CLARK REGIONAL WASTEWATER DISTRICT

COMMISSIONERS
Norm Harker
Denny Kiggins
Neil Kimsey
GENERAL MANAGER
John M. Peterson, P.E.

8000 NE 52 Court Vancouver, WA 98665 PO Box 8979 Vancouver, WA 98668
Phone (360) 750-5876 Fax (360) 750-7570 www.crwwd.com

February 15, 2022

Carey Cholski
Permit Administrator
Washington State Dept. of Ecology
PO Box 47775
Olympia, WA 98504-7775

RE: 2021 Pretreatment Report
WA0023639

Dear Ms. Cholski:

Enclosed you will find the 2021 Pretreatment Report for the Salmon Creek Treatment Plant prepared by Clark Regional Wastewater District (District). This report is being submitted as required by the NPDES Permit No. WA0023639.

If you have any questions, please contact me at 360.993.8833 or by email at kthomas@crwwd.com.

Sincerely,

Kristen Thomas

Digitally signed by Kristen Thomas
DN: cn=Kristen Thomas, o, ou, email=kthomas@crwwd.com, c=US
Date: 2022.02.15 09:11:07 -08'00'

Kristen Thomas
Regulatory Compliance Manager

Enclosure

c: Justin Maynard, Clean Water Division Manager, Clark County
Mark Herceg, Public Works Director, City of Battle Ground
Frank Dick, Wastewater Engineer, City of Vancouver
Bryan Kast, Public Works Director, City of Ridgefield
Robin Krause, Principal Engineer, Clark Regional Wastewater District
Heath Henderson, Engineering Director, Clark Regional Wastewater District

ACCREDITED AGENCY A•P•W•A

CLARK REGIONAL WASTEWATER DISTRICT

2021

Clark Regional Wastewater District

Pretreatment Report

Salmon Creek Treatment Plant

ACCREDITED AGENCY A•P•W•A

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Mission

Providing customer-focused, professional wastewater services in an environmentally and financially responsible manner.

Vision

To be an active partner in Clark County, to support economic development and to manage and protect water resources.

Values

The Values of Clark Regional Wastewater District are "SERVICE":

Safe and healthy workplace for all employees

Employees who are talented and motivated professionals that work together in a spirit of cooperation and with respect for all individuals

Responsibility, integrity, and fairness in managing the environmental and financial resources entrusted to the District

Valued partner involved and active within our community

Innovation and learning, creating an environment of personal and professional growth

Communication that is active, open, honest, and timely

Efficient and effective solutions that meet the needs of our customers and our community

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PROGRAM SUMMARY

INTRODUCTION

The National Pollutant Discharge Elimination System Waste Discharge Permit (Permit) for the Salmon Creek Treatment Plant (SCTP), WA-0023639, issued by the Department of Ecology (Ecology), requires, § S6.A.4, that the owner/permittee provide Ecology with an annual pretreatment report of its non-delegated Pretreatment Program activities during the previous calendar year. The SCTP is owned by the Discovery Clean Water Alliance (Alliance) and is operated, by agreement, by Clark County Department of Public Works. Effective January 1, 2015, the Alliance provides regional wastewater transmission and treatment services for its Members, which include the Clark Regional Wastewater District (District), Clark County, the City of Ridgefield, and the City of Battle Ground. The District, via Agreement, is the Administrative Lead for the Alliance and is responsible for executive, administrative, finance/treasury, and engineering services, including oversight of the Pretreatment Program. As the local regulatory presence on behalf of the Alliance, the District surveys, monitors, and inspects, as necessary, Industrial Users (IUs) of the SCTP. The goal of the Alliance Pretreatment Program is to protect public health and the environment. The District performs inspections and monitoring activities for Significant Industrial Users (SIUs), Minor Industrial Users (MIUs), and Food Service Establishments (FSEs). Continuous surveying of new businesses is conducted throughout the year. In 2021, the SCTP was monitored in accordance with the requirements set forth in the Permit. A summary of the program activities is provided in the following sections of this report.

Figure 1 – Salmon Creek Treatment Plant Tributary Areas

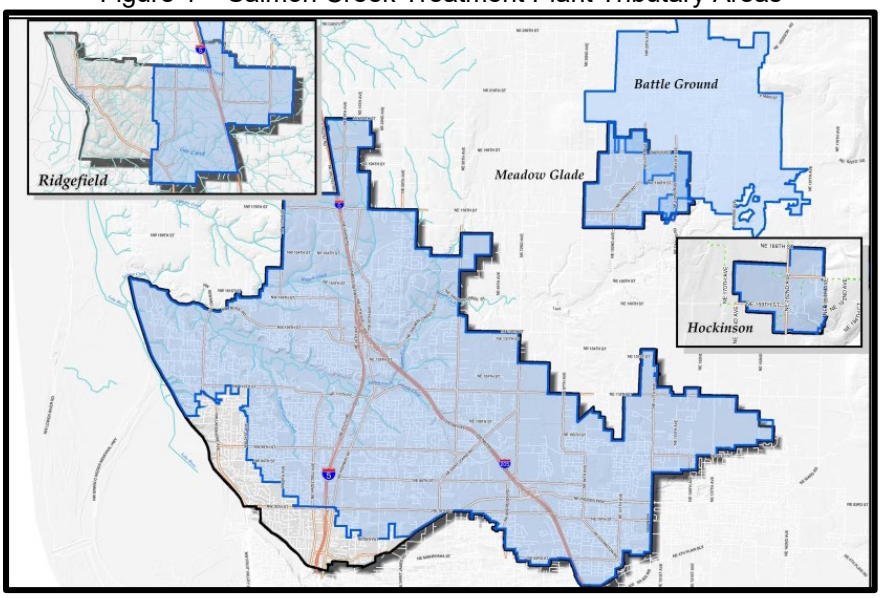

Figure 1 depicts the areas discharging into the SCTP through either the District or City of Battle Ground wastewater collection system and the Alliance regional transmission system. The Columbia River is the receiving water for all flow discharged from the Publicly Owned Treatment Works (POTW).

PROGRAM UPDATE

The District has diligently performed pretreatment activities during 2021, with temporary adjustments made as required to address the ongoing COVID-19 pandemic. All SIUs were inspected and monitored, and copies of analytical results and inspection reports were forwarded to Ecology for review. During 2021, there were three (3) SIUs (see Appendix A) discharging to the SCTP. All SIUs are located within the District service area and are categorical industrial users, one (1) 40 CFR 433 Metal Finishing and two (2) 40 CFR 469 Electrical and Electronics Components.

Six (6) IUs were monitored as MIUs during 2021 (see Appendix B). All MIUs maintained compliance with Letter of Discharge (LOD) requirements, including self-monitoring and reporting.

