	ND	.08	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.080</b>
Plant 2 Cake	mg/L	ND	.08	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.080</b>
<b>Cadmium</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.10</b>
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.10</b>
<b>Chromium</b>														
Plant 1 Cake	mg/L	.57	.1	--	--	--	--	--	--	--	--	--	--	<b>0.52</b>
Plant 2 Cake	mg/L	.56	.1	--	--	--	--	--	--	--	--	--	--	<b>0.61</b>
<b>Cobalt</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.20</b>

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
<b>Copper</b>														
Plant 1 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
<b>Lead</b>														
Plant 1 Cake	EPA 6010B-STLC	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>Mercury</b>														
Plant 1 Cake	EPA 7470A-STLC	mg/L	ND	.002	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 7470A-STLC	mg/L	ND	.002	--	--	--	--	--	--	--	--	--	--
<b>Molybdenum</b>														
Plant 1 Cake	EPA 6010B-STLC	mg/L	.11	.4	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	.12	.4	--	--	--	--	--	--	--	--	--	--
<b>Nickel</b>														
Plant 1 Cake	EPA 6010B-STLC	mg/L	.75	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	.85	.2	--	--	--	--	--	--	--	--	--	--
<b>Selenium</b>														
Plant 1 Cake	EPA 6010B-STLC	mg/L	.3	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	.29	.2	--	--	--	--	--	--	--	--	--	--
<b>Silver</b>														
Plant 1 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
<b>Thallium</b>														
Plant 1 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
<b>Vanadium</b>														
Plant 1 Cake	EPA 6010B-STLC	mg/L	.44	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	1.2	.2	--	--	--	--	--	--	--	--	--	--
<b>Zinc</b>														
Plant 1 Cake	EPA 6010B-STLC	mg/L	6.4	.4	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 6010B-STLC	mg/L	5.5	.4	--	--	--	--	--	--	--	--	--	--

**Volatile Organic Compounds**

**1,1,1,2-Tetrachloroethane**

Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--

**1,1,1-Trichloroethane**

Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--

**1,1,2,2-Tetrachloroethane**

Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--

**1,1,2-Trichloroethane**

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
<b>Copper</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
<b>Lead</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>Mercury</b>														
Plant 1 Cake	mg/L	ND	.002	--	--	--	--	--	--	--	--	--	--	<0.0020
Plant 2 Cake	mg/L	ND	.002	--	--	--	--	--	--	--	--	--	--	<0.0020
<b>Molybdenum</b>														
Plant 1 Cake	mg/L	.07	.4	--	--	--	--	--	--	--	--	--	--	0.090
Plant 2 Cake	mg/L	.073	.4	--	--	--	--	--	--	--	--	--	--	0.10
<b>Nickel</b>														
Plant 1 Cake	mg/L	.43	.2	--	--	--	--	--	--	--	--	--	--	0.59
Plant 2 Cake	mg/L	.25	.2	--	--	--	--	--	--	--	--	--	--	0.55
<b>Selenium</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	0.30
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	0.29
<b>Silver</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
<b>Thallium</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
<b>Vanadium</b>														
Plant 1 Cake	mg/L	.37	.2	--	--	--	--	--	--	--	--	--	--	0.41
Plant 2 Cake	mg/L	.82	.2	--	--	--	--	--	--	--	--	--	--	1.0
<b>Zinc</b>														
Plant 1 Cake	mg/L	2.7	.4	--	--	--	--	--	--	--	--	--	--	4.6
Plant 2 Cake	mg/L	.23	.4	--	--	--	--	--	--	--	--	--	--	2.9
<b>Volatile Organic Compounds</b>														
<b>1,1,1,2-Tetrachloroethane</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>1,1,1-Trichloroethane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,1,2,2-Tetrachloroethane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,1,2-Trichloroethane</b>														

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Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016		
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,1-Dichloroethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,1-Dichloroethene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
1,1-Dichloropropene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,2,3-Trichlorobenzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
1,2,3-Trichloropropane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	280	--	--	ND	5400	ND	5900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	220	--	--	ND	4500	ND	4700	--	--	--	--
1,2,4-Trichlorobenzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
1,2,4-Trimethylbenzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,2-Dibromo-3-chloropropane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
1,2-Dibromoethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,2-Dichlorobenzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,2-Dichloroethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,2-Dichloropropane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,3,5-Trichlorobenzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	--	--	--	--	ND	2200	ND	2400	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	--	--	--	--	ND	1800	ND	1900	--	--	--	--
1,3,5-Trimethylbenzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,3-Dichlorobenzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,3-Dichloropropane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
1,4-Dichlorobenzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
2,2-Dichloropropane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	2200	ND	2400	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	1800	ND	1900	--	--	--	--
2-Chlorotoluene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
2-Hexanone														



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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,1-Dichloroethane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,1-Dichloroethene</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>1,1-Dichloropropene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,2,3-Trichlorobenzene</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>1,2,3-Trichloropropane</b>														
Plant 1 Cake	µg/kg dry	ND	300	--	--	--	--	ND	260	--	--	--	--	< 5900
Plant 2 Cake	µg/kg dry	ND	250	--	--	--	--	ND	220	--	--	--	--	< 4700
<b>1,2,4-Trichlorobenzene</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>1,2,4-Trimethylbenzene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	36	50	--	--	--	--	ND	44	--	--	--	--	36
<b>1,2-Dibromo-3-chloropropane</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>1,2-Dibromoethane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,2-Dichlorobenzene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,2-Dichloroethane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,2-Dichloropropane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,3,5-Trichlorobenzene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	<2400
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	<1900
<b>1,3,5-Trimethylbenzene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,3-Dichlorobenzene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,3-Dichloropropane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>1,4-Dichlorobenzene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>2,2-Dichloropropane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	<2400
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	<1900
<b>2-Chlorotoluene</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>2-Hexanone</b>														

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8260B	µg/kg dry	--	--	--	--	ND	14000	ND	15000	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	--	--	--	--	ND	11000	ND	12000	--	--	--	--
4-Chlorotoluene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
ACETONITRILE														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	1100	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	860	--	--	--	--	--	--	--	--	--	--
Acrolein														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	2800	--	--	ND	54000	ND	59000	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	2200	--	--	ND	45000	ND	47000	--	--	--	--
Acrylonitrile														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	2800	--	--	ND	54000	ND	59000	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	2200	--	--	ND	45000	ND	47000	--	--	--	--
Benzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
Bromobenzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
Bromochloromethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
Bromodichloromethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
Bromoform														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
Bromomethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
Carbon tetrachloride														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
Chlorobenzene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
Chloroethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
Chloroform														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
Chloromethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
cis-1,2-Dichloroethene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
cis-1,3-Dichloropropene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
Dibromochloromethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
Dibromomethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	µg/kg dry	ND	750	--	--	--	--	500	650	--	--	--	--	500
Plant 2 Cake	µg/kg dry	ND	630	--	--	--	--	ND	550	--	--	--	--	<12,000
<b>4-Chlorotoluene</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>ACETONITRILE</b>														
Plant 1 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	< 1100
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	< 860
<b>Acrolein</b>														
Plant 1 Cake	µg/kg dry	ND	3000	--	--	--	--	ND	2600	--	--	--	--	< 59,000
Plant 2 Cake	µg/kg dry	ND	2500	--	--	--	--	ND	2200	--	--	--	--	< 47,000
<b>Acrylonitrile</b>														
Plant 1 Cake	µg/kg dry	ND	3000	--	--	--	--	ND	2600	--	--	--	--	< 59,000
Plant 2 Cake	µg/kg dry	ND	2500	--	--	--	--	ND	2200	--	--	--	--	< 47,000
<b>Benzene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>Bromobenzene</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>Bromochloromethane</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>Bromodichloromethane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>Bromoform</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>Bromomethane</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>Carbon tetrachloride</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>Chlorobenzene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>Chloroethane</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
<b>Chloroform</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>Chloromethane</b>														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	60	130	--	--	--	--	60
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	200	110	--	--	--	--	200
<b>cis-1,2-Dichloroethene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>cis-1,3-Dichloropropene</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>Dibromochloromethane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
<b>Dibromomethane</b>														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940

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Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016		
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
<b>Dichlorodifluoromethane</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
<b>Ethylbenzene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
<b>Hexachlorobutadiene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
<b>Isobutyl alcohol</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	1400	--	--	ND	54000	ND	59000	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	1100	--	--	ND	45000	ND	47000	--	--	--	--
<b>Isopropylbenzene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
<b>m,p-Xylenes</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	86	--	--	ND	1800	ND	1900	--	--	--	--
<b>Methyl ethyl ketone</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	540	280	--	--	ND	11000	ND	12000	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	2400	220	--	--	ND	8900	ND	9400	--	--	--	--
<b>Methylene Chloride</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	570	--	--	ND	11000	ND	12000	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	430	--	--	ND	8900	ND	9400	--	--	--	--
<b>MIBK</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	5400	ND	5900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	4500	ND	4700	--	--	--	--
<b>Naphthalene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
<b>n-Butylbenzene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
<b>n-Propylbenzene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
<b>o-Xylene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
<b>sec-Butylbenzene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
<b>Styrene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
<b>tert-Butylbenzene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
<b>Tetrachloroethene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
<b>Toluene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	110	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	34	43	--	--	ND	890	ND	940	--	--	--	--
<b>trans-1,2-Dichloroethene</b>														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
<b>trans-1,3-Dichloropropene</b>														

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean	
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL		
<b>Dichlorodifluoromethane</b>															
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900	
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400	
<b>Ethylbenzene</b>															
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200	
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940	
<b>Hexachlorobutadiene</b>															
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900	
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400	
<b>Isobutyl alcohol</b>															
Plant 1 Cake	µg/kg dry	ND	1500	--	--	--	--	ND	1300	--	--	--	--	< 59,000	
Plant 2 Cake	µg/kg dry	ND	1300	--	--	--	--	ND	1100	--	--	--	--	< 47,000	
<b>Isopropylbenzene</b>															
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200	
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940	
<b>m,p-Xylenes</b>															
Plant 1 Cake	µg/kg dry	ND	120	--	--	--	--	ND	100	--	--	--	--	< 2400	
Plant 2 Cake	µg/kg dry	ND	100	--	--	--	--	ND	89	--	--	--	--	<1900	
<b>Methyl ethyl ketone</b>															
Plant 1 Cake	µg/kg dry	ND	300	--	--	--	--	4600	260	--	--	--	--	2,600	
Plant 2 Cake	µg/kg dry	930	250	--	--	--	--	ND	220	--	--	--	--	1,700	
<b>Methylene Chloride</b>															
Plant 1 Cake	µg/kg dry	ND	600	--	--	--	--	ND	530	--	--	--	--	<12,000	
Plant 2 Cake	µg/kg dry	ND	500	--	--	--	--	ND	440	--	--	--	--	<9400	
<b>MIBK</b>															
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 5900	
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 4700	
<b>Naphthalene</b>															
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900	
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400	
<b>n-Butylbenzene</b>															
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900	
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400	
<b>n-Propylbenzene</b>															
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200	
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940	
<b>o-Xylene</b>															
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200	
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940	
<b>sec-Butylbenzene</b>															
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900	
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400	
<b>Styrene</b>															
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200	
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940	
<b>tert-Butylbenzene</b>															
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900	
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400	
<b>Tetrachloroethene</b>															
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200	
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940	
<b>Toluene</b>															
Plant 1 Cake	µg/kg dry	43	60	--	--	--	--	32	52	--	--	--	--	62	
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	34	
<b>trans-1,2-Dichloroethene</b>															
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200	
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940	
<b>trans-1,3-Dichloropropene</b>															

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
Trichloroethene														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	57	--	--	ND	1100	ND	1200	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	43	--	--	ND	890	ND	940	--	--	--	--
Trichlorofluoromethane														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--
Vinyl chloride														
Plant 1 Cake	EPA 8260B	µg/kg dry	ND	140	--	--	ND	2700	ND	2900	--	--	--	--
Plant 2 Cake	EPA 8260B	µg/kg dry	ND	110	--	--	ND	2200	ND	2400	--	--	--	--

TCLP - Volatile Organic Compounds

1,1,1,2-Tetrachloroethane

Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--

1,1,1-Trichloroethane

Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--

1,1,2,2-Tetrachloroethane

Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--

1,1,2-Trichloroethane

Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--

1,1-Dichloroethane

Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--

1,1-Dichloroethene

Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--

1,1-Dichloropropene

Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--

1,2,3-Trichlorobenzene

Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--

1,2,3-Trichloropropane

Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--

1,2,4-Trichlorobenzene

Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--

1,2,4-Trimethylbenzene

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
Trichloroethene														
Plant 1 Cake	µg/kg dry	ND	60	--	--	--	--	ND	52	--	--	--	--	< 1200
Plant 2 Cake	µg/kg dry	ND	50	--	--	--	--	ND	44	--	--	--	--	< 940
Trichlorofluoromethane														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400
Vinyl chloride														
Plant 1 Cake	µg/kg dry	ND	150	--	--	--	--	ND	130	--	--	--	--	< 2900
Plant 2 Cake	µg/kg dry	ND	130	--	--	--	--	ND	110	--	--	--	--	< 2400

TCLP - Volatile Organic Compounds

1,1,1,2-Tetrachloroethane

Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050

1,1,1-Trichloroethane

Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020

1,1,2,2-Tetrachloroethane

Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020

1,1,2-Trichloroethane

Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020

1,1-Dichloroethane

Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020

1,1-Dichloroethene

Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050

1,1-Dichloropropene

Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020

1,2,3-Trichlorobenzene

Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050

1,2,3-Trichloropropane

Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10

1,2,4-Trichlorobenzene

Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050

1,2,4-Trimethylbenzene

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
1,3,5-Trichlorobenzene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene														



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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>1,2-Dibromo-3-chloropropane</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>1,2-Dibromoethane</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>1,2-Dichlorobenzene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>1,2-Dichloroethane</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>1,2-Dichloropropane</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>1,3,5-Trichlorobenzene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>1,3,5-Trimethylbenzene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>1,3-Dichlorobenzene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>1,3-Dichloropropane</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>1,4-Dichlorobenzene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>2,2-Dichloropropane</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>2-Chlorotoluene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>4-Chlorotoluene</b>														

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Acetone</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	.92	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	1.3	.1	--	--	--	--	--	--	--	--	--	--
<b>Acrolein</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>Acrylonitrile</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>Benzene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
<b>Bromobenzene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Bromochloromethane</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Bromodichloromethane</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
<b>Bromoform</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Bromomethane</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Carbon tetrachloride</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Chlorobenzene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
<b>Chloroethane</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Chloroform</b>														

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Acetone</b>														
Plant 1 Cake	mg/L	.3	.1	--	--	--	--	--	--	--	--	--	--	0.61
Plant 2 Cake	mg/L	.39	.1	--	--	--	--	--	--	--	--	--	--	0.85
<b>Acrolein</b>														
Plant 1 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Acrylonitrile</b>														
Plant 1 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Benzene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>Bromobenzene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Bromochloromethane</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Bromodichloromethane</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>Bromoform</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Bromomethane</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Carbon tetrachloride</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Chlorobenzene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>Chloroethane</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Chloroform</b>														

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Chloromethane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Dibromomethane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Ethylbenzene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Isobutyl alcohol														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
m,p-Xylenes														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Methyl ethyl ketone														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	.05	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	.078	.1	--	--	--	--	--	--	--	--	--	--
Methylene Chloride														

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Chloromethane														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
cis-1,2-Dichloroethene														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
cis-1,3-Dichloropropene														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Dibromochloromethane														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Dibromomethane														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Dichlorodifluoromethane														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Ethylbenzene														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Hexachlorobutadiene														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Isobutyl alcohol														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
Isopropylbenzene														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
m,p-Xylenes														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Methyl ethyl ketone														
Plant 1 Cake	mg/L	.047	.1	--	--	--	--	--	--	--	--	--	--	0.049
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	0.078
Methylene Chloride														

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	.019	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	.015	.05	--	--	--	--	--	--	--	--	--	--
<b>MIBK</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>Naphthalene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>n-Butylbenzene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>n-Propylbenzene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
<b>o-Xylene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
<b>sec-Butylbenzene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Styrene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
<b>tert-Butylbenzene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Tetrachloroethene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
<b>Toluene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
<b>trans-1,2-Dichloroethene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
<b>trans-1,3-Dichloropropene</b>														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
<b>Trichloroethene</b>														

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		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	mg/L	.012	.05	--	--	--	--	--	--	--	--	--	--	<b>0.016</b>
Plant 2 Cake	mg/L	.012	.05	--	--	--	--	--	--	--	--	--	--	<b>0.014</b>
<b>MIBK</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.10</b>
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.10</b>
<b>Naphthalene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.050</b>
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.050</b>
<b>n-Butylbenzene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.050</b>
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.050</b>
<b>n-Propylbenzene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
<b>o-Xylene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
<b>sec-Butylbenzene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.050</b>
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.050</b>
<b>Styrene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
<b>tert-Butylbenzene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.050</b>
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.050</b>
<b>Tetrachloroethene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
<b>Toluene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
<b>trans-1,2-Dichloroethene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
<b>trans-1,3-Dichloropropene</b>														
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<b>&lt;0.020</b>
<b>Trichloroethene</b>														

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Vinyl chloride														
Plant 1 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8260B-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--

Semi-volatile Organic Compounds

1,2,4-Trichlorobenzene

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

1,2-Dichlorobenzene

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

1,3-Dichlorobenzene

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

1,4-Dichlorobenzene

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

2,4,5-Trichlorophenol

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

2,4,6-Trichlorophenol

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

2,4-Dichlorophenol

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

2,4-Dimethylphenol

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

2,4-Dinitrophenol

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	86000	--	--	--	--	ND	98000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	140000	--	--	--	--	ND	35000	--	--	--	--

