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OCT 22 2022

Dept of Ecology  
Central Regional Office

10.19.2022

Matthew Durkee, LHG  
Senior Hydrogeologist  
Water Quality Program  
Washington Dept. of Ecology  
1250 West Alder Street  
Union Gap, WA 98903

RE: Modifications to Darigold's Schedule A and sampling requirements

Mr. Durkee

The Port of Sunnyside has received and evaluated two requests from Darigold to amend their Schedule A. As the result of our recently completed Membrane BioReactor project (MBR), we would also like to make a few other modifications to their permit.

Darigold has requested an increase of their discharge volume to Outfall 002 by 2.5%, and an increase in their TKN limits by 15%. The Port has assessed the requests and can accommodate both due to increased treatment provide by the MBR's.

During the MBR project, provisions were made to route Darigold Outfall 004, COW Water, into Lagoon 2/3, and not discharge it to Lagoon 4. Since Darigold Outfall 004 will now go to virtually the same place as Darigold Outfall 002, the Port requests that the constituent testing requirements be consistent with Outfall 002 testing requirement. The current Outfall 004 testing was put in place to protect the Sprayfields as there was only limited treatment at Lagoon 4 before it was land applied. It is our intent to largely reduce our wastewater land application. Outfall 004 will now be treated at the IWWTF through Lagoon 2/3 and the MBR system. Please see the attached monitoring schedule for requested changes to Outfall 004.

The Schedule A, winter discharge limit, can also be removed, we are able to treat and discharge everything we receive to JD 33.4.

The Port has been doing both BOD and COD testing on Darigold Outfall 002 and reporting both results. It is our goal to continue to convert all our industry testing and billing to COD only. We request that we only test and report for COD's. This is a much easier and repeatable lab test.

The Port also requests a change for Darigold Outfall 002 TKN testing to 2/week and Outfall 004 to 2/month.

And lastly, we would like to convert the hydraulic flow reporting units from cubic feet to gallons.

In summary:

1. Darigold requested a 2.5% increase to Outfall 002 volume.
2. Darigold requested a 15% increase to Outfall 002 TKN limits.
3. Amend Outfall 004 monitoring schedule to mirror Outfall 002
4. Amend BOD testing and reporting to COD only.
5. Amend Outfall 004 TKN testing schedule to 2 per month
6. Amend Outfall 002 TKN testing schedule to 2 per week
7. Amend hydraulic flow reporting units to gallons vs cubic feet.

We would appreciate your review and consideration of the above requests. Please contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Travis Jansen', followed by a long horizontal flourish.

Travis Jansen  
Operations Manager



June 20, 2022

Travis Jansen  
Port of Sunnyside Industrial Wastewater Treatment Facility  
747 Midvale Road  
Sunnyside, WA 98944

Re: Schedule "A" User Contract update

Mr. Jansen:

I am following up to an email you sent me regarding our Schedule "A" User Contract. I would like to respond to each of six the items you had on your list.

a. Slug load surcharge modification:

We are in favor of having the surcharge modified and do like the current method we have going which has us providing notice and not receiving a surcharge. Moving forward, I feel we can come to an agreement that is fair for both sides.

b. Increase in constituent levels, will work with Darigold on needs:

I will start by saying our COW water limits for Outfall #004 are fine the way they are. We have not struggled with meeting any of the current limits that we have in place. As for Outfall #002, I am requesting a few changes. First, is a small 2.5% increase in volume. From Jan. 2021 through May 2022, the monthly volume limit was violated three times (May 2021, June 2021, and Dec 2021). This would give us a little more cushion on months we experience higher flows.

I am ok with having COD replace BOD. To come up with a COD limit, I divided the monthly BOD limits by .66. I feel this gets us in the ballpark as the .66 correlation is close. BOD was violated once from Jan. 2021 through May 2022. Using the .66, we would have violated COD on the same month we violated BOD (April 2022).

My last and biggest request is a 15% increase in our monthly TKN pounds. From Jan. 2021 through May 2022, we struggled with TKN and violated the monthly limit eight different times. I do realize that 15% is asking for a lot and I am curious what your thoughts are on this. Any increase in TKN will be greatly appreciated on our end. Please see the table below, which has new proposed limits for Outfall #002.