DELEGATION OF AUTHORITY

The District continued efforts in 2021 to develop materials for a Submission for Approval for local delegation of authority for the Alliance Pretreatment Program. A multijurisdictional legal framework and draft documents for the proposed Alliance program were developed in consultation with legal counsel, Alliance Member staff, and Ecology. Revised interlocal agreements and updated sewer use regulations were further reviewed with staff and elected officials for each contributing Member (City of Battle Ground and District) through each agency's endorsement process. These documents have been approved by the local jurisdictions for adoption and implementation upon approval of the program by Ecology.

A draft program manual was completed in 2021 with review and input from Alliance Member staff and Ecology. An updated industrial user survey was also conducted in 2021, with the results to be included in the Submission for Approval. District staff will be coordinating with Ecology in 2022 on the submittal and review process. The District has provided information to permitted users throughout the delegation process and will continue to keep users informed as the process continues in 2022.

USER NON-COMPLIANCE & ENFORCEMENT

SCTP did not experience any interference, inhibition, or pass-through from industrial sources in 2021.

One (1) Notice of Violation (NOV) was issued in 2021 to a commercial property owner for an uncovered stormwater catch basin that was identified to be connected to the wastewater system. The District is working with this user in coordination with the Clark County stormwater program to ensure that wastewater and stormwater requirements are addressed at this site.

INDUSTRIAL USER SURVEY

The District employs both continuous, routine survey measures and periodic, additional survey efforts to ensure that all IUs in the service area are identified and categorized. Industries that may require wastewater discharge permits are primarily identified through a review of Commercial/Industrial Pretreatment surveys. Surveys are submitted to the District and the City of Battle Ground as part of the development review process, which includes all new industrial or

commercial users, as well as tenant improvements. Users are also identified through windshield surveys, records review, and interagency communications. All potential new users are required to submit a survey, and all surveys are reviewed by the District. If any industrial user is identified as a potential SIU (PSIU), the user is required to submit a Pretreatment Application form to the District. Pretreatment Applications are reviewed by District staff in consultation with Ecology as needed. No new SIUs or PSIUs were identified in 2021. One (1) additional MIU (HH Processors) was identified and monitored in 2021 (see Appendix B). One (1) MIU (Pearl Soda) ceased operations in 2021 and was removed from further monitoring.

Food service establishments (FSEs) are identified through the development review process, as well as through notifications from and coordination with Clark County Public Health's Food Safety Program. A new or newly identified FSE is required to submit an FSE Survey, which is reviewed by the District for compliance with grease removal requirements.

A summary of 2021 user survey efforts is provided in Table 1.

Table 1 – Industrial User Survey Review Summary

	2021
Industrial User Surveys	96
Pretreatment Applications	0
FSE Surveys	15
TOTAL	**111**

PRIORITIES AND ACCOMPLISHMENTS FOR REPORTING YEAR

Public Education and Outreach

The District continued its education and outreach efforts in 2021 as part of the "Sewer Smart" program, which encourages users to be mindful of the discharge of Fats, Oils, and Grease (FOG), non-dispersible material, and other topics related to pollution prevention. These efforts included newsletter distribution, the Freeze the Grease program, and online outreach. No in-person events were held in 2021 due to restrictions related to the COVID-19 pandemic.

The Sewer Smart Logo

The District newsletter has continued outreach efforts focusing on pollution prevention habits that are formed at home. As in past years, each issue included a cartoon depicting the wastewater collection system and treatment process. In 2021, an informational flyer and outreach video were also created to provide practical information about conventional and emerging pollutants and specific tips for making informed choices about the use and disposal of household products. The flyer and video are posted on both the District and the Alliance websites.

Fats, Oils, and Grease (FOG) Program

The FOG program is conducted by the District throughout the District's collection system and within the City of Battle Ground by Interlocal Agreement. The District administered its FOG program in

2021 with some modifications to accommodate COVID-19 restrictions. The District also continued its participation in the Preferred Pumper Program (PPP), a collaboration of local pumping companies and municipalities to share information and ensure that FSEs properly clean and maintain their grease removal devices. The District receives reports from pumpers as part of the program that detail the condition and amount of grease in the device at time of service. These reports have been used to evaluate compliance for some facilities that were unable to be physically inspected due to COVID-19.

In 2021, the District monitored 361 active FSEs in the SCTP service area (up from 338 FSEs in 2020), including 75 FSEs in the City of Battle Ground and 25 FSEs in the City of Ridgefield. District staff completed 448 facility inspections, with an additional 15 attempted inspections unable to be completed due to business closures. Facilities that could not be inspected in 2021 will be prioritized in the upcoming year.

Regional Coordination and Training

In 2021, the District continued to be an active member in the Oregon Association of Clean Water Agencies (ACWA) Pretreatment subcommittee, the National Association of Clean Water Agencies (NACWA) Pretreatment Committee, and the Portland Metro area's Preferred Pumper Program (PPP). The District also continued to participate in the Local Interagency Networking Cooperative (LINC), as well as the American Public Works Association (APWA) PreFOG subcommittee. The District Pretreatment Coordinator attended several virtual trainings in 2021, including the Pacific Northwest Source Control Training Association (PNSCTA) Pretreatment Workshop and the National Association of Clean Water Agencies (NACWA) National Pretreatment Conference. The Pretreatment Coordinator also is a planning committee member for the PNSCTA Pretreatment Workshop.

PROGRAM GOALS

Listed below are the pretreatment program goals for 2022:

1. Complete program development and submit to Ecology a Submission for Approval of delegation authority for a locally administered pretreatment program.
2. Upon program delegation, implement and administer the approved program throughout the SCTP service area.
3. Continue to actively participate in local and regional committees to remain informed of changes in regulations and industrial processes.
4. Continue public outreach activities.
5. Continue to work with partner agencies to advance Public Health and environmental programs in Clark County.
6. Continue to monitor and adjust program activities in compliance with all local, state and federal guidelines and requirements regarding COVID-19.

PROGRAM RESOURCES

PROGRAM STAFFING

The Regulatory Compliance Manager (previously titled "Pretreatment Coordinator") is responsible for all program administration and activities, with oversight from the Principal Engineer – Transmission and Treatment. FOG Inspections were completed primarily by Engineering Inspection staff in 2021. The District has additional support staff available as needed, including GIS, Development Review, maintenance/inspection, and administrative support. The District currently utilizes contract laboratories in the area for analysis of treatment plant and industrial monitoring conducted throughout the year.

RESOURCES & SUPPLIES

The District plans and budgets on an ongoing basis for pretreatment program needs. A current equipment list is provided in Table 2.