2,4-Dinitrotoluene

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

2,6-Dinitrotoluene

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

2-Chloronaphthalene

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

2-Chlorophenol

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

2-Methylnaphthalene

Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--

2-Methylphenol



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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
Plant 2 Cake	mg/L	ND	.02	--	--	--	--	--	--	--	--	--	--	<0.020
<b>Trichlorofluoromethane</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Vinyl chloride</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050

**Semi-volatile Organic Compounds**

**1,2,4-Trichlorobenzene**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**1,2-Dichlorobenzene**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**1,3-Dichlorobenzene**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**1,4-Dichlorobenzene**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**2,4,5-Trichlorophenol**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**2,4,6-Trichlorophenol**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**2,4-Dichlorophenol**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**2,4-Dimethylphenol**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**2,4-Dinitrophenol**

Plant 1 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	26000	--	--	--	--	< 98,000
Plant 2 Cake	µg/kg dry	ND	82000	--	--	--	--	ND	22000	--	--	--	--	<140,000

**2,4-Dinitrotoluene**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**2,6-Dinitrotoluene**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**2-Chloronaphthalene**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**2-Chlorophenol**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**2-Methylnaphthalene**

Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000

**2-Methylphenol**

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>2-Nitroaniline</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>2-Nitrophenol</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>3,3-Dichlorobenzidine</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	110000	--	--	--	--	ND	120000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	180000	--	--	--	--	ND	44000	--	--	--	--
<b>3-Nitroaniline</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>4,6-Dinitro-2-methylphenol</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	55000	--	--	--	--	ND	62000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	92000	--	--	--	--	ND	22000	--	--	--	--
<b>4-Bromophenyl phenyl ether</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>4-Chloro-3-methylphenol</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>4-Chloroaniline</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>4-Chlorophenyl phenyl ether</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>4-Methylphenol</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	57000	18000	--	--	--	--
<b>4-Nitroaniline</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	110000	--	--	--	--	ND	120000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	180000	--	--	--	--	ND	44000	--	--	--	--
<b>4-Nitrophenol</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	110000	--	--	--	--	ND	120000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	180000	--	--	--	--	ND	44000	--	--	--	--
<b>Acenaphthene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Acenaphthylene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Aniline</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	55000	--	--	--	--	ND	62000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	92000	--	--	--	--	ND	22000	--	--	--	--
<b>Anthracene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Azobenzene/1,2-Diphenylhydrazine</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Benz(a)anthracene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Benzidine</b>														

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		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>2-Nitroaniline</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>2-Nitrophenol</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>3,3-Dichlorobenzidine</b>														
Plant 1 Cake	µg/kg dry	ND	51000	--	--	--	--	ND	33000	--	--	--	--	<120,000
Plant 2 Cake	µg/kg dry	ND	100000	--	--	--	--	ND	28000	--	--	--	--	<180,000
<b>3-Nitroaniline</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>4,6-Dinitro-2-methylphenol</b>														
Plant 1 Cake	µg/kg dry	ND	26000	--	--	--	--	ND	17000	--	--	--	--	< 62000
Plant 2 Cake	µg/kg dry	ND	52000	--	--	--	--	ND	14000	--	--	--	--	< 92000
<b>4-Bromophenyl phenyl ether</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>4-Chloro-3-methylphenol</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>4-Chloroaniline</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>4-Chlorophenyl phenyl ether</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>4-Methylphenol</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>4-Nitroaniline</b>														
Plant 1 Cake	µg/kg dry	ND	51000	--	--	--	--	ND	33000	--	--	--	--	<120,000
Plant 2 Cake	µg/kg dry	ND	100000	--	--	--	--	ND	28000	--	--	--	--	<180,000
<b>4-Nitrophenol</b>														
Plant 1 Cake	µg/kg dry	ND	51000	--	--	--	--	ND	33000	--	--	--	--	<120,000
Plant 2 Cake	µg/kg dry	ND	100000	--	--	--	--	ND	28000	--	--	--	--	<180,000
<b>Acenaphthene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Acenaphthylene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Aniline</b>														
Plant 1 Cake	µg/kg dry	ND	26000	--	--	--	--	ND	17000	--	--	--	--	< 62000
Plant 2 Cake	µg/kg dry	ND	52000	--	--	--	--	ND	14000	--	--	--	--	< 92000
<b>Anthracene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Azobenzene/1,2-Diphenylhydrazine</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Benz(a)anthracene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Benzidine</b>														

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	180000	--	--	--	--	ND	200000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	290000	--	--	--	--	ND	71000	--	--	--	--
Benzo(a)pyrene														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Benzo(b)fluoranthene														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Benzo(g,h,i)perylene														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Benzo(k)fluoranthene														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Benzoic acid														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	110000	--	--	--	--	ND	120000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	180000	--	--	--	--	ND	44000	--	--	--	--
Benzyl alcohol														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Bis(2-chloroethoxy)methane														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Bis(2-chloroethyl)ether														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Bis(2-chloroisopropyl)ether														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Bis(2-ethylhexyl)phthalate														
Plant 1 Cake	EPA 8270C	µg/kg dry	38000	43000	--	--	--	--	62000	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	42000	72000	--	--	--	--	24000	18000	--	--	--	--
Butyl benzyl phthalate														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Chrysene														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Dibenz(a,h)anthracene														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	55000	--	--	--	--	ND	62000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	92000	--	--	--	--	ND	22000	--	--	--	--
Dibenzofuran														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Diethyl phthalate														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Dimethyl phthalate														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Di-n-butyl phthalate														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Di-n-octyl phthalate														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
Fluoranthene														

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	µg/kg dry	ND	83000	--	--	--	--	ND	53000	--	--	--	--	<200,000
Plant 2 Cake	µg/kg dry	ND	170000	--	--	--	--	ND	45000	--	--	--	--	<290,000
Benzo(a)pyrene														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Benzo(b)fluoranthene														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Benzo(g,h,i)perylene														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Benzo(k)fluoranthene														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Benzoic acid														
Plant 1 Cake	µg/kg dry	ND	51000	--	--	--	--	ND	33000	--	--	--	--	<120,000
Plant 2 Cake	µg/kg dry	ND	100000	--	--	--	--	ND	28000	--	--	--	--	<180,000
Benzyl alcohol														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Bis(2-chloroethoxy)n														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Bis(2-chloroethyl)ether														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Bis(2-chloroisopropyl)ether														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Bis(2-ethylhexyl)phthalate														
Plant 1 Cake	µg/kg dry	40000	20000	--	--	--	--	16000	13000	--	--	--	--	39,000
Plant 2 Cake	µg/kg dry	46000	41000	--	--	--	--	18000	11000	--	--	--	--	33,000
Butyl benzyl phthalate														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Chrysene														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Dibenz(a,h)anthracene														
Plant 1 Cake	µg/kg dry	ND	26000	--	--	--	--	ND	17000	--	--	--	--	< 62000
Plant 2 Cake	µg/kg dry	ND	52000	--	--	--	--	ND	14000	--	--	--	--	< 92000
Dibenzofuran														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Diethyl phthalate														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Dimethyl phthalate														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Di-n-butyl phthalate														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Di-n-octyl phthalate														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
Fluoranthene														

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Fluorene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Hexachlorobenzene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Hexachlorobutadiene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Hexachlorocyclopentadiene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	110000	--	--	--	--	ND	120000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	180000	--	--	--	--	ND	44000	--	--	--	--
<b>Hexachloroethane</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Indeno(1,2,3-cd)pyrene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Isophorone</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Keopne</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	ND	590000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	ND	210000	--	--	--	--
<b>Naphthalene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Nitrobenzene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>N-Nitrosodimethylamine</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>N-Nitroso-di-n-propylamine</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	33000	--	--	--	--	ND	37000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	55000	--	--	--	--	ND	13000	--	--	--	--
<b>N-Nitrosodiphenylamine</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Pentachlorophenol</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	110000	--	--	--	--	ND	120000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	180000	--	--	--	--	ND	44000	--	--	--	--
<b>Phenanthrene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Phenol</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Pyrene</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	43000	--	--	--	--	ND	49000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	72000	--	--	--	--	ND	18000	--	--	--	--
<b>Pyridine</b>														
Plant 1 Cake	EPA 8270C	µg/kg dry	ND	44000	--	--	--	--	ND	50000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	ND	74000	--	--	--	--	ND	18000	--	--	--	--

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Fluorene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Hexachlorobenzene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Hexachlorobutadiene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Hexachlorocyclopentadiene</b>														
Plant 1 Cake	µg/kg dry	ND	51000	--	--	--	--	ND	33000	--	--	--	--	<120,000
Plant 2 Cake	µg/kg dry	ND	100000	--	--	--	--	ND	28000	--	--	--	--	<180,000
<b>Hexachloroethane</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Indeno(1,2,3-cd)pyrene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Isophorone</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Kepone</b>														
Plant 1 Cake	µg/kg dry	ND	250000	--	--	--	--	ND	16000	--	--	--	--	< 590,000
Plant 2 Cake	µg/kg dry	ND	500000	--	--	--	--	ND	14000	--	--	--	--	< 500,000
<b>Naphthalene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Nitrobenzene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>N-Nitrosodimethylamine</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>N-Nitroso-di-n-propylamine</b>														
Plant 1 Cake	µg/kg dry	ND	15000	--	--	--	--	ND	9900	--	--	--	--	<37,000
Plant 2 Cake	µg/kg dry	ND	31000	--	--	--	--	ND	8400	--	--	--	--	<55,000
<b>N-Nitrosodiphenylamine</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Pentachlorophenol</b>														
Plant 1 Cake	µg/kg dry	ND	51000	--	--	--	--	ND	33000	--	--	--	--	<120,000
Plant 2 Cake	µg/kg dry	ND	100000	--	--	--	--	ND	28000	--	--	--	--	<180,000
<b>Phenanthrene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Phenol</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Pyrene</b>														
Plant 1 Cake	µg/kg dry	ND	20000	--	--	--	--	ND	13000	--	--	--	--	< 49,000
Plant 2 Cake	µg/kg dry	ND	41000	--	--	--	--	ND	11000	--	--	--	--	< 72,000
<b>Pyridine</b>														
Plant 1 Cake	µg/kg dry	ND	21000	--	--	--	--	ND	13000	--	--	--	--	< 50,000
Plant 2 Cake	µg/kg dry	ND	42000	--	--	--	--	ND	11000	--	--	--	--	< 74,000

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Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
<b>TCLP - Semi-volatile Organic Compounds</b>													
<b>1,2,4-Trichlorobenzene</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
<b>1,2-Dichlorobenzene</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
<b>1,3-Dichlorobenzene</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
<b>1,4-Dichlorobenzene</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
<b>2,4,5-Trichlorophenc</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
<b>2,4,6-Trichlorophenol</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
<b>2,4-Dichlorophenol</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
<b>2,4-Dimethylphenol</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--
<b>2,4-Dinitrophenol</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--
<b>2,4-Dinitrotoluene</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
<b>2,6-Dinitrotoluene</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
<b>2-Chloronaphthalene</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--
<b>2-Chlorophenol</b>													
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--



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Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean	
	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL		
<b>TCLP - Semi-volatile Organic Compounds</b>														
<b>1,2,4-Trichlorobenzene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>1,2-Dichlorobenzene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>1,3-Dichlorobenzene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>1,4-Dichlorobenzene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2,4,5-Trichlorophenol</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>2,4,6-Trichlorophenol</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>2,4-Dichlorophenol</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2,4-Dimethylphenol</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>2,4-Dinitrophenol</b>														
Plant 1 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>2,4-Dinitrotoluene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2,6-Dinitrotoluene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2-Chloronaphthalene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2-Chlorophenol</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>2-Methylnaphthalene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>2-Methylphenol</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>2-Nitroaniline</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>2-Nitrophenol</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>3,3-Dichlorobenzidine</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
<b>3-Nitroaniline</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>4,6-Dinitro-2-methylphenol</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
<b>4-Bromophenyl phenyl ether</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>4-Chloro-3-methylphenol</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>4-Chloroaniline</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>4-Chlorophenyl phenyl ether</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>4-Methylphenol</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	.051	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>4-Nitroaniline</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2-Methylnaphthalene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2-Methylphenol</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2-Nitroaniline</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>2-Nitrophenol</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>3,3-Dichlorobenzidin</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
<b>3-Nitroaniline</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>4,6-Dinitro-2-methylphenol</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
<b>4-Bromophenyl phenyl ether</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>4-Chloro-3-methylphenol</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>4-Chloroaniline</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>4-Chlorophenyl phenyl ether</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>4-Methylphenol</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	0.051
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>4-Nitroaniline</b>														
Plant 1 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>4-Nitrophenol</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>Acenaphthene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Acenaphthylene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Aniline</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Anthracene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Azobenzene/1,2-Diphenylhydrazine</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>Benz(a)anthracene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Benzidine</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>Benzo(a)pyrene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Benzo(b)fluoranthene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Benzo(g,h,i)perylene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Benzo(k)fluoranthene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Benzoic acid</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--

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Appendix C - Summary of Priority Pollutants and Trace Constituents for Biosolids

	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>4-Nitrophenol</b>														
Plant 1 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Acenaphthene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Acenaphthylene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Aniline</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Anthracene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Azobenzene/1,2-Diphenylhydrazine</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>Benz(a)anthracene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Benzidine</b>														
Plant 1 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Benzo(a)pyrene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Benzo(b)fluoranthene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Benzo(g,h,i)perylene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Benzo(k)fluoranthene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Benzoic acid</b>														
Plant 1 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Bis(2-chloroethoxy)methane														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Bis(2-chloroethyl)ether														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Bis(2-chloroisopropyl)ether														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.25	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.25	--	--	--	--	--	--	--	--	--	--
Butyl benzyl phthalate														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Chrysene														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Dibenzofuran														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Benzyl alcohol														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Bis(2-chloroethoxy)methane														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Bis(2-chloroethyl)ether														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Bis(2-chloroisopropyl)ether														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Bis(2-ethylhexyl)phthalate														
Plant 1 Cake	mg/L	ND	.25	--	--	--	--	--	--	--	--	--	--	<0.25
Plant 2 Cake	mg/L	ND	.25	--	--	--	--	--	--	--	--	--	--	<0.25
Butyl benzyl phthalate														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Chrysene														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Dibenz(a,h)anthracene														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Dibenzofuran														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Diethyl phthalate														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Dimethyl phthalate														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Di-n-butyl phthalate														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Di-n-octyl phthalate														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
<b>Fluoranthene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Fluorene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Hexachlorobenzene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Hexachlorobutadiene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Hexachlorocyclopentadiene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
<b>Hexachloroethane</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Indeno(1,2,3-cd)pyrene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>Isophorone</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Kepon</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>Naphthalene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Nitrobenzene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
<b>N-Nitrosodimethylamine</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>N-Nitroso-di-n-propylamine</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--



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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
<b>Fluoranthene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Fluorene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Hexachlorobenzene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Hexachlorobutadiene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Hexachlorocyclopentadiene</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
<b>Hexachloroethane</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Indeno(1,2,3-cd)pyrene</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>Isophorone</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Kepone</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>Naphthalene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Nitrobenzene</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
<b>N-Nitrosodimethylamine</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>N-Nitroso-di-n-propylamine</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>N-Nitrosodiphenylamine</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Pentachlorophenol</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--
<b>Phenanthrene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Phenol</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Pyrene</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Pyridine</b>														
Plant 1 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>Organochlorine Pesticides</b>														
<b>Aldrin</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>alpha-BHC</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>beta-BHC</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Chlordane</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	1.3	--	--	--	--	ND	1500	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	20	--	--	--	--	ND	900	--	--	--	--
<b>delta-BHC</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.27	--	--	--	--	ND	300	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	4	--	--	--	--	ND	180	--	--	--	--
<b>Dieldrin</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Endosulfan 1</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Endosulfan 2</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Endosulfan Sulfate</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.27	--	--	--	--	ND	300	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	4	--	--	--	--	ND	180	--	--	--	--

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Appendix C - Summary of Priority Pollutants and Trace Constituents for Biosolids

	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>N-Nitrosodiphenylamine</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Pentachlorophenol</b>														
Plant 1 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
Plant 2 Cake	mg/L	ND	.2	--	--	--	--	--	--	--	--	--	--	<0.20
<b>Phenanthrene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Phenol</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Pyrene</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Pyridine</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Organochlorine Pesticides</b>														
<b>Aldrin</b>														
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260
<b>alpha-BHC</b>														
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260
<b>beta-BHC</b>														
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260
<b>Chlordane</b>														
Plant 1 Cake	mg/kg dry	ND	3900	--	--	--	--	ND	400	--	--	--	--	<3900
Plant 2 Cake	mg/kg dry	ND	2600	--	--	--	--	ND	340	--	--	--	--	<2600
<b>delta-BHC</b>														
Plant 1 Cake	mg/kg dry	ND	780	--	--	--	--	ND	80	--	--	--	--	<780
Plant 2 Cake	mg/kg dry	ND	530	--	--	--	--	ND	68	--	--	--	--	<530
<b>Dieldrin</b>														
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260
<b>Endosulfan 1</b>														
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260
<b>Endosulfan 2</b>														
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260
<b>Endosulfan Sulfate</b>														
Plant 1 Cake	mg/kg dry	ND	780	--	--	--	--	ND	80	--	--	--	--	<780
Plant 2 Cake	mg/kg dry	ND	530	--	--	--	--	ND	68	--	--	--	--	<530

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Appendix C - Summary of Priority Pollutants and Trace Constituents for Biosolids

Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016		
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
<b>Endrin</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Endrin Aldehyde</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Endrin Ketone</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>gamma-BHC</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Heptachlor</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Heptachlor Epoxide</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Methoxychlor</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Mirex</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.27	--	--	--	--	ND	300	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	4	--	--	--	--	ND	180	--	--	--	--
<b>o,p'-DDD</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>o,p'-DDE</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>o,p'-DDT</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>p,p'-DDD</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>p,p'-DDE</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>p,p'-DDT</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	.13	--	--	--	--	ND	150	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	2	--	--	--	--	ND	90	--	--	--	--
<b>Total DDTs</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	--	--	--	--	--	ND	--	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	--	--	--	--	--	ND	--	--	--	--	--
<b>Toxaphene</b>														
Plant 1 Cake	EPA 8081	mg/kg dry	ND	5.3	--	--	--	--	ND	6100	--	--	--	--
Plant 2 Cake	EPA 8081	mg/kg dry	ND	80	--	--	--	--	ND	3600	--	--	--	--
<b>TCLP - Organochlorine Pesticides</b>														
<b>Aldrin</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
<b>alpha-BHC</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--

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Appendix C - Summary of Priority Pollutants and Trace Constituents for Biosolids

	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean	
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL		
<b>Endrin</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>Endrin Aldehyde</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>Endrin Ketone</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>gamma-BHC</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>Heptachlor</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>Heptachlor Epoxide</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>Methoxychlor</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>Mirex</b>															
Plant 1 Cake	mg/kg dry	ND	780	--	--	--	--	ND	80	--	--	--	--	<780	
Plant 2 Cake	mg/kg dry	ND	530	--	--	--	--	ND	68	--	--	--	--	<530	
<b>o,p'-DDD</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>o,p'-DDE</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>o,p'-DDT</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>p,p'-DDD</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>p,p'-DDE</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>p,p'-DDT</b>															
Plant 1 Cake	mg/kg dry	ND	390	--	--	--	--	ND	40	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	260	--	--	--	--	ND	34	--	--	--	--	<260	
<b>Total DDTs</b>															
Plant 1 Cake	mg/kg dry	ND	--	--	--	--	--	ND	--	--	--	--	--	<390	
Plant 2 Cake	mg/kg dry	ND	--	--	--	--	--	ND	--	--	--	--	--	<260	
<b>Toxaphene</b>															
Plant 1 Cake	mg/kg dry	ND	16000	--	--	--	--	ND	1600	--	--	--	--	<16,000	
Plant 2 Cake	mg/kg dry	ND	11000	--	--	--	--	ND	1400	--	--	--	--	<11,000	
<b>TCLP - Organochlorine Pesticides</b>															
<b>Aldrin</b>															
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050	
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050	
<b>alpha-BHC</b>															
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050	

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
beta-BHC														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Chlordane														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.005	--	--	--	--	--	--	--	--	--	--
delta-BHC														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--
Dieldrin														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Endosulfan 1														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Endosulfan 2														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Endosulfan Sulfate														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--
Endrin														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Endrin Aldehyde														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Endrin Ketone														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
gamma-BHC														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Heptachlor														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Heptachlor + Epoxid														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	--	--	--	--	--	--	--	--	--	--	--

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Appendix C - Summary of Priority Pollutants and Trace Constituents for Biosolids

	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>beta-BHC</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Chlordane</b>														
Plant 1 Cake	mg/L	ND	.005	--	--	--	--	--	--	--	--	--	--	<0.0050
Plant 2 Cake	mg/L	ND	.005	--	--	--	--	--	--	--	--	--	--	<0.0050
<b>delta-BHC</b>														
Plant 1 Cake	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--	<0.0010
Plant 2 Cake	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--	<0.0010
<b>Dieldrin</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Endosulfan 1</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Endosulfan 2</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Endosulfan Sulfate</b>														
Plant 1 Cake	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--	<0.0010
Plant 2 Cake	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--	<0.0010
<b>Endrin</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Endrin Aldehyde</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Endrin Ketone</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>gamma-BHC</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Heptachlor</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Heptachlor + Epoxide</b>														
Plant 1 Cake	mg/L	ND	--	--	--	--	--	--	--	--	--	--	--	<0.00050

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	--	--	--	--	--	--	--	--	--	--	--
<b>Heptachlor Epoxide</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
<b>Methoxychlor</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
<b>Mirex</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--
<b>o,p'-DDD</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
<b>o,p'-DDE</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
<b>o,p'-DDT</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
<b>p,p'-DDD</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
<b>p,p'-DDE</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
<b>p,p'-DDT</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--
<b>Toxaphene</b>														
Plant 1 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-TCLP(1311)	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--

**STLC - Organochlorine Pesticides**

**Aldrin**

Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--

**alpha-BHC**

Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--

**beta-BHC**



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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/L	ND	--	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Heptachlor Epoxide</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Methoxychlor</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Mirex</b>														
Plant 1 Cake	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--	<0.0010
Plant 2 Cake	mg/L	ND	.001	--	--	--	--	--	--	--	--	--	--	<0.0010
<b>o,p'-DDD</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>o,p'-DDE</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>o,p'-DDT</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>p,p'-DDD</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>p,p'-DDE</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>p,p'-DDT</b>														
Plant 1 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
Plant 2 Cake	mg/L	ND	.0005	--	--	--	--	--	--	--	--	--	--	<0.00050
<b>Toxaphene</b>														
Plant 1 Cake	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--	<0.025
Plant 2 Cake	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--	<0.025
<b>STLC - Organochlorine Pesticides</b>														
<b>Aldrin</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>alpha-BHC</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>beta-BHC</b>														

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Chlordane														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	5	--	--	--	--	--	--	--	--	--	--
delta-BHC														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--
Dieldrin														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Endosulfan 1														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Endosulfan 2														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Endosulfan Sulfate														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--
Endrin														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Endrin Aldehyde														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Endrin Ketone														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
gamma-BHC														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Heptachlor														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Heptachlor Epoxide														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Methoxychlor														

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Chlordane</b>														
Plant 1 Cake	µg/L	ND	5	--	--	--	--	--	--	--	--	--	--	<5.0
Plant 2 Cake	µg/L	ND	5	--	--	--	--	--	--	--	--	--	--	<5.0
<b>delta-BHC</b>														
Plant 1 Cake	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--	<1.0
Plant 2 Cake	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--	<1.0
<b>Dieldrin</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Endosulfan 1</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Endosulfan 2</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Endosulfan Sulfate</b>														
Plant 1 Cake	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--	<1.0
Plant 2 Cake	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--	<1.0
<b>Endrin</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Endrin Aldehyde</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Endrin Ketone</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>gamma-BHC</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Heptachlor</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Heptachlor Epoxide</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Methoxychlor</b>														

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>Mirex</b>														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--
<b>o,p'-DDD</b>														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>o,p'-DDE</b>														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>o,p'-DDT</b>														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>p,p'-DDD</b>														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>p,p'-DDE</b>														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>p,p'-DDT</b>														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>Total DDTs</b>														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	--	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	--	--	--	--	--	--	--	--	--	--	--
<b>Toxaphene</b>														
Plant 1 Cake	EPA 8081-STLC	µg/L	ND	25	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8081-STLC	µg/L	ND	25	--	--	--	--	--	--	--	--	--	--
<b>PCBs</b>														
<b>PCB 1016</b>														
Plant 1 Cake	EPA 8082	µg/kg dry	ND	1300	--	--	--	--	ND	1500	--	--	--	--
Plant 2 Cake	EPA 8082	µg/kg dry	ND	1000	--	--	--	--	ND	900	--	--	--	--
<b>PCB 1221</b>														
Plant 1 Cake	EPA 8082	µg/kg dry	ND	1300	--	--	--	--	ND	1500	--	--	--	--
Plant 2 Cake	EPA 8082	µg/kg dry	ND	1000	--	--	--	--	ND	900	--	--	--	--
<b>PCB 1232</b>														
Plant 1 Cake	EPA 8082	µg/kg dry	ND	1300	--	--	--	--	ND	1500	--	--	--	--
Plant 2 Cake	EPA 8082	µg/kg dry	ND	1000	--	--	--	--	ND	900	--	--	--	--
<b>PCB 1242</b>														
Plant 1 Cake	EPA 8082	µg/kg dry	ND	1300	--	--	--	--	ND	1500	--	--	--	--
Plant 2 Cake	EPA 8082	µg/kg dry	ND	1000	--	--	--	--	ND	900	--	--	--	--
<b>PCB 1248</b>														

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		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Mirex</b>														
Plant 1 Cake	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--	<1.0
Plant 2 Cake	µg/L	ND	1	--	--	--	--	--	--	--	--	--	--	<1.0
<b>o,p'-DDD</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>o,p'-DDE</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>o,p'-DDT</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>p,p'-DDD</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>p,p'-DDE</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>p,p'-DDT</b>														
Plant 1 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Total DDTs</b>														
Plant 1 Cake	µg/L	ND	--	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	µg/L	ND	--	--	--	--	--	--	--	--	--	--	--	<0.50
<b>Toxaphene</b>														
Plant 1 Cake	µg/L	ND	25	--	--	--	--	--	--	--	--	--	--	< 25
Plant 2 Cake	µg/L	ND	25	--	--	--	--	--	--	--	--	--	--	< 25

**PCBs**

**PCB 1016**

Plant 1 Cake	µg/kg dry	ND	3300	--	--	--	--	ND	390	--	--	--	--	<3300
Plant 2 Cake	µg/kg dry	ND	3700	--	--	--	--	ND	340	--	--	--	--	<3700

**PCB 1221**

Plant 1 Cake	µg/kg dry	ND	3300	--	--	--	--	ND	390	--	--	--	--	<3300
Plant 2 Cake	µg/kg dry	ND	3700	--	--	--	--	ND	340	--	--	--	--	<3700

**PCB 1232**

Plant 1 Cake	µg/kg dry	ND	3300	--	--	--	--	ND	390	--	--	--	--	<3300
Plant 2 Cake	µg/kg dry	ND	3700	--	--	--	--	ND	340	--	--	--	--	<3700

**PCB 1242**

Plant 1 Cake	µg/kg dry	ND	3300	--	--	--	--	ND	390	--	--	--	--	<3300
Plant 2 Cake	µg/kg dry	ND	3700	--	--	--	--	ND	340	--	--	--	--	<3700

**PCB 1248**

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Appendix C - Summary of Priority Pollutants and Trace Constituents for Biosolids

Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016		
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	EPA 8082	µg/kg dry	ND	1300	--	--	--	--	ND	1500	--	--	--	--
Plant 2 Cake	EPA 8082	µg/kg dry	ND	1000	--	--	--	--	ND	900	--	--	--	--
<b>PCB 1254</b>														
Plant 1 Cake	EPA 8082	µg/kg dry	ND	1300	--	--	--	--	ND	1500	--	--	--	--
Plant 2 Cake	EPA 8082	µg/kg dry	ND	1000	--	--	--	--	ND	900	--	--	--	--
<b>PCB 1260</b>														
Plant 1 Cake	EPA 8082	µg/kg dry	ND	1300	--	--	--	--	ND	1500	--	--	--	--
Plant 2 Cake	EPA 8082	µg/kg dry	ND	1000	--	--	--	--	ND	900	--	--	--	--
<b>PCB_HR_DM</b>														
Plant 1 Cake	EPA 8082	µg/kg dry	ND	1300	--	--	--	--	ND	1500	--	--	--	--
Plant 2 Cake	EPA 8082	µg/kg dry	ND	1000	--	--	--	--	ND	900	--	--	--	--
<b>Total PCBs</b>														
Plant 1 Cake	EPA 8082	µg/kg dry	ND	--	--	--	--	--	ND	--	--	--	--	--
Plant 2 Cake	EPA 8082	µg/kg dry	ND	--	--	--	--	--	ND	--	--	--	--	--
<b>Herbicides</b>														
<b>2,4,5-T</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	240	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	180	--	--	--	--	--	--	--	--	--	--
<b>2,4,5-TP (Silvex)</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	240	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	180	--	--	--	--	--	--	--	--	--	--
<b>2,4-D</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	240	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	180	--	--	--	--	--	--	--	--	--	--
<b>2,4-DB</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	240	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	180	--	--	--	--	--	--	--	--	--	--
<b>4-Nitrophenol</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	940	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	730	--	--	--	--	--	--	--	--	--	--
<b>Dalapon</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	770	2900	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	2200	--	--	--	--	--	--	--	--	--	--
<b>Dicamba</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	240	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	180	--	--	--	--	--	--	--	--	--	--
<b>Dichlorprop (2,4-DP)</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	240	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	180	--	--	--	--	--	--	--	--	--	--
<b>Dinoseb (DNBP)</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	1400	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	1100	--	--	--	--	--	--	--	--	--	--
<b>MCPA</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	57000	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	16000	44000	--	--	--	--	--	--	--	--	--	--
<b>MCPP</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	8400	57000	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	44000	--	--	--	--	--	--	--	--	--	--
<b>Pentachlorophenol</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	240	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	180	--	--	--	--	--	--	--	--	--	--
<b>Picloram</b>														
Plant 1 Cake	EPA 8151	µg/kg dry	ND	240	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151	µg/kg dry	ND	180	--	--	--	--	--	--	--	--	--	--
<b>TCLP - Herbicides</b>														
<b>2,4,5-T</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 1 Cake	µg/kg dry	ND	3300	--	--	--	--	ND	390	--	--	--	--	<3300
Plant 2 Cake	µg/kg dry	ND	3700	--	--	--	--	ND	340	--	--	--	--	<3700
<b>PCB 1254</b>														
Plant 1 Cake	µg/kg dry	ND	3300	--	--	--	--	ND	390	--	--	--	--	<3300
Plant 2 Cake	µg/kg dry	ND	3700	--	--	--	--	ND	340	--	--	--	--	<3700
<b>PCB 1260</b>														
Plant 1 Cake	µg/kg dry	ND	3300	--	--	--	--	ND	390	--	--	--	--	<3300
Plant 2 Cake	µg/kg dry	ND	3700	--	--	--	--	ND	340	--	--	--	--	<3700
<b>PCB_HR_DM</b>														
Plant 1 Cake	µg/kg dry	ND	3300	--	--	--	--	ND	390	--	--	--	--	<3300
Plant 2 Cake	µg/kg dry	ND	3700	--	--	--	--	ND	340	--	--	--	--	<3700
<b>Total PCBs</b>														
Plant 1 Cake	µg/kg dry	ND	--	--	--	--	--	ND	--	--	--	--	--	<3300
Plant 2 Cake	µg/kg dry	ND	--	--	--	--	--	ND	--	--	--	--	--	<3700
<b>Herbicides</b>														
<b>2,4,5-T</b>														
Plant 1 Cake	µg/kg dry	ND	250	--	--	--	--	--	--	--	--	--	--	< 250
Plant 2 Cake	µg/kg dry	ND	210	--	--	--	--	--	--	--	--	--	--	< 210
<b>2,4,5-TP (Silvex)</b>														
Plant 1 Cake	µg/kg dry	69	250	--	--	--	--	--	--	--	--	--	--	69
Plant 2 Cake	µg/kg dry	190	210	--	--	--	--	--	--	--	--	--	--	190
<b>2,4-D</b>														
Plant 1 Cake	µg/kg dry	ND	250	--	--	--	--	--	--	--	--	--	--	< 250
Plant 2 Cake	µg/kg dry	ND	210	--	--	--	--	--	--	--	--	--	--	< 210
<b>2,4-DB</b>														
Plant 1 Cake	µg/kg dry	ND	250	--	--	--	--	--	--	--	--	--	--	< 250
Plant 2 Cake	µg/kg dry	ND	210	--	--	--	--	--	--	--	--	--	--	< 210
<b>4-Nitrophenol</b>														
Plant 1 Cake	µg/kg dry	ND	1000	--	--	--	--	--	--	--	--	--	--	<1000
Plant 2 Cake	µg/kg dry	ND	820	--	--	--	--	--	--	--	--	--	--	< 820
<b>Dalapon</b>														
Plant 1 Cake	µg/kg dry	ND	3000	--	--	--	--	--	--	--	--	--	--	770
Plant 2 Cake	µg/kg dry	ND	2500	--	--	--	--	--	--	--	--	--	--	< 2500
<b>Dicamba</b>														
Plant 1 Cake	µg/kg dry	ND	250	--	--	--	--	--	--	--	--	--	--	< 250
Plant 2 Cake	µg/kg dry	ND	210	--	--	--	--	--	--	--	--	--	--	< 210
<b>Dichlorprop (2,4-DP)</b>														
Plant 1 Cake	µg/kg dry	ND	250	--	--	--	--	--	--	--	--	--	--	< 250
Plant 2 Cake	µg/kg dry	ND	210	--	--	--	--	--	--	--	--	--	--	< 210
<b>Dinoseb (DNBP)</b>														
Plant 1 Cake	µg/kg dry	ND	1500	--	--	--	--	--	--	--	--	--	--	< 1500
Plant 2 Cake	µg/kg dry	ND	1200	--	--	--	--	--	--	--	--	--	--	< 1200
<b>MCPA</b>														
Plant 1 Cake	µg/kg dry	ND	61000	--	--	--	--	--	--	--	--	--	--	< 61,000
Plant 2 Cake	µg/kg dry	ND	50000	--	--	--	--	--	--	--	--	--	--	16,000
<b>MCPP</b>														
Plant 1 Cake	µg/kg dry	ND	61000	--	--	--	--	--	--	--	--	--	--	8,400
Plant 2 Cake	µg/kg dry	ND	50000	--	--	--	--	--	--	--	--	--	--	< 50,000
<b>Pentachlorophenol</b>														
Plant 1 Cake	µg/kg dry	ND	250	--	--	--	--	--	--	--	--	--	--	< 250
Plant 2 Cake	µg/kg dry	ND	210	--	--	--	--	--	--	--	--	--	--	< 210
<b>Picloram</b>														
Plant 1 Cake	µg/kg dry	ND	250	--	--	--	--	--	--	--	--	--	--	< 250
Plant 2 Cake	µg/kg dry	ND	210	--	--	--	--	--	--	--	--	--	--	< 210
<b>TCLP - Herbicides</b>														
<b>2,4,5-T</b>														
Plant 1 Cake	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--	<0.025