Month	Proposed Volume Limit (2.5% increase) gallons per month	COD lbs per month	Proposed TKN Limit (15% increase) lbs per month
Jan	31,777,209	1,203,061	53,021
Feb	29,727,064	1,125,439	49,600
Mar	31,777,209	1,203,061	53,021
Apr	30,752,136	1,164,250	51,307
May	31,777,209	1,203,061	53,021
Jun	30,752,136	1,164,250	51,313
Jul	31,777,209	1,203,061	53,021
Aug	31,777,209	1,203,061	53,021
Sep	30,752,136	1,164,250	51,307
Oct	31,777,209	1,203,061	53,021
Nov	30,752,136	1,164,250	51,307
Dec	31,777,209	1,203,061	53,021

- c. COW water comes to Lagoon 2/3 now instead of Lagoon 4:  
We have no issues with this change.
- d. Remove winter storage limit:  
We have no issues with this change.
- e. Change cubic feet to gallons:  
We have no issues with this change.
- f. Can we change BOD reporting for Darigold to COD:  
We have no issues with this change.

I hope you and your team can review our requests for increasing the limits for Outfall #002 and provide us some feedback on it. If you have any further questions regarding any of the topics discussed, please feel free to reach out to me via email at [chris.babcock@darigold.com](mailto:chris.babcock@darigold.com) or by phone at (509) 854-4379.

Best Regards,

Chris Babcock  
Darigold



DATE:

PORT OF SUNNYSIDE  
INDUSTRIAL WASTEWATER TREATMENT FACILITY  
USER CONTRACT  
SCHEDULE "A" - PAGE 1

INDUSTRY: Darigold, Inc draft

Outfall 002

	HYDRAULIC DISCHARGE CONTRACTED MONTHLY TOTAL	GALLONS	CHEMICAL OXYGEN DEMAND MONTHLY TOTAL	POUNDS	TOTAL KJELDAHL NITROGEN MONTHLY TOTAL	POUNDS	CHLORIDE SEE BELOW FN2 MONTHLY TOTAL	POUNDS	TOTAL PHOSPHORUS MONTHLY TOTAL	POUNDS
JANUARY	31,777,209		1,203,061		53,021					
FEBRUARY	29,727,064		1,125,439		49,600					
MARCH	31,777,209		1,203,061		53,021					
APRIL	30,752,136		1,164,250		51,307					
MAY	31,777,209		1,203,061		53,021					
JUNE	30,752,136		1,164,250		51,307					
JULY	31,777,209		1,203,061		53,021					
AUGUST	31,777,209		1,203,061		53,021					
SEPTEMBER	30,752,136		1,164,250		51,307					
OCTOBER	31,777,209		1,203,061		53,021					
NOVEMBER	30,752,136		1,164,250		51,307					
DECEMBER	31,777,209		1,203,061		53,021					
ANNUAL TOTAL	375,176,071		14,203,866		625,975					

THE FOLLOWING CONTAINS ALL WASTEWATER COMPONENTS WHICH MAY BE CONSIDERED  
TOXIC OR HAZARDOUS SUBSTANCES.

NOTES:

- Capital Charges are based on monthly contract volumes; see user contract for excess volumes.
- The monthly flow-weighted average chloride concentration shall not exceed 250mg/L.

THE CONTRACTED USER CERTIFIES THAT THE ABOVE SCHEDULE IS ACCURATE AND COMPLETE AND  
THAT THE WASTEWATER SHALL NOT CONTAIN ANY TOXIC OR HAZARD SUBSTANCES OTHER THAN  
THOSE LISTED ABOVE.

CONTRACTED USER

EXECUTIVE DIRECTOR,  
PORT OF SUNNYSIDE

COPY

DATE: June 20, 2016

PORT OF SUNNYSIDE  
INDUSTRIAL WASTEWATER TREATMENT FACILITY  
USER CONTRACT  
SCHEDULE "A" - PAGE 1

INDUSTRY: Darigold, Inc.