Table 2 – PRETREATMENT EQUIPMENT INVENTORY

1	Myron L Ultra Pen PT2 pH and Temp Meter
1	Myron L Ultra Pen PT5 Dissolved Oxygen Meter
1	ISCO GLS Compact Composite Sampler and accessories
2	Sigma 950 Area Velocity Flow Meter
1	American Sigma Composite Sampler
1	2018 Nissan Frontier

PLANT PERFORMANCE

PRIORITY POLLUTANT MONITORING

The SCTP influent, effluent, and biosolids were monitored for metals and priority pollutants in accordance with NPDES permit requirements in 2021. Analytical results are provided in Appendix D.

In accordance with the Permit, the SCTP influent and effluent are monitored quarterly for metals and annually for priority pollutants. In addition, SCTP staff conduct required monitoring of biosolids throughout the year. All metal concentrations were found to be below inhibition levels, and removal rates remained consistent with previous years. Other priority pollutants monitored were either non-detectable or below inhibitory concentrations.

BIOSOLIDS PRODUCTION

Biosolids production data is provided in Appendix E. Total biosolids produced in 2021 were 1,249 dry tons, as compared with 1,461 dry tons in 2020, a 15% decrease from last year.

LOCAL LIMIT EVALUATION

Existing local limits were protective of water quality, beneficial biosolids reuse, and plant performance in 2021. Actual headworks loadings were compared to the Maximum Allowable Headworks Loadings (MAHLs), and this evaluation is presented in Appendix F. The District completed a Local Limits Reassessment in 2019-2020 as part of program development for the delegation effort. A draft report has been reviewed with Ecology, and the final report will be submitted as part of the Submission for Approval in 2022.

APPENDIX A: SIGNIFICANT INDUSTRIAL USERS

SIGNIFICANT INDUSTRIAL USERS	REPORTING QUARTER	DISTRICT INSPECTIONS	DISTRICT SAMPLING	SELF-MONITORING REPORTS	LIMIT VIOLATIONS	REPORTING STATUS	Average Monthly Flow (GPD)
PRO-TECH INDUSTRIES, INC.	1	0	0	1	0	C	
14113 NE 3rd Court	2	0	0	1	0	C	
Vancouver, WA 98685	3	0	0	1	0	C	
WA Permit No. ST 6194, effective 11/1/18	4	1	1	1	0	C	
40 CFR Part 433.17							215
No exceedances or excursions from permit requirements were self-reported or detected during annual inspection/sampling. This SIU will be inspected and sampled in 2022.							
nLIGHT PHOTONICS CORPORATION	1	0	0	3	0	C	
5408 NE 88th Street	2	0	0	3	0	C	
Vancouver, WA 98665	3	0	0	3	0	C	
WA Permit No. ST 6025, effective 7/1/18	4	1	1	3	0	C	
40 CFR Part 469							3773
No exceedances or excursions from permit requirements were self-reported or detected during annual inspection/sampling. This SIU will be inspected and sampled in 2022.							
IMAT INC.	1	0	0	3	0	C	
12516 NE 95th Street	2	0	0	3	0	C	
Vancouver, WA 98682	3	0	0	3	0	C	
WA Permit No. ST 6162, effective 11/1/18	4	1	1	3	0	C	
40 CFR Part 469							247
No exceedances or excursions from permit requirements were self-reported or detected during annual inspection/sampling. This SIU will be inspected and sampled in 2022.							

C = Compliance: NC = Non-compliance; SNC = Significat Non-compliance; NSCIU = Non-Significant Categorical Industrial User
Self-Monitoring Reports indicate the number of reports submitted in reporting quarter.

APPENDIX B: MINOR INDUSTRIAL USERS

MINOR INDUSTRIAL USERS	REPORTING QUARTER	DISTRICT INSPECTIONS	DISTRICT SAMPLING	SELF-MONITORING REPORTS	LIMIT VIOLATIONS	REPORTING STATUS
WASTE CONNECTIONS	1	0	0	1	0	C
9411 NE 94th Avenue	2	0	0	1	0	C
Vancouver, WA 98662	3	0	0	1	0	C
LOD 2-2018 expires April 30, 2023 (metals, pH, O&G, BOD, TSS, Cn)	4	0	0	1	0	C
	Avg Monthly Flow (GPD): Not reported					
OLDCASTLE BUILDING ENVELOPE	1	0	0	3	0	C
1611 SE Commerce Avenue	2	0	0	3	0	C
Battle Ground, WA 98604	3	0	0	3	0	C
LOD 3-2018 expires October 31, 2023 (Cu, Ag, TSS, pH)	4	0	0	3	0	C
	Avg Monthly Flow (GPD): 3315					
HH PROCESSORS	1					
14708 NE 13th Court	2	1	0	0	0	C
Vancouver, WA 98685	3	0	0	1	0	C
LOD 3-2021 expires July 11, 2022 (flow, pH)	4	0	0	1	0	C
	Avg Monthly Flow (GPD): 20					
QUARTZ DISTILLERS	1	0	0	1	0	C
4601 NE 78th Street, Suite 210	2	0	0	1	0	C
Vancouver, WA 98686	3	0	0	1	0	C
LOD 1-2021 expires May 31, 2026 (flow, pH)	4	0	0	1	0	C
	Avg Monthly Flow (GPD): 15					
FRESENIUS MEDICAL CARE	1					
3921 SW 13th Avenue	2					
Battle Ground, WA 98604	3	0	0	NA	0	C
LOD 2-2021 expires June 14, 2026 (pH, flow monitored through water consumption records)	4	0	0	NA	0	C
	Avg Monthly Flow (GPD): Not reported					
ANDERSEN DAIRY	1					
305 E Main Street	2					
Battle Ground, WA 98604	3					
LOD 4-2021 expires November 14, 2026 (flow, pH; reporting to begin in 2022)	4	1	0	0	0	C
	Avg Monthly Flow (GPD): Not yet reported					

Compliance: NC = Non-compliance; SNC = Significat Non-compliance; NSCIU = Non-Significant Categorical Industrial User
Self-Monitoring Reports indicate the number of reports submitted in reporting quarter.

APPENDIX C: FSE SURVEY FORM

CLARK REGIONAL WASTEWATER DISTRICT

FOOD SERVICE ESTABLISHMENT GREASE REMOVAL DEVICE SURVEY

Please see directions for completing this form on the reverse side.