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--
<b>2,4,5-TP (Silvex)</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--
<b>2,4,6-Trichlorophenol</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>2,4-D</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>2,4-DB</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>2,6-Dichlorophenol</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
<b>3,5-Dichlorobenzoic acid</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>4-Nitrophenol</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>ACIFLUORFEN</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>BENTAZON</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>Chloramben</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>Dalapon</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--
<b>DCPA</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
<b>Dicamba</b>														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--



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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--	<0.025
<b>2,4,5-TP (Silvex)</b>														
Plant 1 Cake	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--	<0.025
Plant 2 Cake	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--	<0.025
<b>2,4,6-Trichlorophenol</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2,4-D</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2,4-DB</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>2,6-Dichlorophenol</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>3,5-Dichlorobenzoic acid</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>4-Nitrophenol</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>ACIFLUORFEN</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>BENTAZON</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>Chloramben</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>Dalapon</b>														
Plant 1 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
Plant 2 Cake	mg/L	ND	.5	--	--	--	--	--	--	--	--	--	--	<0.50
<b>DCCA</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>Dicamba</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050

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	Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016	
			Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Dichlorprop (2,4-DP)														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Dinoseb (DNBP)														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--
MCPA														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	12	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	12	--	--	--	--	--	--	--	--	--	--
MCPP														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	12	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	12	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--
Picloram														
Plant 1 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8151-TCLP(1311)	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--
Other														
2,3,7,8-Tetrachlorodibenzo-p-dioxin														
Plant 1 Cake	EPA 1613B	pg/g dry	ND	28	--	--	--	--	ND	30	--	--	--	--
Plant 2 Cake	EPA 1613B	pg/g dry	ND	19	--	--	--	--	ND	23	--	--	--	--
Chrysotile														
Plant 1 Cake		% dry	ND	--	--	--	--	--	ND	--	--	--	--	--
Plant 2 Cake		% dry	ND	--	--	--	--	--	ND	--	--	--	--	--
Paint Filter Free Liquid test														
Plant 1 Cake	EPA 9095A	-	NEG	--	NEG	--	NEG	--	NEG	--	NEG	--	NEG	--
Plant 2 Cake	EPA 9095A	-	NEG	--	NEG	--	NEG	--	NEG	--	NEG	--	NEG	--
Tentatively Identified Compounds														
.BETA.-SITOSTEROL														
Plant 1 Cake	EPA 8270C	µg/kg dry	440000	65000	--	--	--	--	--	--	--	--	--	--
1000147-77-7														
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
1000210-86-9														
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
2,7-Dimethyl-3,5-dimethylthio-2H-1,														
Plant 2 Cake	EPA 8270C	µg/kg dry	570000	110000	--	--	--	--	--	--	--	--	--	--
2-ETHYL-3-METHYLCYCLOPENTENE														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	380000	74000	--	--	--	--
2-Pentanone, 4-hydroxy-4-methyl-														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	1300000	74000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	1100000	27000	--	--	--	--
758-16-7														
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
9,19-CYCLOCHOLEST-24-EN-3-OL, 14-METHYL-														
Plant 2 Cake	EPA 8270C	µg/kg dry	610000	110000	--	--	--	--	--	--	--	--	--	--

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Dichlorprop (2,4-DP)</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Dinoseb (DNBP)</b>														
Plant 1 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
Plant 2 Cake	mg/L	ND	.1	--	--	--	--	--	--	--	--	--	--	<0.10
<b>MCPA</b>														
Plant 1 Cake	mg/L	ND	12	--	--	--	--	--	--	--	--	--	--	< 12
Plant 2 Cake	mg/L	ND	12	--	--	--	--	--	--	--	--	--	--	< 12
<b>MCPP</b>														
Plant 1 Cake	mg/L	ND	12	--	--	--	--	--	--	--	--	--	--	< 12
Plant 2 Cake	mg/L	ND	12	--	--	--	--	--	--	--	--	--	--	< 12
<b>Pentachlorophenol</b>														
Plant 1 Cake	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--	<0.025
Plant 2 Cake	mg/L	ND	.025	--	--	--	--	--	--	--	--	--	--	<0.025
<b>Picloram</b>														
Plant 1 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
Plant 2 Cake	mg/L	ND	.05	--	--	--	--	--	--	--	--	--	--	<0.050
<b>Other</b>														
<b>2,3,7,8-Tetrachlorodibenzo-p-dioxin</b>														
Plant 1 Cake	pg/g dry	ND	27	--	--	--	--	ND	11	--	--	--	--	<30
Plant 2 Cake	pg/g dry	ND	24	--	--	--	--	ND	9.1	--	--	--	--	<24
<b>Chrysotile</b>														
Plant 1 Cake	% dry	ND	--	--	--	--	--	ND	--	--	--	--	--	ND
Plant 2 Cake	% dry	ND	--	--	--	--	--	ND	--	--	--	--	--	ND
<b>Paint Filter Free Liquid test</b>														
Plant 1 Cake	-	NEG	--	NEG	--	NEG	--	NEG	--	NEG	--	NEG	--	NEG
Plant 2 Cake	-	NEG	--	NEG	--	NEG	--	NEG	--	NEG	--	NEG	--	NEG
<b>Tentatively Identified Compounds</b>														
<b>.BETA.-SITOSTEROL</b>														
Plant 1 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	440,000
<b>1000147-77-7</b>														
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	240000	17000	--	--	--	--	240,000
<b>1000210-86-9</b>														
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	180000	17000	--	--	--	--	180,000
<b>2,7-Dimethyl-3,5-dimethylthio-2H-1,2,4-t</b>														
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	570,000
<b>2-ETHYL-3-METHYLCYCLOPENTENE</b>														
Plant 1 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	380,000
<b>2-Pentanone, 4-hydroxy-4-methyl-</b>														
Plant 1 Cake	µg/kg dry	340000	31000	--	--	--	--	--	--	--	--	--	--	820,000
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	1,100,000
<b>758-16-7</b>														
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	93000	17000	--	--	--	--	93,000
<b>9,19-CYCLOCHOLEST-24-EN-3-OL, 14-METHYL-</b>														
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	610,000

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Method	Units	Jan-2016		Feb-2016		Mar-2016		Apr-2016		May-2016		Jun-2016		
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
9-OCTADECENOIC ACID, (E)-														
Plant 1 Cake	EPA 8270C	µg/kg dry	580000	65000	--	--	--	--	790000	74000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	2200000	110000	--	--	--	--	180000	27000	--	--	--	--
Cholest-4-en-3-one														
Plant 1 Cake	EPA 8270C	µg/kg dry	300000	65000	--	--	--	--	650000	74000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	540000	110000	--	--	--	--	97000	27000	--	--	--	--
CHOLEST-5-EN-3-ONE														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
CHOLEST-8-EN-3-OL, (3.BETA.)-														
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
Cholestan-3-ol														
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	1000000	27000	--	--	--	--
Cholestan-3-one														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	1500000	74000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	140000	27000	--	--	--	--
Cholestan-3-one, (5.beta.)-														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	620000	27000	--	--	--	--
CHOLESTAN-3-ONE, 4,4-DIMETHYL-, (5.ALPHA														
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	130000	27000	--	--	--	--
CHOLESTANE, 2,3-EPOXY-, (2.ALPHA.,3.ALPH														
Plant 1 Cake	EPA 8270C	µg/kg dry	1900000	65000	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	2500000	110000	--	--	--	--	--	--	--	--	--	--
CHOLESTANE, 3-ETHOXY-, (3.BETA.,5.ALPH/														
Plant 1 Cake	EPA 8270C	µg/kg dry	470000	65000	--	--	--	--	240000	74000	--	--	--	--
CHOLESTANOL														
Plant 1 Cake	EPA 8270C	µg/kg dry	2300000	65000	--	--	--	--	3000000	74000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	2500000	110000	--	--	--	--	--	--	--	--	--	--
CHOLESTEROL														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	780000	74000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	120000	27000	--	--	--	--
CYCLOHEXENE, 3-(2-METHYLPROPYL)-														
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
Ergost-7-en-3-ol, (3.beta.)-														
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
n-Hexadecanoic acid														
Plant 1 Cake	EPA 8270C	µg/kg dry	1400000	65000	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	3500000	110000	--	--	--	--	--	--	--	--	--	--
OCTADECANOIC ACID														
Plant 1 Cake	EPA 8270C	µg/kg dry	430000	65000	--	--	--	--	400000	74000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	1000000	110000	--	--	--	--	--	--	--	--	--	--
PREGN-5-EN-20-ONE, 3-HYDROXY-														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
Squalene														
Plant 1 Cake	EPA 8270C	µg/kg dry	350000	65000	--	--	--	--	510000	74000	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	760000	110000	--	--	--	--	--	--	--	--	--	--
TETRADECANOIC ACID														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
TRIDECANE														
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	93000	27000	--	--	--	--
UNKNOWN														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
VITAMIN E														
Plant 1 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--
Plant 2 Cake	EPA 8270C	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--

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	Units	Jul-2016		Aug-2016		Sep-2016		Oct-2016		Nov-2016		Dec-2016		Annual Mean
		Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	Average	RL	
<b>9-OCTADECENOIC ACID, (E)-</b>														
Plant 1 Cake	µg/kg dry	570000	31000	--	--	--	--	330000	20000	--	--	--	--	<b>570,000</b>
Plant 2 Cake	µg/kg dry	650000	62000	--	--	--	--	440000	17000	--	--	--	--	<b>870,000</b>
<b>Cholest-4-en-3-one</b>														
Plant 1 Cake	µg/kg dry	270000	31000	--	--	--	--	--	--	--	--	--	--	<b>410,000</b>
Plant 2 Cake	µg/kg dry	470000	62000	--	--	--	--	150000	17000	--	--	--	--	<b>310,000</b>
<b>CHOLEST-5-EN-3-ONE</b>														
Plant 1 Cake	µg/kg dry	--	--	--	--	--	--	120000	20000	--	--	--	--	<b>120,000</b>
<b>CHOLEST-8-EN-3-OL, (3.BETA.)-</b>														
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	770000	17000	--	--	--	--	<b>770,000</b>
<b>Cholestan-3-ol</b>														
Plant 2 Cake	µg/kg dry	320000	62000	--	--	--	--	120000	17000	--	--	--	--	<b>480,000</b>
<b>Cholestan-3-one</b>														
Plant 1 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>1,500,000</b>
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>140,000</b>
<b>Cholestan-3-one, (5.beta.)-</b>														
Plant 1 Cake	µg/kg dry	130000	31000	--	--	--	--	--	--	--	--	--	--	<b>130,000</b>
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>620,000</b>
<b>CHOLESTAN-3-ONE, 4,4-DIMETHYL-, (5.ALPHA)</b>														
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>130,000</b>
<b>CHOLESTANE, 2,3-EPOXY-, (2.ALPHA.,3.ALPH</b>														
Plant 1 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>1,900,000</b>
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>2,500,000</b>
<b>CHOLESTANE, 3-ETHOXY-, (3.BETA.,5.ALPHA.</b>														
Plant 1 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>360,000</b>
<b>CHOLESTANOL</b>														
Plant 1 Cake	µg/kg dry	300000	31000	--	--	--	--	870000	20000	--	--	--	--	<b>1,600,000</b>
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>2,500,000</b>
<b>CHOLESTEROL</b>														
Plant 1 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>780,000</b>
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>120,000</b>
<b>CYCLOHEXENE, 3-(2-METHYLPROPYL)-</b>														
Plant 2 Cake	µg/kg dry	200000	62000	--	--	--	--	--	--	--	--	--	--	<b>200,000</b>
<b>Ergost-7-en-3-ol, (3.</b>														
Plant 2 Cake	µg/kg dry	210000	62000	--	--	--	--	--	--	--	--	--	--	<b>210,000</b>
<b>n-Hexadecanoic acid</b>														
Plant 1 Cake	µg/kg dry	1400000	31000	--	--	--	--	--	--	--	--	--	--	<b>1,400,000</b>
Plant 2 Cake	µg/kg dry	2000000	62000	--	--	--	--	--	--	--	--	--	--	<b>2,800,000</b>
<b>OCTADECANOIC ACID</b>														
Plant 1 Cake	µg/kg dry	530000	31000	--	--	--	--	230000	20000	--	--	--	--	<b>400,000</b>
Plant 2 Cake	µg/kg dry	560000	62000	--	--	--	--	290000	17000	--	--	--	--	<b>620,000</b>
<b>PREGN-5-EN-20-ONE, 3-HYDROXY-</b>														
Plant 1 Cake	µg/kg dry	1800000	31000	--	--	--	--	--	--	--	--	--	--	<b>1,800,000</b>
<b>Squalene</b>														
Plant 1 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>430,000</b>
Plant 2 Cake	µg/kg dry	390000	62000	--	--	--	--	--	--	--	--	--	--	<b>580,000</b>
<b>TETRADECANOIC ACID</b>														
Plant 1 Cake	µg/kg dry	110000	31000	--	--	--	--	--	--	--	--	--	--	<b>110,000</b>
Plant 2 Cake	µg/kg dry	170000	62000	--	--	--	--	96000	17000	--	--	--	--	<b>130,000</b>
<b>TRIDECANE</b>														
Plant 2 Cake	µg/kg dry	--	--	--	--	--	--	--	--	--	--	--	--	<b>93,000</b>
<b>UNKNOWN</b>														
Plant 1 Cake	µg/kg dry	--	--	--	--	--	--	130000	20000	--	--	--	--	<b>130,000</b>
<b>VITAMIN E</b>														
Plant 1 Cake	µg/kg dry	180000	31000	--	--	--	--	--	--	--	--	--	--	<b>180,000</b>
Plant 2 Cake	µg/kg dry	250000	62000	--	--	--	--	98000	17000	--	--	--	--	<b>170,000</b>











**The history of OCSD's Biosolids Program is important to understand as we plan for the future. In order to maintain the integrity of this information for future generations, the historical information is maintained in this appendix.**

### **Program History**

- In 1971, OCSD entered into a long-term contract with Goldenwest Fertilizer Co., Inc., a local fertilizer manufacturer, who hauled and composted the sludge off site. OCSD maintained contracts with Goldenwest Fertilizer Co. for several years until the firm lost their land lease for their composting operation in 1979. Contracts with other composting companies were also used during the 1970s.
- In 1978, after notification that their contract with Goldenwest Fertilizer Co. would be ending in 1979, OCSD presented a proposal to the County of Orange to co-dispose sludge with municipal solid waste at Orange County landfills. Following approval by Orange County and the California Regional Water Quality Control Board, Santa Ana Region (CRWQCB): OCSD established an air drying/composting site at Coyote Canyon landfill. OCSD used this site as a sludge-drying operation until 1981 when it was converted to an open-air composting facility. This was done to reduce odors and dry the sludge to the required 50% solids content prior to being blended with municipal solid waste.
- The 50% solids requirement was set by the CRWQCB, by Order No. 79-55. In December 1982, the requirements were modified by Order No. 82-299. The new order reduced the required average solids content to 22.5%. In addition to the solids content requirements, the volume of refuse to sludge incorporated into the landfill was required to be a 10:1 ratio. After the new Order was issued and the treatment plant belt press dewatering system was installed, the air drying process was no longer needed and its operation was discontinued.
- In 1974, OCSD began a cooperative regional sludge management study with the City of Los Angeles, the Los Angeles County Sanitation Districts, the Environmental Protection Agency (EPA), and the CRWQCB. By a joint powers agreement, the Regional Wastewater Solids Management Program for the Los Angeles/Orange County Metropolitan Area (LA/OMA Project) had a separate staff and budget to develop a long-term solids reuse or disposal plan, including an implementation strategy for the Los Angeles/Orange County metropolitan areas. This extensive, six-year, \$4.0 million study, which covered all aspects of sludge processing and disposal, was completed in 1980. The conclusion was that each of the three entities would carry out its own sludge management program. For OCSD, land-based disposal and beneficial reuse were the study's preferred alternatives.

However, co-combustion and enclosed mechanical in-vessel composting alternatives at OCSD's Reclamation Plant No. 1 were added to OCSD's LA/OMA supplemental study when the recommended composting facilities were evaluated as being difficult to site.

- In 1978 and 1983, OCSD brought activated sludge facilities online at Plant No. 1 and Plant No. 2 respectively, which led to significant improvements of ocean water quality. By 1984, OCSD had replaced centrifuges that dewatered to about 20% with new belt presses at both plants. The new belt presses had to dewater to at least 22.5% in order to meet landfill requirements. As a result, waste activated secondary sludges were dewatered separately and sent to a private landfill. Clean Water Grant Funds aided in the construction of the important facilities improvements at Plant No. 2 including the activated sludge plant (\$45 million) and sludge handling/process facilities (\$30 million).
- In November 1983, OCSD's Boards of Directors submitted a new Residual, Solids Management Plan to the EPA. The plan included both short- and long-term compliance strategies. The short-term compliance plan involved the continued practice of trucking 22.5% solids to Coyote Canyon landfill for co-disposal with municipal waste until the landfill closed in March 1990. It also included hauling sludge to private landfills using OCSD's trucks or private contractors. The long-term plan included co-disposal at county landfills and off-site reuse/management by private contractors.
- In November 1984, OCSD approved an interim sludge disposal program due to the limitation of the amount of sludge this could be co-disposed at Coyote Canyon. As part of this program, an agreement was made with BKK Corporation to take the balance of the sludge to the BKK-owned and operated landfill 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's overall sludge reuse/disposal program (completed in August of 1989).
- The goals noted above led to a series of new recycling options starting in 1988 using three separate contractors. Two contracts were created with compost contractors, and one was created with an agricultural land fertilization contractor. Using these three contractors, OCSD recycled about 50% of their sludge from 1988-1991.
  - 1990: About 50% of the sludge is processed into compost by L. Curti Truck & Equipment and by Recyc; Inc., or applied directly to agricultural land by Pima Gro-Systems, Inc. The remaining 50% of the sludge is disposed in the BKK landfill in Los Angeles County. The dewatered sludge is hauled to the landfill and directly incorporated with municipal solid waste in conformance with operating requirements of the Regional Water Quality Control Board, Los Angeles.