1. Facility Name: _____
2. Facility Contact: _____
3. Mailing/Billing Address: _____
4. Contact Telephone Number: _____ 5. Facility Telephone Number: _____
6. Email Address: _____
7. Facility Address: _____
8. Establishment Type:

	Bakery		Daycare		School Cafeteria
	Brewery		Fast Food		Sports Grill
	Coffeehouse		Grocery		Steakhouse
	Commercial Cafeteria		Hotel		Winery
	Convenience Store		Pizzeria		
	Corporate Cafeteria		Restaurant		

9. Hours of Operation: _____ 10. Seating Capacity: _____
11. Meals Served: Breakfast ☐ Lunch ☐ Dinner ☐ Lounge ☐ 12. Number of Meals Served Per Day: _____
13. Is There Food Preparation on the Premises: Yes ☐ No ☐ If No, skip to bottom of page, sign and submit.
14. Food Type (Check all that apply):

	Asian		Ice Cream		Pizza		Southern
	Barbecue		Italian		Sandwich/Soup		Western
	Burgers		Mexican		Seafood		
	Doughnuts/Pastries		Middle Eastern		Smoothies		
	Other:						

15. Number of Fixtures:

	Deep Fryers		Tilt Kettles		3-Compartment Sinks		Floor Sinks
	Grills		Wok Ranges		Dishwashers		Low Temp Sanitizer
	Ovens		1-Compartment Sinks		Garbage Disposals		Pre-Wash Sinks
	Stove		2-Compartment Sinks		Floor Drains		Mop Sinks
	Other:						

16. Grease Removal Device (GRD) Location/Type (Include additional devices in blank boxes):

Location	Size	Manufacturer / Model (if unknown, leave blank)
Exterior Grease Inceptor	☐Gal ☐ lb. ☐ gpm	
Interior Under Sink Trap	☐Gal ☐ lb. ☐ gpm	
Interior Floor Trap	☐Gal ☐ lb. ☐ gpm	
	☐Gal ☐ lb. ☐ gpm	
	☐Gal ☐ lb. ☐ gpm	

17. GRD Cleaning Frequency (How often do you clean the GRD?):

	Daily		Bi-Weekly		Weekly
	Monthly		Quarterly		Annually

18. Who Cleans GRD? ☐ Self ☐ Vendor/Contractor 19. Date of Last Cleaning: _____
20. GRD Service Company: _____
21. Yellow/Fryer Grease Rendering Container on Site? Yes ☐ No☐
22. Yellow/Fryer Grease Rendering Company: _____

I, _____ *certify that to the best of my knowledge the above information is correct*

(Print Name and Title)

_____ _____

(Signature) *(Date)*

APPENDIX D: SCTP MONITORING DATA

Total Metals per EPA 200 series									
1st Quarter 2021									
CAS ID#	Influent Sampled: 3/5/21				Effluent Sampled: 3/5/21				Percent Removal
	Results in mg/L (*except Hg*)								
	Parameter	INF	MRL	Q	*Parameter*	EFF	MRL	Q	
7440-36-0	Antimony	ND	0.00100		Antimony	ND	0.00100		NA
7440-38-2	Arsenic	0.00185	0.00100		Arsenic	0.00136	0.00100		26%
7440-41-7	Beryllium	ND	0.000200		Beryllium	ND	0.0000200		NA
7440-43-9	Cadmium	ND	0.000200		Cadmium	ND	0.000200		NA
7440-47-3	Chromium	0.00173	0.00100		Chromium	ND	0.00100		71%
7440-50-8	Copper	0.0863	0.00200		Copper	0.0134	0.00200		84%
7439-92-1	Lead	0.000809	0.000200		Lead	ND	0.000200		88%
7439-98-7	Molybdenum	0.00326	0.00100		Molybdenum	ND	0.00100		85%
7440-02-0	Nickel	0.00255	0.00200		Nickel	ND	0.00200		61%
7782-49-2	Selenium	ND	0.00100		Selenium	ND	0.00100		NA
7440-22-4	Silver	0.000156	0.000020		Silver	ND	0.0000200		94%
7440-28-0	Thallium	ND	0.000200		Thallium	ND	0.0000200		NA
7440-66-6	Zinc	0.123	0.00400		Zinc	0.0437	0.00400		64%

Total Metals per EPA 200 series / HG per EPA 1631E									
2nd Quarter 2021									
CAS ID#	Influent Sampled: 6/3/21				Effluent Sampled: 6/3/21				Percent Removal
	Results in mg/L (*except Hg*)								
	Parameter	INF	MRL	Q	*Parameter*	EFF	MRL	Q	
7440-36-0	Antimony	ND	0.00100		Antimony	ND	0.00100		NA
7440-38-2	Arsenic	0.00181	0.00100		Arsenic	0.00144	0.00100		20%
7440-41-7	Beryllium	ND	0.0000200		Beryllium	ND	0.0000200		NA
7440-43-9	Cadmium	ND	0.000200		Cadmium	ND	0.000200		NA
7440-47-3	Chromium	0.00174	0.00100		Chromium	0.00128	0.00100		26%
7440-50-8	Copper	0.0590	0.00200		Copper	0.0229	0.00200		61%
7439-92-1	Lead	0.000914	0.000200		Lead	0.000258	0.000200		72%
7439-97-6	Mercury (ug/L)	0.0232	0.000500		Mercury (ug/L)	0.00196	0.000500		92%
7439-98-7	Molybdenum	0.00362	0.00100		Molybdenum	0.00530	0.00100		NA*
7440-02-0	Nickel	0.00238	0.00200		Nickel	0.00254	0.00200		NA*
7782-49-2	Selenium	ND	0.00100		Selenium	ND	0.00100		NA
7440-22-4	Silver	0.000187	0.0000200		Silver	ND	0.0000200		95%
7440-28-0	Thallium	ND	0.0000200		Thallium	ND	0.0000200		NA
7440-66-6	Zinc	0.126	0.00400		Zinc	0.0494	0.00400		61%

Total Metals per EPA 200 series									
3rd Quarter 2021									
CAS ID#	Influent Sampled: 8/19/21				Effluent Sampled: 8/19/21				Percent Removal
	Results in mg/L (*except Hg*)								
	Parameter	INF	MRL	Q	*Parameter*	EFF	MRL	Q	
7440-36-0	Antimony	ND	0.00100		Antimony	ND	0.00100		NA
7440-38-2	Arsenic	0.00202	0.00100		Arsenic	0.00134	0.00100		34%
7440-41-7	Beryllium	ND	0.000020		Beryllium	ND	0.0000200		NA
7440-43-9	Cadmium	ND	0.000200		Cadmium	ND	0.000200		NA
7440-47-3	Chromium	0.00153	0.00100		Chromium	ND	0.00100		67%
7440-50-8	Copper	0.0534	0.00200		Copper	0.0149	0.00200		72%
7439-92-1	Lead	0.009020	0.000200		Lead	0.000203	0.000200		98%
7439-97-6	Mercury (ug/L)	0.0650	0.000500		Mercury (ug/L)	0.00143	0.000500		98%
7439-98-7	Molybdenum	0.0162	0.00100		Molybdenum	ND	0.00100		97%
7440-02-0	Nickel	0.00233	0.00200		Nickel	ND	0.00200		57%
7782-49-2	Selenium	ND	0.00100		Selenium	ND	0.00100		NA
7440-22-4	Silver	0.000167	0.0000200		Silver	ND	0.0000200		94%
7440-28-0	Thallium	ND	0.0000200		Thallium	ND	0.0000200		NA
7440-66-6	Zinc	0.129	0.00400		Zinc	0.0393	0.00400		70%

Total Metals per EPA 200 series / HG per EPA 1631E									
4th Quarter 2021									
CAS ID#	Influent Sampled: 11/18/21				Effluent Sampled: 11/18/21				Percent Removal
	Results in mg/L (*except Hg*)								
	Parameter	INF	MRL	Q	*Parameter*	EFF	MRL	Q	
7440-36-0	Antimony	ND	0.00100		Antimony	ND	0.00100		NA
7440-38-2	Arsenic	0.00190	0.00100		Arsenic	0.00162	0.00100		15%
7440-41-7	Beryllium	ND	0.0000200		Beryllium	ND	0.0000200		NA
7440-43-9	Cadmium	ND	0.000200		Cadmium	ND	0.000200		NA
7440-47-3	Chromium	0.00139	0.00100		Chromium	ND	0.00100		64%
7440-50-8	Copper	0.0204	0.00200		Copper	0.0114	0.00200		44%
7439-92-1	Lead	0.000415	0.000200		Lead	ND	0.000200		76%
7439-97-6	Mercury (ug/L)	0.0262	0.000500		Mercury (ug/L)	0.00257	0.000500		90%
7439-98-7	Molybdenum	0.00106	0.00100		Molybdenum	ND	0.00100		53%
7440-02-0	Nickel	ND	0.00200		Nickel	ND	0.00200		NA
7782-49-2	Selenium	ND	0.00100		Selenium	ND	0.00100		NA
7440-22-4	Silver	0.0000930	0.0000200		Silver	ND	0.0000200		89%
7440-28-0	Thallium	ND	0.0000200		Thallium	ND	0.0000200		NA
7440-66-6	Zinc	0.0656	0.00400		Zinc	0.0426	0.00400		35%

< - 1/2 of the reporting limit was used for all non-detectable data in percent removal calculations
* Percent removal not calculated due to higher influent result than effluent (results <5x MRL)

	Parameter	EPA Method	mg/kg dry	mg/kg dry	mg/kg/dry	mg/kg dry	mg/kg dry	mg/kg dry
	Biosolids		Event 1	Event 2	Event 3	Event 4	Event 5	Event 6
CAS ID#			2/3/2021	3/22/2021	5/26/2021	7/12/2021	9/13/2021	11/22/2021
7429-90-5	Aluminum	6010C	6600	NT	NT	NT	NT	NT
7440-36-0	Antimony	6020A	1.97	2.01	1.08	2.03	2.84	2.65
7440-38-2	Arsenic	6020A	5.9	5.5	2.7	5.6	5.8	5.8
7440-39-3	Barium	6020A	159	NT	NT	NT	NT	NT
7440-41-7	Beryllium	6020A	0.19	0.18	<0.067	<0.12	<0.14	<0.15
7440-42-8	Boron	6010C	30	NT	NT	NT	NT	NT
7440-43-9	Cadmium	6020A	1.2	1.17	0.597	1.16	1.07	1.23
7440-47-3	Chromium	6020A	20.6	19.3	9.68	18.2	18.5	20
7440-47-3	Chromium VI	7196A	<37	<20	<17	<18	<18	<6.7
7440-48-4	Cobalt	6020A	3.83	NT	NT	NT	NT	NT
7440-50-8	Copper	6020A	283	280	134	279	289	317
7439-89-6	Iron	6010C	8620	NT	NT	NT	NT	NT
7439-92-1	Lead	6020A	9.29	8.22	3.61	6.68	6.94	7.73
7439-95-4	Magnesium	6010C	7940	NT	NT	NT	NT	NT
7439-96-5	Manganese	6020A	215	NT	NT	NT	NT	NT
7439-97-6	Mercury	7471B	0.52	0.45	0.276	0.61	0.43	0.3
7439-98-7	Molybdenum	6020A	14.3	39.9	10.1	39.4	24.7	19.3
7440-02-0	Nickel	6020A	17.3	15.3	7.5	14.0	14.6	15.4
7782-49-2	Selenium	6020A	7.3	<7.8	4.1	8.4	8.1	8.5
7440-22-4	Silver	6020A	1.93	1.92	0.98	2.08	2.74	3.00
7440-28-0	Thallium	6020A	<0.13	<0.16	<0.067	<0.12	<0.14	<0.15
7440-31-5	Tin	6020A	32.9	NT	NT	NT	NT	NT
7440-32-6	Titanium	6010C	431	NT	NT	NT	NT	NT
7440-66-6	Zinc	6020A	867	818	408	870	1000	1070
Conventional								
57-12-5	Cyanide	9010B	0.89	NT	NT	NT	NT	NT
7723-14-0	Phosphorus	6010B	22500	22600	NT	NT	NT	NT
7664-36-0	Ammonia-N	SM 4500-NH3 G Mod	18400	18000	8990	18300	17700	16200
	Total Kjeldahl Nitrogen	351.4	124000	93500	47600	89600	78100	85700
	Total Solids	SM 2540 G	13	12.6	28.3	13.1	13.5	13.1
	Total Volatile Solids	SM 2540 G	75.3	76	33.7	79.2	79.7	79.5
14797-65-0	Nitrite-Nitrogen	353.2M	2	2.2	<0.82	<1.8	<1.8	<1.9
14797-55-8	Nitrate-Nitrogen	353.2M	<1.8	<1.8	<1.6	<3.6	<3.7	<3.7
	pH (SU)	150.1	8.25	7.86	8.2	8.04	8.21	8.44
14808-79-8	Sulfate	300.0	579	NT	NT	NT	NT	NT
18496-25-8	Sulfide	PSEP SID	560	NT	NT	NT	NT	NT
16984-48-8	Fluoride	300.0	<30	NT	NT	NT	NT	NT
24687-31-8	Bromide	300.0	<15	NT	NT	NT	NT	NT
64743-03-9	Phenolics	420.1	1.5	NT	NT	NT	NT	NT
68153-81-1	Oil and Grease (T)	9071B	51200	NT	NT	NT	NT	NT
Polybrominated Diphenyl Ethers								
ug/kg dry								
	PBDE 85	8270D	<38	NT	NT	NT	NT	NT
	PBDE 99	8270D	440	NT	NT	NT	NT	NT
	PBDE 100	8270D	<38	NT	NT	NT	NT	NT
	PBDE 203	8270D	<38	NT	NT	NT	NT	NT
	PBDE 209	8270D	<380	NT	NT	NT	NT	NT