Prior to March of 1990, landfill co-disposal was available at the Coyote Canyon landfill in Orange County and the BKK landfill. During this period 14% of the Districts' sludge went to Coyote Canyon and 36% went to BKK.

- On June 24, 1991 a new solids handling storage facility (truck loading) was placed in service. Plant No. 1 Belt Press Dewatering Building M was placed in service in February 1983. Belt Press Dewatering Building C was placed in service in October 1988. By 2018, the belt presses will be replaced by centrifuges, the DAFTs will be replaced by thickening centrifuges, and truck loading will be rehabilitated.
- Beginning in Beginning in November 1991, the Districts' Biosolids Management Program achieved a milestone of 100% beneficial reuse. Beneficial reuse allows the Districts to lower its management costs and eliminate the need to take up valuable landfill space. The program consisted of compost, direct land application, and a standby agreement to landfill the biosolids in the event of an emergency. Further benefits of switching to beneficial reuse was been a reduction in disposal costs. Beneficial reuse costed the Districts less than landfilling and was expected to become even more cost effective in the future as the market for compost material grows. About 73% of the biosolids are processed into compost by Pima Gro Systems, Inc. at the Riverside Recyc compost facility. The remaining 23% is applied directly to agricultural land by Ag Tech Company in Yuma, Arizona.

- During 1993-94, only one biosolids contractor was used to haul and manage the OCSD's biosolids produced by Plant No. 1. Pima Gro Systems, Inc. hauled the biosolids to the Recyc processing site in Riverside County where it was composted. The biosolids based compost was then sold to nearby farmers as a nutrient rich soil amendment and fertilizer.
- In late 1994, the Ag Tech Company was contracted to use OCSD biosolids to enhance agricultural soils, reduce the amount of irrigation water needed, and provide a much needed source of organic humus. The biosolids were injected 6 inches to 15 inches beneath the surface (in the root zone) within hours of their arrival to permitted farm lands.
- In June 1995, Bio Gro, a division of Wheelabrator Clean Water Systems, Inc., was added as a biosolids contractor. Biosolids were recycled on agricultural land in Riverside County. Pima Gro used commercial fertilizer spreaders to distribute the biosolids prior to incorporation on agricultural land in Kern County, California.
- In March 1996, Tule Ranch was added as a biosolids contractor. Pima Gro was still recycling biosolids in Kern County, California, and Bio Gro was recycling biosolids in Riverside. No composting was reported.
- In 1997, continued 100% beneficial reuse with all biosolids recycled via direct land application in Kern, Riverside, and San Diego counties.

The Districts also entered into a one-year pilot project contract with Waste Conversion Industries, Inc. (WCI) to chemically treat and heat dry the Districts' biosolids at their Corona, California site. Due to mechanical difficulties, WCI was not able to process any of the Districts' biosolids.

During fiscal year 1996-97, the Districts' biosolids management cost was reduced by approximately \$1 million from that of fiscal year 1995-96. New and amended biosolids management contracts as well increased efficiency in the Districts' belt operation contributed to the decrease in biosolids management costs. Upon the expiration of the Ag Tech contract and the termination of the Hondo contract, the Districts maintained only two active biosolids management contractors, Bio Gro and . Pima Gro. In August 1996, having only two active biosolids management contractors, and receiving numerous unsolicited lower cost biosolids management proposals Districts' staff prepared and issued a Request for Proposals for Biosolids Management (RFP). The RFP was necessary in order to increase biosolids management diversity and reliability while decreasing costs. Eight biosolids management firms submitted proposals. Bio Gro proposed to maintain their existing contract, but unilaterally offered a pricing amendment, while Pima Gro submitted a new proposal that provided the Districts with the option of

accepting the entire proposal or modify the pricing structure of the existing contract.

After extensive review and ranking of the proposals by staff, new contracts were offered to Tule Ranch and Waste Conversion Industries, Inc., while Bio Gro's and Pima Gro's existing contracts were amended to reflect their new price schedules.

- In 1998 through 2000, continued 100% beneficial reuse with all biosolids recycled via direct land application in Kern, Kings, San Diego and Riverside counties. Pima Gro, Bio Gro, and Tule Ranch were OCSD's biosolids contractors. Small amounts of biosolids were composted at Pimo Gro's Riverside composting facility, Bio Gro's Arizona Soils facility in La Paz County, Arizona, and by Pima Gro for a UCR Extension research project in Imperial County.
- In June 2000, OCSD purchased 1,800 acres of Tule Ranch's farm in Kings County, California, to provide a reliable, long-term site for treatment and land application of biosolids. Tule Ranch contracted to manage OCSD's biosolids its farm at a reduced cost per ton.
- In 2001, Synagro purchased Pima Gro and Bio Gro, and OCSD added Yakima as a contractor. One-hundred percent beneficial reuse via direct land application in Kern, Kings, San Diego, and Riverside. Synagro also recycled biosolids to tribal land farms in San Bernardino County, California. Small amounts were composted in Riverside and tribal land.

In 2001, Riverside County issued an ordinance that banned the use of Class B biosolids for land application but allowed limited use of Class A biosolids. In 2003, the restrictions were expanded to address nuisance problems related to Class A biosolids. Kern County's Class A requirement (Class B ban) went into effect in early 2002, and King's County followed in 2003 with only composted biosolids allowed after 2006.

- In 2002, as staff began work on a large-scale long-range biosolids management plan and contentious local county Class B land application bans were on the rise, OCSD began increasing diversification away from land application and added more composting in Riverside County. Biosolids were also recycled on Fort Mohave tribal land in Mohave County, Arizona and Clark County, Nevada.
- October 28, 2002 Yakima Co. began operations at their new biosolids management site in La Paz County, Arizona. The operation involved biosolids air drying to achieve material greater than 50% total solids and use as alternative daily cover at La Paz Landfill. A total of 4,628.09 wet tons (881.7 dry metric tons) of biosolids were managed through this process through

2002. This amount represents about 2% of the total District's biosolids material beneficially reused in land application operations during 2002. The District discontinued its use of the Yakima Co. for management of its biosolids in early January 2003. The facility was later shut-down by the County of La Paz and a lawsuit was won against the County by Yakima for \$9.2 million in damages.

- In 2002, OCSD's Board of Directors voted to increase the level of treatment to full-secondary treatment requirements, which produced significantly more biosolids, especially between 2002 to 2005, until the new dewatering centrifuges could be constructed and implemented at each plant (2018-2020). OCSD's focus through the 2000's was on building the water-side capital facilities to meet this increased level of service.
- In 2003, OCSD continued to encourage contractors to diversify its biosolids options, especially in Arizona and Nevada. OCSD started using Arizona Soils in La Paz County, Arizona on a regular basis. OCSD additionally piloted Tule Ranch's subcontractor, Universal, to utilize farms in Wellton and Dateland, Arizona for land application of about 6% of OCSD's biosolids. Tule Ranch's Class A lime stabilization process was started in order to continue recycling biosolids in Kern and Kings Counties. A small amount of biosolids was used in Maricopa County, Arizona.

In addition, OCSD started using Solid Solutions to recycle biosolids in Nye County, Nevada to further diversify the biosolids management program. Solid Solutions was a subcontractor to California Soils Products who had a 2002 contract with OCSD to render biosolids into a treated soil product.

By March 2004, OCSD pulled out of Nye because of a hearing with complaints from affected neighbors, local competition with dairy manure, and a letter from Nevada congressional representative, Harry Reid, whose brother was a local resident. This episode also captured the attention of the 2003-04 Orange County Grand Jury who performed an investigative study and published a report: <http://www.ocgrandjury.org/pdfs/biosolids.pdf>.

OCSD concluded its use of Solid Solutions in 2005 when it was clear that the Soil Products facility would not materialize.

- In December 2003, OCSD finalized a Long Range Biosolids Management Plan that set forth the following recommendations to ensure a sustainable biosolids management program. These recommendations were implemented over the following decade.
  - Maintain at least three different product-manufacturing options at any given time.
  - Optimize capital and operations and maintenance (O&M) costs at OCSD's treatment plants as part of implementation of the long-range plan.

- Limit maximum participation for any market to one-half of the total biosolids production.
  - Limit biosolids management contracts to a maximum of one-third of total biosolids production per merchant facility, and one-half per contractor (for contractors with multiple product manufacturing facilities).
  - For each OCSD-owned product manufacturing facility, limit the size to one-half of the total biosolids production.
  - Explore funding options for in-county facilities (private capital, OCSD capital, or both).
  - Allocate up to 10 percent of biosolids for participation in emerging markets.
  - Pursue Orange County-based product manufacturing facilities and maximize the use of horticultural products within the OCSD service area by member agencies and through developing public-private partnerships.
  - Maintain capacity and options at OCSD's Central Valley Ranch.
  - Pursue failsafe backup options (landfilling, alternative daily cover for landfills, and dedicated landfilling) to acquire a 100 percent contingency capacity.
- From **November 1991 through December 2004, OCSD achieved 100 percent beneficial reuse** of its biosolids mostly through the use of land application with some composting.
  - In 2004, OCSD started ramping up the land application in Arizona through Tule Ranch's Dateland operation, from about 10% in 2003 to 20% in 2004. OCSD also ramped up its use of compost sites in California and Arizona from about 7% in 2003 to 20% in 2004.
  - In January 2005 and 2006, OCSD sent a small fraction of its biosolids to two landfills in Arizona (Copper Mountain and South Yuma County Landfill) in order to increase the diversity of its biosolids management options, as well as address the operational needs caused by wet weather periods. The routes to these two landfills were not impacted by severe weather.
  - Starting in 2006, Synagro eliminated their last remaining OCSD land application (Maricopa County), as fuel prices hit record highs, and focused on composting services.

On December 27, 2006, Synagro's new composting facility (South Kern Compost Manufacturing Facility) came online. This was the first long-term contract to become operational as an outcome of the 2003 Long-Range Biosolids Management Plan.

- In 2007, with OCSD's contract that guaranteed at least 250 tons per day to Synagro's new facility, OCSD's biosolids allocation to compost facilities expanded to its current level of about 50% of its total biosolids production.



These facilities have extensive permitting and regulatory oversight and reporting, improved public outreach with neighbors and local communities, and have more air quality and odor process controls. Today's framework is more sophisticated than what was in place two decades ago.

Land application was also allocated about 50% of OCSD's portfolio with half of that as lime-stabilized Class A in Kern County and half as Class B in Yuma County, Arizona.

- In March 2007, OCSD stopped actively using landfills and maintained this option only as a failsafe backup. OCSD re-gained its **100 percent recycling performance from 2008 through 2012** (excluding some digester cleanings).
- In August 2007, the Orange County Water District's (OCWD) Advanced Water Purification Facility, later called the Ground Water Replenishment System (GWRS), started taking an average of 30 MGD of Plant No. 1's secondary treated water to test their facility in purifying the water to meet drinking water standards. OCWD uses microfiltration and reverse osmosis, as well as ultraviolet (UV) disinfection. 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 blends with treated wastewater from Plant No. 2 prior to ocean discharge through OCSD's 120-inch, 5-mile outfall.
- 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 odor complaints.
- In late 2008, OCSD stopped using Tule Ranch's farm in Kern County. This change in strategy culminated when the EnerTech facility started commissioning their process and Kern County required additional costly environmental studies to continue utilizing that option. OCSD's Kings County property was sold in December 2011.
- As part of the 2003 Long Range Biosolids Management Plan implementation, OCSD issued a series of request for proposals in 2004. As a result, EnerTech Environmental, Inc. was awarded a 225-ton guaranteed-minimum contract in 2005, which was signed in May 2006. The Rialto facility was constructed and began commissioning on November 3, 2008. OCSD reallocated Tule Ranch's Kern County land application loads to EnerTech to meet contractual obligations. EnerTech's patented technology used heat and pressure to convert biosolids to a certified renewable energy pellet (E-fuel) that was burned as a replacement for coal in local cement kilns. EnerTech encountered a series of technical and permitting setbacks during the

commissioning process. During the start-up process, biosolids not processed at the Rialto facility were land-applied in Yuma County, Arizona by Terra Renewal (formerly Solid Solutions).

In November 2010, EnerTech began implementation of a Single Train Technical Plan that was anticipated to address the issues and finish the commissioning process by March 2012. After a final extension and failure to meet contractual performance requirements, OCSD terminated its contract with EnerTech effective July 2012. OCSD re-allocated the EnerTech loads to our two remaining contractors, Synagro (composting) and Tule Ranch (land application), at about 50% each.

- March 2009, OCSD began diverted settled sludge from Plant No. 1's primary clarifiers, along with about 2.5 MGD of belt press dewatering filtrate, to Plant No. 2's headworks, where they are mixed with the influent wastewater. OCSD built a new pump station at Plant No. 1, the Steve Anderson Lift Station, in order to bring more flow into Plant No. 1 to provide more flows to GWRS. However, the additional flows produced more solids than Plant No. 1 was equipped to handle during rehabilitation of its digesters and construction of its thickening and dewatering centrifuges, making the diversion of these solids to Plant No. 2 necessary. 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](http://www.ocsd.com/CIPAnnual)) summarizes the projects and their progress.

- In February and March 2012, OCSD's Plant No. 2 biosolids exceeded the Arsenic Table 3 Exceptional Quality Limit for fields 23110121, 2311013, 2311021, and 2311022, but were below Table 1 Ceiling Concentrations. OCSD's land application contractor, Tule Ranch, already reports Table 2 Cumulative Pollutant Loading Rates for *all* pollutants and *all fields* as part of their annual report to the Arizona Department of Environmental Quality.
- As directed by the Board's November 2011 Strategic Plan direction, OCSD executed an agreement with Orange County Waste and Recycling (OCWR) to manage up to 100 tons per day of OCSD's biosolids at the Prima Deshecha landfill located in the city of San Juan Capistrano, California. This alternative provides OCSD a local biosolids management option during projected peak biosolids production period until 2017.

As a result of the landfill start-up in 2013, OCSD is recycling about 94-97% of its biosolids, with the remaining biosolids going to the OCWR landfill. Landfill loads do not count towards recycling despite the indirect energy production from capturing methane onsite. OCSD sends the landfill about 1 truck per day of grit and screenings (non-recyclable material) and 3 trucks of biosolids per day (5 days per week when not impacted by rain) in order to keep some revenues and resources in-County (see also OCSD Biosolids Policy Board Resolution 13-03: [ocsd.com/policy](http://ocsd.com/policy)).

However, after residential complaints about odor 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 2015, OCSD awarded a professional engineering services contract for developing a new Biosolids Master Plan. The Biosolids Master Plan will meet one of the goals in OCSD's 5-year Strategic Plan ([www.ocsd.com/5yearstrategicplan](http://www.ocsd.com/5yearstrategicplan)), which is to recommend future biosolids management options, as well as recommending and providing design of capital facility improvements for a 20-year planning period. The Plan is anticipated to be published in spring 2017.
- OCSD is replacing the belt filter presses with new dewatering centrifuge facilities, which are scheduled to start service in 2018 for Plant No. 1 and in 2020 for Plant No. 2. As a result, the total percent solids of digested biosolids is anticipated to increase from 18-22% to 30%, resulting in approximately one-third fewer solids to manage. In addition, this project is also bringing pre-digestion thickening centrifuges to replace the dissolved air floatation thickening at Plant No. 1, and will rehabilitate the Plant No. 1 truck loading facility.

- 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.
- 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 2018. This cessation is anticipated to reduce Plant No. 1's influent solids by 10-15%.