NT = Not Tested

CAS ID#	Parameter	Influent 6/3/21	Qualifiers	Effluent 6/3/21	Qualifiers	Percent Removal	Biosolids 2/3/21
	Semivolatile Organic Compounds per EPA Method 625/8270B	ug/l		ug/l		(%)	mg/kg
	Acid and Base/Neutrals						
83-32-9	Acenaphthene'	< 0.408		< 0.0385		N/A	<2.5
208-96-8	Acenaphthylene'	< 0.408		< 0.0385		N/A	<2.5
120-12-7	Anthracene'	< 0.408		< 0.0385		N/A	<2.5
103-33-3	Azobenzene (1,2-diphenylhydrazine)	< 1.02		< 0.0962		N/A	<2.5
92-87-5	Benzidine'	< 20.4		< 1.92	Q-52	N/A	<15
56-55-3	Benzo (a) Anthracene'	< 0.408		< 0.0385		N/A	<2.5
50-32-8	Benzo (a) Pyrene'	< 0.612		< 0.0577		N/A	<2.5
205-99-2	Benzo (b) fluroanthene'	< 0.612		< 0.0577		N/A	<2.5
207-08-9	Benzo (k) fluoranthene'	< 0.612		< 0.0577		N/A	<2.5
191-24-2	Benzo (ghi) perylene'	< 0.408		< 0.0385		N/A	<2.5
111-91-1	Bis(2-chloroethoxy) methane'	< 1.02		< 0.0962		N/A	<2.5
111-44-4	Bis (2-chloroethyl)ether'	< 1.02		< 0.0962		N/A	<2.5
117-81-7	bis (2-ethylhexyl)phthalate	NT		7.03*		N/A	3.5
117-81-7	bis (2-ethylhexyl)phthalate	NT		0.236**	J	N/A	3.5
117-81-7	bis (2-ethylhexyl)phthalate	8.32	J	1.21	J	85%	3.5
117-81-7	bis (2-ethylhexyl)phthalate	< 7.62***		< 0.762***		N/A	3.5
117-81-7	bis (2-ethylhexyl)phthalate	< 7.92****		0.189	J	N/A	3.5
101-55-3	4-Bromophenyl phenyl ether'	< 1.020		< 0.0962		N/A	<2.5
85-68-7	Butyl benzyl phthalate'	< 8.160		< 0.7690		N/A	<2.5
91-58-7	2-Chloronaphthalene'	< 0.408		< 0.0385		N/A	<2.5
7005-72-3	4-Chlorophenyl phenyl ether'	< 1.020		< 0.0962		N/A	<2.5
218-01-9	Chrysene'	< 0.408		< 0.0385		N/A	<2.5
53-70-3	Dibenz (a,h) anthracene'	< 0.408		< 0.0385		N/A	<2.5
91-94-1	3,3'-Dichlorobenzidine'	< 20.4		< 1.92		N/A	<2.5
84-66-2	Diethyl phthalate'	< 8.160		< 0.7690		N/A	<2.5
131-11-3	Dimethyl phthalate'	< 8.160		< 0.7690		N/A	<2.5
84-74-2	Di-n-butyl phtalate'	< 8.160		< 0.7690		N/A	<2.5
121-14-2	2,4-dinitrotoluene	< 4.080		< 0.3850		N/A	<2.5
606-20-2	2,6-Dinitrotoluene'	< 4.080		< 0.7690		N/A	<2.5
117-84-0	Di-n-octyl phthalate'	< 8.160		< 0.7690		N/A	<2.5
206-44-0	Flouranthene'	< 0.408		< 0.0385		N/A	<2.5
86-73-7	Fluorene'	< 0.408		< 0.0385		N/A	<2.5
118-74-1	Hexachlorobenzene'	< 0.408		< 0.0385		N/A	<2.5
87-68-3	Hexachlorobutadiene'	< 1.020		< 0.0962		N/A	<2.5
77-47-4	Hexachlorocyclopentadiene'	< 2.040		< 0.1920		N/A	<2.5
67-72-1	Hexachloroethane'	< 1.020		< 0.0962		N/A	<2.5
193-39-5	Indeno (1,2,3-cd) Pyrene'	< 0.408		< 0.0385		N/A	<2.5
78-59-1	Isophorone'	< 2.040		< 0.0962		N/A	<2.5
91-20-3	Napthalene'	< 0.816		< 0.0769		N/A	<2.5
98-95-3	Nitrobenzene'	< 4.080		< 0.0385		N/A	<2.5
62-75-9	N-Nitrosodimethylamine'	< 1.020		< 0.0962		N/A	<15
621-64-7	N-Nitrosodi-n-Propylamine'	< 4.900		< 0.1920		N/A	<2.5
55-18-5	N-Nitrosodiphenylamine'	< 1.020		< 0.0962		N/A	<2.5
85-01-8	Phenanthrene'	< 0.408		< 0.0385		N/A	<2.5
129-00-0	Pyrene'	< 0.408		< 0.0385		N/A	<2.5
120-82-1	1,2,4-Trichlorobenzene'	< 1.020		< 0.0962		N/A	<2.5
	Acid Compounds						
95-57-8	2-chlorophenol	< 2.04		< 0.192		N/A	<11
120-83-2	2,4 Dichlorophenol	< 2.04		< 0.192		N/A	<11
105-67-9	2,4-Dimethylphenol	< 2.04		< 0.192		N/A	<11
51-28-5	2,4-Dinitrophenol	< 10.2		< 0.962		N/A	<68
88-75-5	2-Nitrophenol	< 4.08		< 0.385		N/A	<11
100-02-7	4-Nitrophenol	< 4.08		< 0.385		N/A	<68
87-86-5	Pentachlorophenol	4.52	J	< 0.385		96%	<68
108-95-2	Phenol	37.3		< 0.769		99%	<11
88-06-2	2,4,6-Trichlorophenol	< 2.04		< 0.192		N/A	<11

	Tentatively Identified Compounds (TICs)						
1000210-38-4	17-(1,5-Dimethylhexyl)-10,13-dimet	75		ND		N/A	N/A
013360-61-7	1-Pentadecene	59		ND		N/A	N/A
000112-75-4	1-Tetradecanamine, N,N-dimethyl-	29		ND		N/A	N/A
007206-21-5	5-Octadecene, (E)-	49		ND		N/A	N/A
000060-33-3	9,12-Octadecadienoic acid (Z,Z)-	29		ND		N/A	N/A
000103-82-2	Benzeneacetic acid	71		ND		N/A	N/A
000107-92-6	Butanoic acid	26		ND		N/A	N/A
000116-53-0	Butanoic acid, 2-methyl-	27		ND		N/A	N/A
000058-08-2	Caffeine	46		ND		N/A	N/A
000360-68-9	Cholestan-3-ol, (3.beta.,5.beta.)-	67		0.83		N/A	N/A
000057-88-5	Cholesterol	130		ND		N/A	N/A
000143-07-7	Dodecanoic acid	73		ND		N/A	N/A
000122-99-6	Ethanol, 2-phenoxy-	31		ND		N/A	N/A
000120-72-9	Indole	30		ND		N/A	N/A
000057-10-3	n-Hexadecanoic acid	430		ND		N/A	N/A
000057-11-4	Octadecanoic acid	310		2.2		N/A	N/A
000112-80-1	Oleic Acid	380		ND		N/A	N/A
000109-52-4	Pentanoic acid	46		ND		N/A	N/A
000111-02-4	Squalene	190		1.2		N/A	N/A
000544-63-8	Tetradecanoic acid	98		ND		N/A	N/A

1/2 of the detection limit was used for all non-detectable data in percent removal calculations	
Additional sampling - Bis (2-ethylhexyl)phthalate:	
* Sample date 3/5/21; analysis using existing sampler tubing to confirm presence of BEHP	
** Sample date 3/5/21; analysis using new sampler tubing to confirm absence of BEHP	
*** Sample date 8/19/21 (using new phthalate-free tubing)	
**** Sample date 11/18/21 (using new phthalate-free tubing)	
Qualifiers:	
J	Estimated Result. Result detected below lowest point of calibration curve, but above specified MDL.
Q-52	Due to known erratic recoveries, the result and reporting levels for this analyte are reported as Estimated Values. This analyte may not have passed all QC requirements for this method.

CAS ID#	Parameter	Influent 6/3/21	Qualifiers	Effluent 6/3/21	Qualifiers	Percent Removal	Biosolids 2/3/21
	Organochlorine Pesticides and PCBs per EPA Method 608/8081B/8082A	ug/l		ug/l		(%)	ug/kg dry
309-00-2	Aldrin	< 0.0583		< 0.0566		N/A	< 14
319-84-6	alpha-BHC	< 0.0583		< 0.0566		N/A	< 7
319-85-7	beta-BHC	< 0.0583		< 0.0566		N/A	< 7
58-89-9	delta-BHC	< 0.0583		< 0.0566		N/A	< 7
319-86-8	gamma-BHC (Lindane)	< 0.0583		< 0.0566		N/A	< 7
57-74-9	Chlordane (tech)	< 0.728		< 0.708		N/A	< 7
72-54-8	4,4'-DDD	< 0.0583		< 0.0566		N/A	< 14
72-55-9	4,4'-DDE	< 0.0583		< 0.0566		N/A	< 7
50-29-3	4,4'-DDT	< 0.0583		< 0.0566		N/A	< 14
60-57-1	Dieldrin	< 0.0583		< 0.0566		N/A	< 7
959-98-8	Endosulfan I	< 0.0583		< 0.0566		N/A	< 7
33213-65-9	Endosulfan II	< 0.0583		< 0.0566		N/A	< 14
1031-07-8	Endosulfan Sulfate	< 0.0583		< 0.0566		N/A	< 14
72-20-8	Endrin	< 0.0583		< 0.0566		N/A	< 7
7421-93-4	Endrin Aldehyde	< 0.0583		< 0.0566		N/A	< 17
76-44-8	Heptachlor	< 0.0583		< 0.0566		N/A	< 7
1024-57-3	Heptachlor Epoxide	< 0.0583		< 0.0566		N/A	< 14
8001-35-2	Toxaphene	< 1.94		< 1.89		N/A	< 1600
12674-11-2	Aroclor 1016	< 0.0943		< 0.0962		N/A	< 71
11104-28-2	Aroclor1221	< 0.0943		< 0.0962		N/A	< 150
11141-16-5	Aroclor 1232	< 0.0943		< 0.0962		N/A	< 71
53469-21-9	Aroclor 1242	< 0.0943		< 0.0962		N/A	< 71
12672-29-6	Aroclor 1248	< 0.0943		< 0.0962		N/A	< 71
11097-69-1	Aroclor 1254	< 0.0943		< 0.0962		N/A	< 71
11096-82-5	Aroclor 1260	< 0.0943		< 0.0962		N/A	< 71

CAS ID#	Parameter *Conventional Pollutants*	EPA Method	Influent 6/3/21 mg/l	Qualifiers	Effluent 6/3/21 mg/l	Qualifiers	Percent Removal %
68153-81-1	Oil and Grease (total)	1664	24.8		< 4.90		90%
18496-25-8	Sulfides, Total	SM4500 /S2E	0.188		< 0.050		N/A
57-12-5	Cyanide	EPA 335.4/ SM4500-CN C	0.0149		< 0.005		83%
7664-36-0	Ammonia	SM4500NH3-G	38.2		1.41		96%
7440-42-8	Boron	EPA 200.8	96.6		193		N/A
16887-00-6	Chloride	EPA 300	53.8		52.5		2%
16984-48-8	Fluoride	EPA 300	< 1.00		< 1.00		N/A
14808-79-8	Sulfate	EPA300	20.3		20.1		1%
7440-70-2	Calcium	EPA 200.8	30.0		26.6		11%
7439-89-6	Iron	EPA 200.8	0.336		0.0694		79%
7439-95-4	Magnesium	EPA 200.8	11.1		9.06		18%
HARD	Hardness	EPA 207	120		104		13%
14797-55-8	Nitrate+Nitrite	EPA 353.2	0.0210	Q-42	11.2		N/A
TDS	Total Dissolved Solids	SM2540-C	344		338		2%
	Total Inorganic Nitrogen	Calculation	38.2		12.6		67%
7723-14-0	Phosphorus, Total	SM4500-P E	7.21		1.02		86%
64743-03-9	Phenolics	EPA 420.1	0.097		0.015		92%
	Salinity	Sm2520-B	0.4	J	< 2.0		N/A

all non-detectable data in percent removal calculations

Qualifiers:	
J	Estimated Result. Result detected below lowest point of calibration curve, but above specified MDL.
Q-42	Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits.