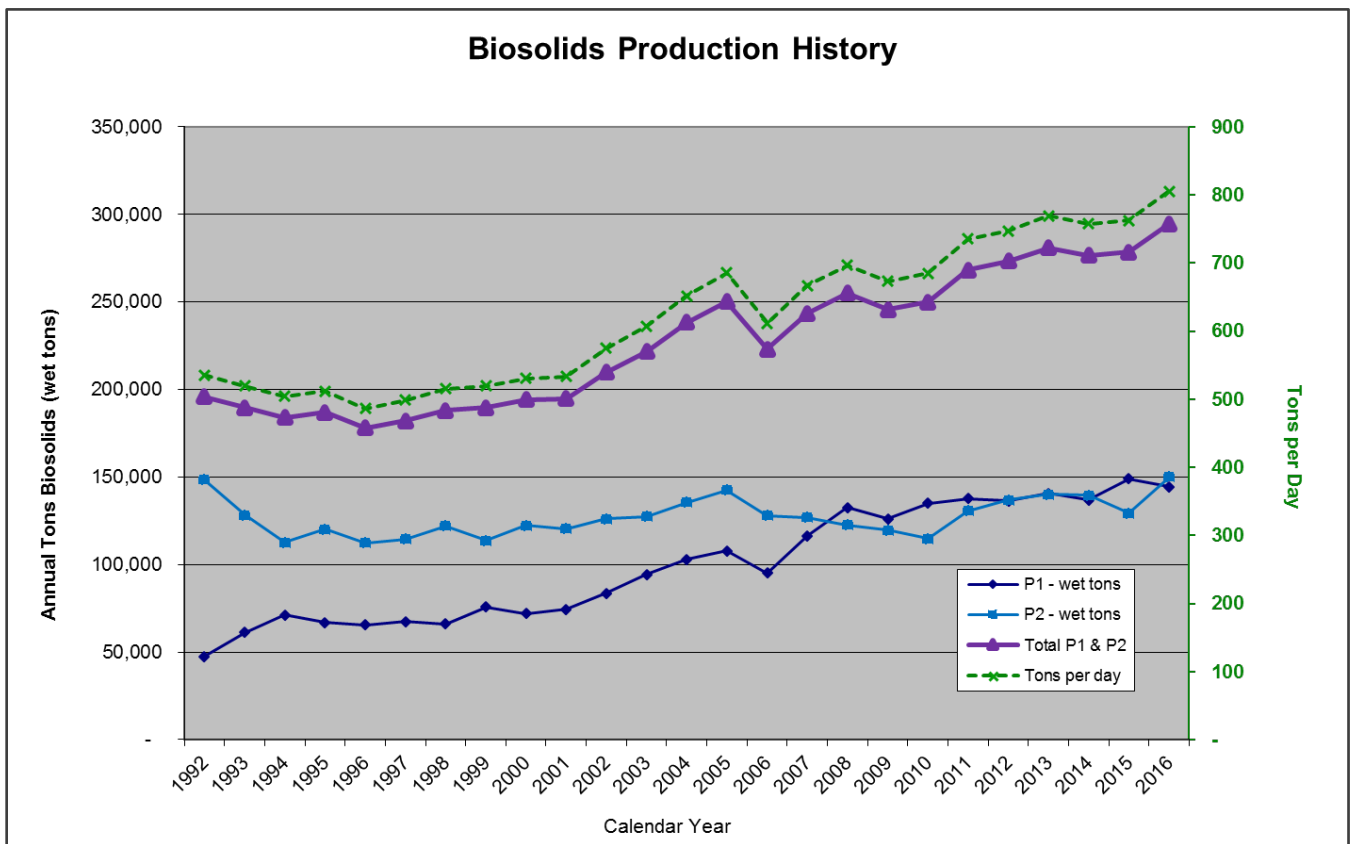


Figure 1: Biosolids Production History from January 1992 – December 2016

## Biosolids Program Policy

Originally adopted in 1999 and amended in 2006 and 2013, OCSD's Resolution 13-03 ([www.ocsd.com/policy](http://www.ocsd.com/policy)), established a policy that commits the agency to support biosolids beneficial reuse (organics recycling). The resolution states OCSD is committed to:

- A sustainable biosolids program.
- Diversifying its portfolio of offsite biosolids management options with multiple biosolids contractors, markets, facilities, and maintaining fail-safe back-up capacity at least 100% of its daily biosolids production.
- Supporting the recycling of biosolids.
- Striving to balance financial, environmental, and societal considerations when making biosolids decisions.
- Utilizing a biosolids management system to maintain a sustainable and publicly supported biosolids program.
- Researching and implementing ways to reduce the volume of biosolids at the treatment plants to minimize the need for offsite management.
- Declaring its support of continuing to research biosolids benefits and potential safety concerns.
- Demonstrating the benefits of biosolids compost by using it at the OCSD's facilities.





# 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

If you do not see the NPDES ID associated with your facility, please Cancel and within the Forms tab submit a NPDES ID Access Request. Complete instructions are available in the Biosolids Users Guide 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: \*

- a POTW with a design flow rate equal to or greater than one million gallons per day
  a POTW that serves 10,000 people or more
  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 \*

01-01-2016

12-31-2016

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	<input type="checkbox"/> Sludge Monitoring - Ascaris ova.	Sludge Monitoring - Ascaris ova., "Method for the Recovery and Assay of Total Culturable Viruses from Sludge (Appendix I)," Control of Pathogens and Vector Attraction in Sewage Sludge", EPA-625-R-92-013, July 2003
	Ascaris ova. <input type="checkbox"/> Other Ascaris ova. Analytical Method:	



Parameter	Method Number or Author	Description Text for Certification Section
Enteric viruses	<input type="checkbox"/> ASTM Method D4994 - Enteric Viruses	ASTM Method D4994 - Enteric Viruses, "Standard Practice for Recovery of Viruses From Wastewater Sludges," ASTM International
	<input type="checkbox"/> Other Enteric Viruses Analytical Method:	
	<input type="checkbox"/> 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]
Fecal coliform	<input type="checkbox"/> Standard Method 9221 - Fecal Coliform	Standard Method 9221 - Fecal Coliform, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
Helminth ova.	<input type="checkbox"/> Other Fecal Coliform Analytical Method:	
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Helminth ova. Analytical Method:	
Salmonella sp. Bacteria	<input type="checkbox"/> Standard Method 9260 - Salmonella	Standard Method 9260 - Salmonella, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Salmonella sp. Bacteria Analytical Method:	
Total Culturable Viruses	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Total Culturable Viruses Analytical Method:	
<b>Metals</b>		
Arsenic	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Arsenic Analytical Method:	
Beryllium	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Beryllium Analytical Method	

Parameter	Method Number or Author	Description Text for Certification Section
Cadmium	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Cadmium Analytical Method:	
Chromium	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Chromium Analytical Method:	
Copper	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Copper Analytical Method:	
Lead	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
Mercury	<input checked="" type="checkbox"/> EPA Method 7471 - Mercury (CVAA)	EPA Method 7471 - Mercury in Solid or Semi-Solid Waste (Cold Vapor Atomic Absorption), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Mercury Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Molybdenum	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Molybdenum Analytical Method:	
Nickel	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Nickel Analytical Method:	
Selenium	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> EPA Method 7740 - Selenium (AA-FT)	EPA Method 7740 - Selenium (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Selenium Analytical Method:	
Zinc	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Zinc Analytical Method:	
<b>Nitrogen Compounds</b>		
Ammonia Nitrogen	<input type="checkbox"/> EPA Method 350.1 - Ammonia Nitrogen	EPA Method 350.1 - Ammonia Nitrogen, "Determination of Ammonia Nitrogen by Semi-Automated Colorimetry," August 1993
	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> Other Ammonia Nitrogen Analytical Method	

Parameter	Method Number or Author	Description Text for Certification Section
Nitrate Nitrogen	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input checked="" type="checkbox"/> Other Nitrate Nitrogen Analytical Method:	EPA 300.0
Nitrogen	<input type="checkbox"/> Standard Method 4500-N - Nitrogen	Standard Method 4500-N - Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> Other Nitrogen Analytical Method:	
	<input type="checkbox"/> 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
Organic Nitrogen	<input checked="" type="checkbox"/> Other Organic Nitrogen Analytical Method:	Calculation
Total Kjeldahl Nitrogen	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> Other Total Kjeldahl Nitrogen Analytical Method:	
<b>Other Analytes</b>		
Fixed Solids	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Fixed Solids Analytical Method:	
Paint Filter Test	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> Other Paint Filter Test Analytical Method:	
pH	<input type="checkbox"/> EPA Method 9040 - pH ( $\leq$ 7% solids)	EPA Method 9040 - pH ( $\leq$ 7% solids), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input checked="" type="checkbox"/> 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
Specific Oxygen Uptake Rate	<input type="checkbox"/> Other pH Analytical Method:	
	<input type="checkbox"/> Standard Method 2710 - SOUR	Standard Method 2710 - Specific Oxygen Uptake Rate, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
TCLP	<input type="checkbox"/> Other Specific Oxygen Uptake Rate Analytical Method:	
	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> Other TCLP Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Temperature	<input type="checkbox"/> Standard Method 2550 - Temperature <input type="checkbox"/> Other Temperature Analytical Method:	Standard Method 2550 - Temperature, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
Total Solids	<input checked="" type="checkbox"/> Standard Method 2540 - Total Solids <input type="checkbox"/> Other Total Solids Analytical Method:	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
Volatile Solids	<input checked="" type="checkbox"/> Standard Method 2540 - Volatile Solids <input type="checkbox"/> Other Volatile Solids Analytical Method:	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
No Analytical Methods	<input type="checkbox"/> 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)? \*

24817

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

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class B	718

#### 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 or Preparer for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

#### Off-Site Third-Party Handler or Preparer Information

NPDES ID (if known)

Facility/Company Name \*

Tule Ranch / Ag-Tech

Address \*

4324 E. Ashlan Ave.

City \*

Fresno

State \*

California

Zip Code \*

93726

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name \*

Shaen

Last Name \*

Magan

Title \*

Owner

Phone (10-digits, No dashes) \*

5599709432

Ext.

E-Mail Address \*

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  |
|---|--|
|   | <b>Class A (must also demonstrate that meet fecal coliform or salmonella limits)</b> |
| <input type="checkbox"/> B1             | Class B-Alternative 1: Fecal Coliform Geometric Mean                                 |
| <input type="checkbox"/> B21            | Class B-Alternative 2 PSRP 1: Aerobic Digestion                                      |
| <input type="checkbox"/> B22            | Class B-Alternative 2 PSRP 2: Air Drying   |
| <input checked="" type="checkbox"/> B23 | Class B-Alternative 2 PSRP 3: Anaerobic Digestion                                    |
| <input type="checkbox"/> B24            | Class B-Alternative 2 PSRP 4: Composting   |
| <input type="checkbox"/> B25            | Class B-Alternative 2 PSRP 5: Lime Stabilization                                     |
| <input type="checkbox"/> B3             | Class B-Alternative 3: PSRP Equivalency  |
| <input type="checkbox"/> 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)
- VR9 Option 9-Sewage Sludge Injection
- 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 or Preparer Type *	Management Practice Detail *
Other Management Practice	Off-Site Third-Party Handler or Preparer	Disposal in a Municipal Landfill (under 40 CFR 258)

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class B	1260

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

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

**Off-Site Third-Party Handler or Preparer Information**

NPDES ID (if known)



Facility/Company Name \*

Orange County Waste and Recycling, Prima Deshecha Landfill

Address \*

32250 La Pata Ave.

City \*

San Juan Capistrano

State \*

California

Zip Code \*

92675

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name \*

Greg

Last Name \*

Dayak

Title \*

Landfill Operations Superintendent

Phone (10-digits, No dashes) \*

9497283050

Ext.

E-Mail Address \*

Greg.Dayak@ocwr.ocgov.com

Do you have any deficiencies to report for this SSUID? \*

Yes  No  Unknown

**SSUID Section**

**Sewage Sludge Unique Identifier (SSUID): 003**

Management Practice Type \*

Land Application

Handler or Preparer Type \*

Off-Site Third-Party Handler or Preparer

Management Practice Detail \*

Distribution and Marketing - Compost

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container \*

Bulk

Pathogen Class \*

Class A EQ (sale/give away)

Volume Amount (dry metric tons) \*

12867

**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 or Preparer for this Sewage Sludge Unique Identifier**

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

**Off-Site Third-Party Handler or Preparer Information**

NPDES ID (if known)

Facility/Company Name \*

Synagro – South Kern Compost Manufacturing Facility

Address \*

P.O. Box 265

City \*

Taft

State \*

California

Zip Code \*

93268

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name \*

Chad

Last Name \*

Buechel

Title \*

Area Manager

Phone (10-digits, No dashes) \*

6617652200

Ext.

223

E-Mail Address \*

cbuechel@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  |
|--|--|
| <b>Class A (must also demonstrate that meet fecal coliform or salmonella limits)</b> |  |
| <input type="checkbox"/> A1  | Class A-Alternative 1: Time/Temperature  |
| <input type="checkbox"/> A2  | Class A-Alternative 2: pH/Temperature/Percent Solids                               |
| <input type="checkbox"/> A3  | Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters |
| <input type="checkbox"/> A4  | Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids        |
| <input checked="" type="checkbox"/> A51  | Class A-Alternative 5 PFRP 1: Composting   |
| <input type="checkbox"/> A52   | Class A-Alternative 5 PFRP 2: Heat Drying  |
| <input type="checkbox"/> A53   | Class A-Alternative 5 PFRP 3: Liquid Heat Treatment                                |
| <input type="checkbox"/> A54   | Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)                |
| <input type="checkbox"/> A55   | Class A-Alternative 5 PFRP 5: Beta Ray Irradiation                                 |
| <input type="checkbox"/> A56   | Class A-Alternative 5 PFRP 6: Gamma Ray Irradiation                                |
| <input type="checkbox"/> A57   | Class A-Alternative 5 PFRP 7: Pasteurization                                       |
| <input type="checkbox"/> A6  | Class A-Alternative 6: PFRP Equivalency  |
| <input type="checkbox"/> 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 or Preparer Type *	Management Practice Detail *
<input type="text" value="Land Application"/>	<input type="text" value="Off-Site Third-Party Handler or Preparer"/>	<input type="text" value="Distribution and Marketing - Compost"/>

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
<input type="text" value="Bulk"/>	<input type="text" value="Class A EQ (sale/give away)"/>	<input type="text" value="8593"/>

**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 or Preparer for this Sewage Sludge Unique Identifier**

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

**Off-Site Third-Party Handler or Preparer Information**

NPDES ID (if known)

Facility/Company Name \*

Address \*

City *	State *	Zip Code *
<input type="text" value="Tolleson"/>	<input type="text" value="Arizona"/>	<input type="text" value="85353"/>

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name *	Last Name *	Title *
<input type="text" value="Craig"/>	<input type="text" value="Geyer"/>	<input type="text" value="Senior Operations Manager"/>
Phone (10-digits, No dashes) *	Ext.	E-Mail Address *
<input type="text" value="6239366328"/>	<input type="text"/>	<input type="text" value="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   | <b>Pathogen Reduction Option</b> |  |
|--|----------------------------------|--|
| <b>Class A (must also demonstrate that meet fecal coliform or salmonella limits)</b> |                                  |  |
| <input type="checkbox"/>   | A1                               | Class A-Alternative 1: Time/Temperature  |
| <input type="checkbox"/>   | A2                               | Class A-Alternative 2: pH/Temperature/Percent Solids                               |
| <input type="checkbox"/>   | A3                               | Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters |
| <input type="checkbox"/>   | A4                               | Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids        |
| <input checked="" type="checkbox"/>  | A51                              | Class A-Alternative 5 PFRP 1: Composting   |
| <input type="checkbox"/>   | A52                              | Class A-Alternative 5 PFRP 2: Heat Drying  |
| <input type="checkbox"/>   | A53                              | Class A-Alternative 5 PFRP 3: Liquid Heat Treatment                                |
| <input type="checkbox"/>   | A54                              | Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)                |
| <input type="checkbox"/>   | A55                              | Class A-Alternative 5 PFRP 5: Beta Ray Irradiation                                 |
| <input type="checkbox"/>   | A56                              | Class A-Alternative 5 PFRP 6: Gamma Ray Irradiation                                |
| <input type="checkbox"/>   | A57                              | Class A-Alternative 5 PFRP 7: Pasteurization                                       |
| <input type="checkbox"/>   | A6                               | Class A-Alternative 6: PFRP Equivalency  |
| <input type="checkbox"/>   | 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**

- |                                     |     |  |
|-------------------------------------|-----|--|
| <input checked="" type="checkbox"/> | VR1 | Option 1-Volatile Solids Reduction   |
| <input type="checkbox"/>            | VR2 | Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)  |
| <input type="checkbox"/>            | VR3 | Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less) |
| <input type="checkbox"/>            | VR4 | Option 4-Specific Oxygen Uptake Rate   |
| <input checked="" type="checkbox"/> | VR5 | Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)  |
| <input type="checkbox"/>            | VR6 | Option 6-Alkaline Treatment  |
| <input type="checkbox"/>            | VR7 | Option 7-Drying (Equal to or Greater than 75 Percent)  |
| <input type="checkbox"/>            | 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 or Preparer Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Handler or Preparer	Distribution and Marketing - Compost

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class A EQ (sale/give away)	50

#### 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 or Preparer for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

#### Off-Site Third-Party Handler or Preparer Information

NPDES ID (if known)

Facility/Company Name \*

Address \*

City \*

State \*

Zip Code \*

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name \*

Last Name \*

Title \*

Phone (10-digits, No dashes) \*

Ext.

E-Mail Address \*

**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   |
|-------------------------------------|---|
| <input type="checkbox"/>            | A1 Class A-Alternative 1: Time/Temperature  |
| <input type="checkbox"/>            | A2 Class A-Alternative 2: pH/Temperature/Percent Solids                               |
| <input type="checkbox"/>            | A3 Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters |
| <input type="checkbox"/>            | A4 Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids        |
| <input checked="" type="checkbox"/> | A51 Class A-Alternative 5 PFRP 1: Composting  |
| <input type="checkbox"/>            | A52 Class A-Alternative 5 PFRP 2: Heat Drying   |
| <input type="checkbox"/>            | A53 Class A-Alternative 5 PFRP 3: Liquid Heat Treatment                               |
| <input type="checkbox"/>            | A54 Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)               |
| <input type="checkbox"/>            | A55 Class A-Alternative 5 PFRP 5: Beta Ray Irradiation                                |
| <input type="checkbox"/>            | A56 Class A-Alternative 5 PFRP 6: Gamma Ray Irradiation                               |
| <input type="checkbox"/>            | A57 Class A-Alternative 5 PFRP 7: Pasteurization                                      |
| <input type="checkbox"/>            | A6 Class A-Alternative 6: PFRP Equivalency  |
| <input type="checkbox"/>            | 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): 006**

Management Practice Type *	Handler or Preparer Type *	Management Practice Detail *
<input type="text" value="Land Application"/>	<input type="text" value="Off-Site Third-Party Handler or Preparer"/>	<input type="text" value="Distribution and Marketing - Compost"/>

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
<input type="text" value="Bulk"/>	<input type="text" value="Class A EQ (sale/give away)"/>	<input type="text" value="751"/>

**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 or Preparer for this Sewage Sludge Unique Identifier**

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

**Off-Site Third-Party Handler or Preparer Information**

NPDES ID (if known)

Facility/Company Name \*

Address \*

City *	State *	Zip Code *
<input type="text" value="Helendale"/>	<input type="text" value="California"/>	<input type="text" value="92342"/>

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name *	Last Name *	Title *
<input type="text" value="Chad"/>	<input type="text" value="Buechel"/>	<input type="text" value="Area Manager"/>
Phone (10-digits, No dashes) *	Ext.	E-Mail Address *
<input type="text" value="6613782515"/>	<input type="text"/>	<input type="text" value="cbuechel@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   | <b>Pathogen Reduction Option</b> |  |
|--|----------------------------------|--|
| <b>Class A (must also demonstrate that meet fecal coliform or salmonella limits)</b> |                                  |  |
| <input type="checkbox"/>   | A1                               | Class A-Alternative 1: Time/Temperature  |
| <input type="checkbox"/>   | A2                               | Class A-Alternative 2: pH/Temperature/Percent Solids                               |
| <input type="checkbox"/>   | A3                               | Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters |
| <input type="checkbox"/>   | A4                               | Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids        |
| <input checked="" type="checkbox"/>  | A51                              | Class A-Alternative 5 PFRP 1: Composting   |
| <input type="checkbox"/>   | A52                              | Class A-Alternative 5 PFRP 2: Heat Drying  |
| <input type="checkbox"/>   | A53                              | Class A-Alternative 5 PFRP 3: Liquid Heat Treatment                                |
| <input type="checkbox"/>   | A54                              | Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)                |
| <input type="checkbox"/>   | A55                              | Class A-Alternative 5 PFRP 5: Beta Ray Irradiation                                 |
| <input type="checkbox"/>   | A56                              | Class A-Alternative 5 PFRP 6: Gamma Ray Irradiation                                |
| <input type="checkbox"/>   | A57                              | Class A-Alternative 5 PFRP 7: Pasteurization                                       |
| <input type="checkbox"/>   | A6                               | Class A-Alternative 6: PFRP Equivalency  |
| <input type="checkbox"/>   | 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**

- |                                     |     |  |
|-------------------------------------|-----|--|
| <input checked="" type="checkbox"/> | VR1 | Option 1-Volatile Solids Reduction   |
| <input type="checkbox"/>            | VR2 | Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)  |
| <input type="checkbox"/>            | VR3 | Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less) |
| <input type="checkbox"/>            | VR4 | Option 4-Specific Oxygen Uptake Rate   |
| <input checked="" type="checkbox"/> | VR5 | Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)  |
| <input type="checkbox"/>            | VR6 | Option 6-Alkaline Treatment  |
| <input type="checkbox"/>            | VR7 | Option 7-Drying (Equal to or Greater than 75 Percent)  |
| <input type="checkbox"/>            | 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): 007

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

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class A EQ (sale/give away)	147

#### 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 or Preparer for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

#### Off-Site Third-Party Handler or Preparer Information

NPDES ID (if known)

Facility/Company Name \*

Address \*

City \*

State \*

Zip Code \*

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name \*

Last Name \*

Title \*

Phone (10-digits, No dashes) \*

Ext.

E-Mail Address \*

**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  |
|---|--|
| <input type="checkbox"/> A1             | Class A-Alternative 1: Time/Temperature  |
| <input type="checkbox"/> A2             | Class A-Alternative 2: pH/Temperature/Percent Solids                               |
| <input type="checkbox"/> A3             | Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters |
| <input type="checkbox"/> A4             | Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids        |
| <input checked="" type="checkbox"/> A51 | Class A-Alternative 5 PFRP 1: Composting   |
| <input type="checkbox"/> A52            | Class A-Alternative 5 PFRP 2: Heat Drying  |
| <input type="checkbox"/> A53            | Class A-Alternative 5 PFRP 3: Liquid Heat Treatment                                |
| <input type="checkbox"/> A54            | Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)                |
| <input type="checkbox"/> A55            | Class A-Alternative 5 PFRP 5: Beta Ray Irradiation                                 |
| <input type="checkbox"/> A56            | Class A-Alternative 5 PFRP 6: Gamma Ray Irradiation                                |
| <input type="checkbox"/> A57            | Class A-Alternative 5 PFRP 7: Pasteurization                                       |
| <input type="checkbox"/> A6             | Class A-Alternative 6: PFRP Equivalency  |
| <input type="checkbox"/> 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 provide additional explanatory details in the comment box below (limit to 3,900 characters) or attach a PDF file if you are reporting any noncompliance with EPA's Federal sewage sludge program requirements (see [40 CFR 503](#)) for this SSUID during the reporting period. In particular, please note the sewage sludge tonnage related to the deficiencies identified above.

See attachment submitted with form.

Land Application Deficiencies PDF Attachment

File: None

Check when done with SSUID section. \*

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.

**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		
January	February	March	April	May	June
= 6.7	= 6.7	= 11	= 7.3	= 7.6	= 12
July	August	September	October	November	December
= 8.6	= 7.0	= 8.6	= 6.8	= 7.6	= 8.2

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type		
Cadmium	Maximum	mg/kg	COMPOS		
January	February	March	April	May	June
= 1.8	= 2.3	= 2.9	= 1.5	= 1.3	= 2.7
July	August	September	October	November	December
= 3.4	= 2.9	= 4.0	= 9.7	= 6.9	= 4.5

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Copper		Maximum	mg/kg		COMPOS	
January	February	March	April	May	June	
= 450	= 520	= 490	= 480	= 410	= 480	
July	August	September	October	November	December	
= 540	= 410	= 540	= 520	= 460	= 420	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Lead		Maximum	mg/kg		COMPOS	
January	February	March	April	May	June	
= 11	< 23	= 12	= 14	< 12	< 25	
July	August	September	October	November	December	
< 12	< 13	= 12	= 12	= 17	< 12	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Mercury		Maximum	mg/kg		COMPOS	
January	February	March	April	May	June	
= 0.70	= 1.0	= 0.61	= 0.65	= 1.9	= 1.5	
July	August	September	October	November	December	
= 0.88	= 0.55	= 0.96	= 0.95	= 0.95	= 1.3	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Molybdenum		Maximum	mg/kg		COMPOS	
January	February	March	April	May	June	
= 14	= 13	= 13	= 15	= 13	= 16	
July	August	September	October	November	December	
= 17	= 12	= 25	= 17	= 16	= 14	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Nickel		Maximum	mg/kg		COMPOS	
January	February	March	April	May	June	
= 55	= 31	= 36	= 36	= 34	= 46	
July	August	September	October	November	December	
= 43	= 25	= 37	= 33	= 29	= 27	

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type		
Nitrogen	Average	mg/kg	COMPOS		
January	February	March	April	May	June
= 53000	= 59000	= 61000	= 49000	= 45000	= 56000
July	August	September	October	November	December
= 54000	= 55000	= 58000	= 51000	= 50000	= 55000

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type		
Selenium	Maximum	mg/kg	COMPOS		
January	February	March	April	May	June
= 10	= 14	= 9.7	= 11	= 5.1	= 12
July	August	September	October	November	December
= 8.2	= 12	= 12	= 9.9	= 11	= 6.7

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type		
Zinc	Maximum	mg/kg	COMPOS		
January	February	March	April	May	June
= 620	= 570	= 620	= 640	= 550	= 670
July	August	September	October	November	December
= 710	= 560	= 750	= 710	= 630	= 610

**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		
January	February	March	April	May	June
= 6.3	= 6.4	= 8.3	= 7.0	= 6.7	= 12
July	August	September	October	November	December
= 8.0	= 6.7	= 7.6	= 6.7	= 7.6	= 7.7

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type		
Cadmium	Average	mg/kg	COMPOS		
January	February	March	April	May	June
= 1.6	< 2.3	= 2.4	= 1.3	= 1.3	= 2.7
July	August	September	October	November	December
= 3.1	= 2.6	= 3.6	= 6.1	= 6.0	= 4.2



Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Copper		Average	mg/kg	COMPOS	
January	February	March	April	May	June
= 390	= 440	= 450	= 480	= 410	= 450
July	August	September	October	November	December
= 490	= 400	= 520	= 490	= 440	= 420

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Lead		Average	mg/kg	COMPOS	
January	February	March	April	May	June
< 11	< 23	< 11	= 14	< 12	< 25
July	August	September	October	November	December
< 12	< 13	< 13	= 11	= 14	< 12

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Mercury		Average	mg/kg	COMPOS	
January	February	March	April	May	June
= 0.62	= 0.87	= 0.60	= 0.64	= 1.7	= 1.3
July	August	September	October	November	December
= 0.82	= 0.53	= 0.94	= 0.87	= 0.82	= 1.0

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Nickel		Average	mg/kg	COMPOS	
January	February	March	April	May	June
= 44	= 29	= 31	= 36	= 34	= 43
July	August	September	October	November	December
= 39	= 25	= 37	= 30	= 27	= 27

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Selenium		Average	mg/kg	COMPOS	
January	February	March	April	May	June
= 9.7	= 9.8	= 9.1	= 10	= 4.4	= 9.3
July	August	September	October	November	December
= 8.0	= 9.3	= 8.8	= 8.1	= 8.6	= 5.4

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Zinc		Average	mg/kg	COMPOS	
January	February	March	April	May	June
= 540	= 500	= 560	= 640	= 540	= 630
July	August	September	October	November	December
= 670	= 550	= 700	= 670	= 600	= 610

**Pathogens: Class A, Fecal Coliform \***

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Fecal Coliform		Geometric Mean	MPN/gram	GRAB-7	
January	February	March	April	May	June
N	N	N	N	N	N
July	August	September	October	November	December
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		Geometric Mean	MPN per 4 grams	GRAB-7	
January	February	March	April	May	June
N	N	N	N	N	N
July	August	September	October	November	December
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	
January	February	March	April	May	June
= 62	= 63	= 61	= 59	= 58	= 54
July	August	September	October	November	December
= 60	= 61	= 62	= 62	= 62	= 60

Additional Information

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

- Reported "organic nitrogen" in "Nitrogen" fields above.
- Attached is OCSD's Biosolids Management Compliance Report including the Priority Pollutants report in Appendix C.
- OCSD does not monitor biosolids for indicator organisms because we produce Class B via time and temperature in anaerobic digesters (N chosen for fecal coliform and salmonella).
- Reported value for VSR is an average calculation using two flow-weighted sample results and average monthly flows.
- Per OCSD's email to EPA on 2/2/17, for consistency with OCSD's historical reporting practices, OCSD has reported our biosolids data to the reporting limit (RL). OCSD will follow-up with EPA to address this matter for 2017 reporting.

#### Additional Attachments

File: 2016\_OCSD\_Annual\_Biosolids\_Compliance\_Report\_503.pdf

#### Certification Information

Certifier E-Mail \*

rcoss@ocsd.com

Confirm Certifier: rcoss@ocsd.com \*



# 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

If you do not see the NPDES ID associated with your facility, please Cancel and within the Forms tab submit a NPDES ID Access Request. Complete instructions are available in the Biosolids Users Guide 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: \*

- a POTW with a design flow rate equal to or greater than one million gallons per day     a POTW that serves 10,000 people or more     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 \*

01-01-2016

12-31-2016

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	<input type="checkbox"/> Sludge Monitoring - Ascaris ova.	Sludge Monitoring - Ascaris ova., "Method for the Recovery and Assay of Total Culturable Viruses from Sludge (Appendix I)," Control of Pathogens and Vector Attraction in Sewage Sludge", EPA-625-R-92-013, July 2003
	Ascaris ova. <input type="checkbox"/> Other Ascaris ova. Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Enteric viruses	<input type="checkbox"/> ASTM Method D4994 - Enteric Viruses	ASTM Method D4994 - Enteric Viruses, "Standard Practice for Recovery of Viruses From Wastewater Sludges," ASTM International
	<input type="checkbox"/> Other Enteric Viruses Analytical Method:	
	<input type="checkbox"/> 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]
Fecal coliform	<input type="checkbox"/> Standard Method 9221 - Fecal Coliform	Standard Method 9221 - Fecal Coliform, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
Helminth ova.	<input type="checkbox"/> Other Fecal Coliform Analytical Method:	
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Helminth ova. Analytical Method:	
Salmonella sp. Bacteria	<input type="checkbox"/> Standard Method 9260 - Salmonella	Standard Method 9260 - Salmonella, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Salmonella sp. Bacteria Analytical Method:	
Total Culturable Viruses	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Total Culturable Viruses Analytical Method:	
<b>Metals</b>		
Arsenic	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Arsenic Analytical Method:	
Beryllium	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Beryllium Analytical Method	

Parameter	Method Number or Author	Description Text for Certification Section
Cadmium	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Cadmium Analytical Method:	
Chromium	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Chromium Analytical Method:	
Copper	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Copper Analytical Method:	
Lead	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
Mercury	<input checked="" type="checkbox"/> EPA Method 7471 - Mercury (CVAA)	EPA Method 7471 - Mercury in Solid or Semi-Solid Waste (Cold Vapor Atomic Absorption), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> Other Mercury Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Molybdenum	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Molybdenum Analytical Method:	
Nickel	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Nickel Analytical Method:	
Selenium	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> EPA Method 7740 - Selenium (AA-FT)	EPA Method 7740 - Selenium (Atomic Absorption - Furnace Technique), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Selenium Analytical Method:	
Zinc	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Zinc Analytical Method:	
<b>Nitrogen Compounds</b>		
Ammonia Nitrogen	<input type="checkbox"/> EPA Method 350.1 - Ammonia Nitrogen	EPA Method 350.1 - Ammonia Nitrogen, "Determination of Ammonia Nitrogen by Semi-Automated Colorimetry," August 1993
	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> Other Ammonia Nitrogen Analytical Method	



Parameter	Method Number or Author	Description Text for Certification Section
Nitrate Nitrogen	<input type="checkbox"/> 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
	<input type="checkbox"/> 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
	<input checked="" type="checkbox"/> Other Nitrate Nitrogen Analytical Method:	EPA 300.0
Nitrogen	<input type="checkbox"/> Standard Method 4500-N - Nitrogen	Standard Method 4500-N - Nitrogen, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
	<input type="checkbox"/> Other Nitrogen Analytical Method:	
	<input type="checkbox"/> 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
Organic Nitrogen	<input checked="" type="checkbox"/> Other Organic Nitrogen Analytical Method:	Calculation
Total Kjeldahl Nitrogen	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> Other Total Kjeldahl Nitrogen Analytical Method:	
<b>Other Analytes</b>		
Fixed Solids	<input type="checkbox"/> 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
	<input type="checkbox"/> Other Fixed Solids Analytical Method:	
Paint Filter Test	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> Other Paint Filter Test Analytical Method:	
pH	<input type="checkbox"/> EPA Method 9040 - pH ( $\leq$ 7% solids)	EPA Method 9040 - pH ( $\leq$ 7% solids), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. SW-846
	<input checked="" type="checkbox"/> 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
Specific Oxygen Uptake Rate	<input type="checkbox"/> Other pH Analytical Method:	
	<input type="checkbox"/> Standard Method 2710 - SOUR	Standard Method 2710 - Specific Oxygen Uptake Rate, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
TCLP	<input type="checkbox"/> Other Specific Oxygen Uptake Rate Analytical Method:	
	<input checked="" type="checkbox"/> 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
	<input type="checkbox"/> Other TCLP Analytical Method:	

Parameter	Method Number or Author	Description Text for Certification Section
Temperature	<input type="checkbox"/> Standard Method 2550 - Temperature <input type="checkbox"/> Other Temperature Analytical Method:	Standard Method 2550 - Temperature, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
Total Solids	<input checked="" type="checkbox"/> Standard Method 2540 - Total Solids <input type="checkbox"/> Other Total Solids Analytical Method:	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
Volatile Solids	<input checked="" type="checkbox"/> Standard Method 2540 - Volatile Solids <input type="checkbox"/> Other Volatile Solids Analytical Method:	Standard Method 2540 - Total, fixed, and volatile solids, "Standard Methods for the Examination of Water and Wastewater," American Public Health Association
No Analytical Methods	<input type="checkbox"/> 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)? \*

29534

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

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class B	26183

#### 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 or Preparer for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

#### Off-Site Third-Party Handler or Preparer Information

NPDES ID (if known)

Facility/Company Name \*

Tule Ranch / Ag-Tech

Address \*

4324 E. Ashlan Ave.

City \*

Fresno

State \*

California

Zip Code \*

93726

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name \*

Shaen

Last Name \*

Magan

Title \*

Owner

Phone (10-digits, No dashes) \*

5599709432

Ext.