CAS ID#	Parameter	Influent 6/3/21	Qualifiers	Effluent 6/3/21	Qualifiers	Percent Removal	Biosolids 2/3/21
	Volatile Organic Compounds per EPA Methods 624/5035/8260C	ug/l		ug/l		%	ug/kg
107-02-8	Acrolein	< 5.00		< 5.00		N/A	< 810
107-13-1	Acrylonitrile	< 2.00		< 2.00		N/A	< 160
71-43-2	Benzene	< 0.250		< 0.250		N/A	< 41
75-25-2	Bromoform	< 1.00		< 1.00		N/A	< 41
75-27-4	Dichlorobromomethane	< 1.00		< 1.00		N/A	< 41
56-23-5	Carbon tetrachloride	< 1.00		< 1.00		N/A	< 41
108-90-7	Chlorobenzene	< 0.500		< 0.500		N/A	< 41
110-75-8	2-Chloroethylvinyl ether	< 10.0		< 10.0		N/A	< 81
74-87-3	Chloromethane	< 5.00		< 5.00		N/A	< 41
75-00-3	Chlorethane	< 5.00		< 5.00		N/A	< 41
67-66-3	Chloroform	< 1.00		< 1.00		N/A	< 41
124-48-1	Dibromochloromethane	< 1.00		< 1.00		N/A	< 41
95-50-1	1,2-dichlorobenzene	< 0.500		< 0.500		N/A	< 41
541-73-1	1,3-dichlorobenzene	< 0.500		< 0.500		N/A	< 41
106-46-7	1,4-dichlorobenzene	< 0.500		0.620		N/A	< 41
75-34-3	1,1-Dichloroethane	< 0.500		< 0.500		N/A	< 41
107-06-2	1,2-Dichloroethane	< 0.500		< 0.500		N/A	< 41
75-35-4	1,1-Dichloroethylene	< 0.500		< 0.500		N/A	< 41
78-87-5	1,2-Dichloropropane	< 0.500		< 0.500		N/A	< 41
542-75-6	1,3-Dichloropropylene	< 1.00		< 1.00		N/A	< 41
100-41-4	Ethylbenzene	< 0.500		< 0.500		N/A	< 41
74-83-9	Bromomethane/methyl Bromide	< 5.00		< 5.00		N/A	< 41
75-09-2	Methylene chloride	< 10.0		< 10.00		N/A	< 81
79-34-5	1,1,2,2-Tetrachloroethane	< 0.500		< 0.500		N/A	< 41
127-18-4	Tetrachloroethylene	< 0.500		< 0.500		N/A	< 41
108-88-3	Toluene	1.75		< 1.00		71%	56
156-60-5	1,2-Trans-Dichloroethene	< 0.500		< 0.500		N/A	< 41
71-55-6	1,1,1-Trichloroethane	< 0.500		< 0.500		N/A	< 41
79-00-5	1,1,2-Trichloroethane	< 0.500		< 0.500		N/A	< 41
79-01-6	Trichloroetheylene	< 0.500		< 0.500		N/A	< 41
75-01-4	Vinyl Chloride	< 0.500		< 0.500		N/A	< 41
100-42-5	Styrene	< 1.00		< 1.00		N/A	41
67-64-1	Acetone	141.00		< 20.00		93%	900
	Tentatively Identified Compounds (TICs)						
000075-18-3	Dimethyl sulfide	9.3		< 5.0		N/A	
000624-92-0	Disulfide, dimethyl	4.3		< 5.0		N/A	
005989-27-5	D-Limonene	2.1		< 5.0		N/A	
64-17-5	Ethanol	3.8		< 5.0		N/A	
67-63-0	Isopropyl alcohol	14		< 5.0		N/A	
002216-51-5	Levomenthol	1.8		< 5.0		N/A	
007446-09-5	Sulfur dioxide	27		< 5.0		N/A	

< - 1/2 of the detection limit was used for all non-detectable data in percent removal calculations

APPENDIX E: BIOSOLIDS PRODUCTION REPORT

2021 - ANNUAL BIOSOLIDS (SLUDGE) PRODUCTION REPORT

	Cubic Yards	Dry Pounds	Wet Pounds
January	917	209,266	1,577,710
February	1,155	260,435	1,987,111
March	1,267	296,467	2,178,392
April	1,175	286,675	2,021,000
May	1,153	282,104	1,982,354
June	1,319	319,425	2,268,090
July	1,437	332,553	2,471,008
August	1,234	291,386	2,123,205
September	1,396	337,508	2,401,475
October	1,276	304,078	2,195,217
November	1,174	281,929	2,020,104
December	1,141	278,144	1,962,019
Total	14,644.00	3,479,970	25,187,685
Tons Processed		1,740	12,594
Metric Tons		1,579	11,425

DRY TON BALANCE:

From Ridgefield	1.85
Processed (no RF)	1,738.1
Total Processed	1,740.0
To Long (NSF)	667.8
To Local (M&J)	175.3
To Local (Tribeca)	356.1
Total Applied	1,171.2
Est. Recycled Dry Tons	**568.8**

Current Avg. TS (Annual Summary) =	**13.82**
Estimated Ave. Capture Rate %	71.8

Visual Levels of Biosolids Storage Bays (2021)
(estimates taken at end of each month)

	Visual CY Bay 1	Visual CY Bay 2	Visual CY Bay 3	Visual CY Bay 4	Total est. CY (94.1/log)	Estimate WT (x 0.86)	Weight Hauled (Dry Tons)	Weight Hauled + Solids Added To Bays	Estimated Bay DT (at avg TS%)
Previous Year Carryover >					50	43			5.8
JAN	0	0	0	0	0	0	82	76	0
FEB	0	376	0	0	376	323	51	96	45
MAR	0	376	0	0	376	323	102	102	45
APR	0	376	0	0	376	323	108	108	45
MAY	0	1,224	0	0	1,224	1,053	28	129	145
JUN	0	1,318	0	1,318	2,636	2,267	0	168	313
JUL	0	1,318	1,318	1,318	3,954	3,400	136	293	470
AUG	377	0	0	0	377	324	271	-154	45
SEP	188	0	0	0	188	162	133	111	22
OCT	94	0	0	0	94	81	118	107	11
NOV	94	0	0	0	94	81	100	100	11
DEC	377	0	0	94	471	405	70	115	56.0

Assumptions:
94.1 CY per foot = each section (188.27 CY/entire stop log height)
0.86 x cubic yards = wet tons

TOTAL DRY TONS PRODUCED IN 2021 = 1,249.49

APPENDIX F: LOCAL LIMITS EVALUATION

Parameter	Avg Inf Conc (mg/L)	Actual Loading (lbs/day)	MAHL (lbs/day	Safety Factor
Arsenic	0.00191	0.141	2.58	18
Cadmium	<0.002	<0.15	0.71	>4.7
Chromium	0.00155	0.115	3.61	31
Copper	0.0443	3.27	35.36	11
Lead	0.00472	0.349	3.59	10
Mercury (ug/L)	0.0381	0.00282	0.142	50
Molybdenum	0.00863	0.638	0.96	1.5
Nickel	0.00233	0.172	9.59	56
Selenium	<0.001	<0.074	0.75	>10
Silver	0.000151	0.0112	3.776	339
Zinc	0.111	8.20	19.1	2.3
Cyanide	0.0149	1.10	4.69	4.3

2021 Average Influent Flow: 8.87 MGD