E-Mail Address \*

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                            |
|--|--|
| <b>Class A (must also demonstrate that meet fecal coliform or salmonella limits)</b> |  |
| <input type="checkbox"/> B1  | Class B-Alternative 1: Fecal Coliform Geometric Mean |
| <input type="checkbox"/> B21   | Class B-Alternative 2 PSRP 1: Aerobic Digestion      |
| <input type="checkbox"/> B22   | Class B-Alternative 2 PSRP 2: Air Drying             |
| <input checked="" type="checkbox"/> B23  | Class B-Alternative 2 PSRP 3: Anaerobic Digestion    |
| <input type="checkbox"/> B24   | Class B-Alternative 2 PSRP 4: Composting             |
| <input type="checkbox"/> B25   | Class B-Alternative 2 PSRP 5: Lime Stabilization     |
| <input type="checkbox"/> B3  | Class B-Alternative 3: PSRP Equivalency              |
| <input type="checkbox"/> 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)
- VR9 Option 9-Sewage Sludge Injection
- 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 or Preparer Type *	Management Practice Detail *
Land Application	Off-Site Third-Party Handler or Preparer	Distribution and Marketing - Compost

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
Bulk	Class A EQ (sale/give away)	905

**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 or Preparer for this Sewage Sludge Unique Identifier**

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

**Off-Site Third-Party Handler or Preparer Information**

NPDES ID (if known)

Facility/Company Name \*

Address \*

City \*

State \*

Zip Code \*

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name \*

Last Name \*

Title \*

Phone (10-digits, No dashes) \*

Ext.

E-Mail Address \*

**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   |
|-------------------------------------|---|
| <input type="checkbox"/>            | A1 Class A-Alternative 1: Time/Temperature  |
| <input type="checkbox"/>            | A2 Class A-Alternative 2: pH/Temperature/Percent Solids                               |
| <input type="checkbox"/>            | A3 Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters |
| <input type="checkbox"/>            | A4 Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids        |
| <input checked="" type="checkbox"/> | A51 Class A-Alternative 5 PFRP 1: Composting  |
| <input type="checkbox"/>            | A52 Class A-Alternative 5 PFRP 2: Heat Drying   |
| <input type="checkbox"/>            | A53 Class A-Alternative 5 PFRP 3: Liquid Heat Treatment                               |
| <input type="checkbox"/>            | A54 Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)               |
| <input type="checkbox"/>            | A55 Class A-Alternative 5 PFRP 5: Beta Ray Irradiation                                |
| <input type="checkbox"/>            | A56 Class A-Alternative 5 PFRP 6: Gamma Ray Irradiation                               |
| <input type="checkbox"/>            | A57 Class A-Alternative 5 PFRP 7: Pasteurization                                      |
| <input type="checkbox"/>            | A6 Class A-Alternative 6: PFRP Equivalency  |
| <input type="checkbox"/>            | 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 or Preparer Type *	Management Practice Detail *
<input type="text" value="Land Application"/>	<input type="text" value="Off-Site Third-Party Handler or Preparer"/>	<input type="text" value="Agricultural Land Applicaton"/>

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
<input type="text" value="Bulk"/>	<input type="text" value="Class A EQ (sale/give away)"/>	<input type="text" value="64"/>

**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 or Preparer for this Sewage Sludge Unique Identifier**

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

**Off-Site Third-Party Handler or Preparer Information**

NPDES ID (if known)

Facility/Company Name \*

Address \*

City *	State *	Zip Code *
<input type="text" value="Helendale"/>	<input type="text" value="California"/>	<input type="text" value="92342"/>

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name *	Last Name *	Title *
<input type="text" value="Chad"/>	<input type="text" value="Buechel"/>	<input type="text" value="Area Manager"/>
Phone (10-digits, No dashes) *	Ext.	E-Mail Address *
<input type="text" value="6613782515"/>	<input type="text"/>	<input type="text" value="cbuechel@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   | <b>Pathogen Reduction Option</b> |  |
|--|----------------------------------|--|
| <b>Class A (must also demonstrate that meet fecal coliform or salmonella limits)</b> |                                  |  |
| <input type="checkbox"/>   | A1                               | Class A-Alternative 1: Time/Temperature  |
| <input type="checkbox"/>   | A2                               | Class A-Alternative 2: pH/Temperature/Percent Solids                               |
| <input type="checkbox"/>   | A3                               | Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters |
| <input type="checkbox"/>   | A4                               | Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids        |
| <input checked="" type="checkbox"/>  | A51                              | Class A-Alternative 5 PFRP 1: Composting   |
| <input type="checkbox"/>   | A52                              | Class A-Alternative 5 PFRP 2: Heat Drying  |
| <input type="checkbox"/>   | A53                              | Class A-Alternative 5 PFRP 3: Liquid Heat Treatment                                |
| <input type="checkbox"/>   | A54                              | Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)                |
| <input type="checkbox"/>   | A55                              | Class A-Alternative 5 PFRP 5: Beta Ray Irradiation                                 |
| <input type="checkbox"/>   | A56                              | Class A-Alternative 5 PFRP 6: Gamma Ray Irradiation                                |
| <input type="checkbox"/>   | A57                              | Class A-Alternative 5 PFRP 7: Pasteurization                                       |
| <input type="checkbox"/>   | A6                               | Class A-Alternative 6: PFRP Equivalency  |
| <input type="checkbox"/>   | 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**

- |                                     |     |  |
|-------------------------------------|-----|--|
| <input checked="" type="checkbox"/> | VR1 | Option 1-Volatile Solids Reduction   |
| <input type="checkbox"/>            | VR2 | Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)  |
| <input type="checkbox"/>            | VR3 | Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less) |
| <input type="checkbox"/>            | VR4 | Option 4-Specific Oxygen Uptake Rate   |
| <input checked="" type="checkbox"/> | VR5 | Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)  |
| <input type="checkbox"/>            | VR6 | Option 6-Alkaline Treatment  |
| <input type="checkbox"/>            | VR7 | Option 7-Drying (Equal to or Greater than 75 Percent)  |
| <input type="checkbox"/>            | 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 or Preparer Type *	Management Practice Detail *
<input type="text" value="Land Application"/>	<input type="text" value="Off-Site Third-Party Handler or Preparer"/>	<input type="text" value="Agricultural Land Applicaton"/>

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
<input type="text" value="Bulk"/>	<input type="text" value="Class A EQ (sale/give away)"/>	<input type="text" value="1168"/>

#### 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 or Preparer for this Sewage Sludge Unique Identifier

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

#### Off-Site Third-Party Handler or Preparer Information

NPDES ID (if known)

Facility/Company Name \*

Address \*

City \*

State \*

Zip Code \*

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name \*

Last Name \*

Title \*

Phone (10-digits, No dashes) \*

Ext.

E-Mail Address \*

**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   |
|-------------------------------------|---|
| <input type="checkbox"/>            | A1 Class A-Alternative 1: Time/Temperature  |
| <input type="checkbox"/>            | A2 Class A-Alternative 2: pH/Temperature/Percent Solids                               |
| <input type="checkbox"/>            | A3 Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters |
| <input type="checkbox"/>            | A4 Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids        |
| <input checked="" type="checkbox"/> | A51 Class A-Alternative 5 PFRP 1: Composting  |
| <input type="checkbox"/>            | A52 Class A-Alternative 5 PFRP 2: Heat Drying   |
| <input type="checkbox"/>            | A53 Class A-Alternative 5 PFRP 3: Liquid Heat Treatment                               |
| <input type="checkbox"/>            | A54 Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)               |
| <input type="checkbox"/>            | A55 Class A-Alternative 5 PFRP 5: Beta Ray Irradiation                                |
| <input type="checkbox"/>            | A56 Class A-Alternative 5 PFRP 6: Gamma Ray Irradiation                               |
| <input type="checkbox"/>            | A57 Class A-Alternative 5 PFRP 7: Pasteurization                                      |
| <input type="checkbox"/>            | A6 Class A-Alternative 6: PFRP Equivalency  |
| <input type="checkbox"/>            | 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 or Preparer Type *	Management Practice Detail *
<input type="text" value="Land Application"/>	<input type="text" value="Off-Site Third-Party Handler or Preparer"/>	<input type="text" value="Distribution and Marketing - Compost"/>

**Please Note:** Land Application includes the distribution and marketing (sale or give away) of Class A EQ.

Bulk or Bag/Container *	Pathogen Class *	Volume Amount (dry metric tons) *
<input type="text" value="Bulk"/>	<input type="text" value="Class A EQ (sale/give away)"/>	<input type="text" value="1215"/>

**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 or Preparer for this Sewage Sludge Unique Identifier**

Please complete the following information for the Off-Site Third-Party Handler or Preparer 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 Look Up button, then no data exists and you must enter the information

**Off-Site Third-Party Handler or Preparer Information**

NPDES ID (if known)

Facility/Company Name \*

Address \*

City *	State *	Zip Code *
<input type="text" value="Tolleson"/>	<input type="text" value="Arizona"/>	<input type="text" value="85353"/>

**Off-Site Third-Party Handler or Preparer Contact Information**

First Name *	Last Name *	Title *
<input type="text" value="Craig"/>	<input type="text" value="Geyer"/>	<input type="text" value="Senior Operations Manager"/>
Phone (10-digits, No dashes) *	Ext.	E-Mail Address *
<input type="text" value="6239366328"/>	<input type="text"/>	<input type="text" value="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   | <b>Pathogen Reduction Option</b> |  |
|--|----------------------------------|--|
| <b>Class A (must also demonstrate that meet fecal coliform or salmonella limits)</b> |                                  |  |
| <input type="checkbox"/>   | A1                               | Class A-Alternative 1: Time/Temperature  |
| <input type="checkbox"/>   | A2                               | Class A-Alternative 2: pH/Temperature/Percent Solids                               |
| <input type="checkbox"/>   | A3                               | Class A-Alternative 3: Test Enteric Viruses and Helminth ova; Operating Parameters |
| <input type="checkbox"/>   | A4                               | Class A-Alternative 4: Test Enteric Viruses and Helminth ova; No New Solids        |
| <input checked="" type="checkbox"/>  | A51                              | Class A-Alternative 5 PFRP 1: Composting   |
| <input type="checkbox"/>   | A52                              | Class A-Alternative 5 PFRP 2: Heat Drying  |
| <input type="checkbox"/>   | A53                              | Class A-Alternative 5 PFRP 3: Liquid Heat Treatment                                |
| <input type="checkbox"/>   | A54                              | Class A-Alternative 5 PFRP 4: Thermophilic Aerobic Digestion (ATAD)                |
| <input type="checkbox"/>   | A55                              | Class A-Alternative 5 PFRP 5: Beta Ray Irradiation                                 |
| <input type="checkbox"/>   | A56                              | Class A-Alternative 5 PFRP 6: Gamma Ray Irradiation                                |
| <input type="checkbox"/>   | A57                              | Class A-Alternative 5 PFRP 7: Pasteurization                                       |
| <input type="checkbox"/>   | A6                               | Class A-Alternative 6: PFRP Equivalency  |
| <input type="checkbox"/>   | 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**

- |                                     |     |  |
|-------------------------------------|-----|--|
| <input checked="" type="checkbox"/> | VR1 | Option 1-Volatile Solids Reduction   |
| <input type="checkbox"/>            | VR2 | Option 2-Bench-Scale Volatile Solids Reduction (Anaerobic Bench Test)  |
| <input type="checkbox"/>            | VR3 | Option 3-Bench-Scale Volatile Solids Reduction (Aerobic Bench Test with Percent Solids of Two Percent or Less) |
| <input type="checkbox"/>            | VR4 | Option 4-Specific Oxygen Uptake Rate   |
| <input checked="" type="checkbox"/> | VR5 | Option 5-Aerobic Processing (Thermophilic Aerobic Digestion/Composting)  |
| <input type="checkbox"/>            | VR6 | Option 6-Alkaline Treatment  |
| <input type="checkbox"/>            | VR7 | Option 7-Drying (Equal to or Greater than 75 Percent)  |
| <input type="checkbox"/>            | 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](#)).
- Check when done with SSUID section. \*

**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.

**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							
				January	February	March	April	May	June	
				= 6.8	= 9.5	= 10	= 9.1	= 8.1	= 11	
				July	August	September	October	November	December	
				= 8.3	= 5.7	= 7.2	= 7.6	= 6.4	= 6.6	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Cadmium		Maximum	mg/kg	COMPOS	
January	February	March	April	May	June
= 2.5	= 3.3	= 3.4	= 2.4	= 2.2	= 3.4
July	August	September	October	November	December
= 3.6	= 3.8	= 5.1	= 9.1	= 7.6	= 5.3

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Copper		Maximum	mg/kg	COMPOS	
January	February	March	April	May	June
= 450	= 500	= 510	= 550	= 470	= 470
July	August	September	October	November	December
= 550	= 480	= 520	= 490	= 570	= 520

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Lead		Maximum	mg/kg	COMPOS	
January	February	March	April	May	June
= 11	< 18	= 12	= 15	= 11	< 20
July	August	September	October	November	December
< 10	= 12	= 14	= 13	= 15	= 14

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Mercury		Maximum	mg/kg	COMPOS	
January	February	March	April	May	June
= 0.70	= 1.2	= 1.0	= 1.2	= 0.94	= 1.3
July	August	September	October	November	December
= 1.0	= 0.74	= 1.2	= 0.92	= 0.89	= 0.82

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)	Sample Type	
Molybdenum		Maximum	mg/kg	COMPOS	
January	February	March	April	May	June
= 12	= 14	= 14	= 16	= 15	= 16
July	August	September	October	November	December
= 18	= 15	= 18	= 16	= 16	= 16



Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type		
Nickel	Maximum	mg/kg	COMPOS		
January	February	March	April	May	June
= 49	= 33	= 33	= 31	= 30	= 32
July	August	September	October	November	December
= 31	= 30	= 35	= 30	= 36	= 28

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type		
Nitrogen	Average	mg/kg	COMPOS		
January	February	March	April	May	June
= 44000	= 45000	= 45000	= 44000	= 41000	= 44000
July	August	September	October	November	December
= 52000	= 50000	= 45000	= 45000	= 42000	= 41000

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type		
Selenium	Maximum	mg/kg	COMPOS		
January	February	March	April	May	June
= 11	= 12	= 8.9	= 11	= 6.2	= 10
July	August	September	October	November	December
= 8.0	= 8.4	= 8.4	= 6.9	= 8.5	= 4.6

Biosolids or Sewage Sludge Monitored Parameter	Measurement Type	Unit of Measure (Dry Weight)	Sample Type		
Zinc	Maximum	mg/kg	COMPOS		
January	February	March	April	May	June
= 680	= 710	= 740	= 790	= 700	= 740
July	August	September	October	November	December
= 840	= 730	= 790	= 740	= 830	= 820

**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		
January	February	March	April	May	June
= 6.8	= 8.5	= 8.7	= 8.8	= 7.5	= 10
July	August	September	October	November	December
= 7.5	= 5.6	= 6.7	= 7.2	= 6.4	= 6.3

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Cadmium		Average	mg/kg		COMPOS	
January	February	March	April	May	June	
= 2.3	= 2.9	= 3.1	= 2.2	= 2.0	= 3.1	
July	August	September	October	November	December	
= 3.5	= 3.6	= 4.5	= 6.1	= 6.7	= 5.2	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Copper		Average	mg/kg		COMPOS	
January	February	March	April	May	June	
= 410	= 450	= 490	= 520	= 460	= 460	
July	August	September	October	November	December	
= 510	= 480	= 510	= 490	= 530	= 490	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Lead		Average	mg/kg		COMPOS	
January	February	March	April	May	June	
= 9.7	< 18	= 12	= 15	= 11	< 20	
July	August	September	October	November	December	
< 10	= 12	= 14	= 13	= 15	= 13	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Mercury		Average	mg/kg		COMPOS	
January	February	March	April	May	June	
= 0.65	= 1.1	= 0.85	= 0.91	= 0.94	= 1.2	
July	August	September	October	November	December	
= 0.94	= 0.72	= 1.2	= 0.52	= 0.88	= 0.82	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Nickel		Average	mg/kg		COMPOS	
January	February	March	April	May	June	
= 41	= 31	= 33	= 31	= 29	= 32	
July	August	September	October	November	December	
= 30	= 30	= 35	= 30	= 32	= 27	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Selenium		Average	mg/kg		COMPOS	
January	February	March	April	May	June	
= 9.4	= 7.6	= 8.4	= 10	= 5.5	= 8.8	
July	August	September	October	November	December	
= 7.8	= 6.7	= 8.3	= 6.9	= 6.0	= 3.8	

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Zinc		Average	mg/kg		COMPOS	
January	February	March	April	May	June	
= 620	= 640	= 730	= 760	= 700	= 720	
July	August	September	October	November	December	
= 790	= 730	= 750	= 740	= 760	= 760	

**Pathogens: Class A, Fecal Coliform \***

Biosolids or Sewage Sludge Monitored Parameter		Measurement Type	Unit of Measure (Dry Weight)		Sample Type	
Fecal Coliform		Geometric Mean	MPN/gram		GRAB-7	
January	February	March	April	May	June	
N	N	N	N	N	N	
July	August	September	October	November	December	
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		Geometric Mean	MPN per 4 grams		GRAB-7	
January	February	March	April	May	June	
N	N	N	N	N	N	
July	August	September	October	November	December	
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	
January	February	March	April	May	June
= 65	= 60	= 62	= 59	= 63	= 62
July	August	September	October	November	December
= 59	= 60	= 59	= 68	= 65	= 62

Additional Information

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

- Reported "organic nitrogen" in "Nitrogen" fields above.  
 - Attached is OCSD's Biosolids Management Compliance Report including the Priority Pollutants report in Appendix C.  
 - OCSD does not monitor biosolids for indicator organisms because we produce Class B via time and temperature in anaerobic digesters (N chosen for fecal coliform and salmonella).  
 - Reported value for VSR is an average calculation using two flow-weighted sample results and average monthly flows.  
 - Per OCSD's email to EPA on 2/2/17, for consistency with OCSD's historical reporting practices, OCSD has reported our biosolids data to the reporting limit (RL). OCSD will follow-up with EPA to address this matter for 2017 reporting.

Additional Attachments

File: 2016\_OCSD\_Annual\_Biosolids\_Compliance\_Report\_503.pdf

Certification Information

Certifier E-Mail \*

rcoss@ocsd.com

Confirm Certifier: rcoss@ocsd.com \*



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