HYDRAULIC DISCHARGE CONTRACTED SEE BELOW FN 1 MONTHLY TOTAL CUBIC FT	BIOCHEMICAL OXYGEN DEMAND MONTHLY TOTAL POUNDS	TOTAL KJELDAHL NITROGEN MONTHLY TOTAL POUNDS	CHLORIDE SEE BELOW FN 2 TOTAL MONTHLY TOTAL POUNDS	TOTAL PHOSPHORUS MONTHLY TOTAL POUNDS
JANUARY	4,144,385	794,020	46,105	
FEBRUARY	3,877,005	742,790	43,130	
MARCH	4,144,385	794,020	46,105	
APRIL	4,010,695	768,405	44,615	
MAY	4,144,385	794,020	46,105	
JUNE	4,010,695	768,405	44,620	
JULY	4,144,385	794,020	46,105	
AUGUST	4,144,385	794,020	46,105	
SEPTEMBER	4,010,695	768,405	44,615	
OCTOBER	4,144,385	794,020	46,105	
NOVEMBER	4,010,695	768,405	44,615	
DECEMBER	4,144,385	794,020	46,105	
ANNUAL TOTAL	48,930,480	9,374,550	544,330	

THE FOLLOWING CONTAINS ALL WASTEWATER COMPONENTS WHICH MAY BE CONSIDERED  
TOXIC OR HAZARDOUS SUBSTANCES.

NOTES:

1. Debt Charges are based on monthly contract volumes; see user contract for excess volumes.
2. The monthly flow-weighted average chloride concentration shall not exceed 250 mg/L.

THE CONTRACTED USER CERTIFIES THAT THE ABOVE SCHEDULE IS ACCURATE AND COMPLETE, AND THAT THE WASTEWATER SHALL NOT CONTAIN ANY  
TOXIC OR HAZARD SUBSTANCES OTHER THAN THOSE LISTED ABOVE.

Way Darigold  
DARIGOLD, INC.

[Signature]  
EXECUTIVE DIRECTOR, PORT OF SUNNYSIDE

DATE: Effective February 1, 2016

PORT OF SUNNYSIDE  
INDUSTRIAL WASTEWATER TREATMENT FACILITY

USER CONTRACT

SCHEDULE "A" - PAGE 1

COW Water Discharge to IWWTF Lagoon No. 4

INDUSTRY: Darigold, Inc.

HYDRAULIC DISCHARGE CONTRACTED	BIOCHEMICAL OXYGEN DEMAND MONTHLY	TOTAL SUSPENDED SOLIDS MONTHLY	TOTAL KJELDHAHL NITROGEN MONTHLY	TOTAL NITROGEN MONTHLY	TOTAL PHOSPHORUS MONTHLY	CHLORIDE MONTHLY	TOTAL DISSOLVED SOLIDS MONTHLY	FIXED DISSOLVED SOLIDS MONTHLY
MONTHLY TOTAL	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
JANUARY	1,243,316	7,756	1,396	1,551	155	2,327	5,429	4,654
FEBRUARY	1,163,102	7,256	1,306	1,451	145	2,177	5,079	4,353
MARCH	1,243,316	7,756	1,396	1,551	155	2,327	5,429	4,654
APRIL	1,203,209	7,506	1,351	1,501	150	2,252	5,254	4,504
MAY	1,243,316	7,756	1,396	1,551	155	2,327	5,429	4,654
JUNE	1,203,209	7,506	1,351	1,501	150	2,252	5,254	4,504
JULY	1,243,316	7,756	1,396	1,551	155	2,327	5,429	4,654
AUGUST	1,243,316	7,756	1,396	1,551	155	2,327	5,429	4,654
SEPTEMBER	1,203,209	7,506	1,351	1,501	150	2,252	5,254	4,504
OCTOBER	1,243,316	7,756	1,396	1,551	155	2,327	5,429	4,654
NOVEMBER	1,203,209	7,506	1,351	1,501	150	2,252	5,254	4,504
DECEMBER	1,243,316	7,756	1,396	1,551	155	2,327	5,429	4,654
ANNUAL TOTAL	14,679,150	91,572	16,482	18,312	1,830	27,474	64,098	54,947

MAXIMUM FLOW-WEIGHTED  
CONCENTRATION. See Note 1.

165 mg/L

60 mg/L

45 mg/L

50 mg/L

3 mg/L

50 mg/L

150 mg/L

100 mg/L

THE FOLLOWING CONTAINS ALL WASTEWATER COMPONENTS WHICH MAY BE CONSIDERED  
TOXIC OR HAZARDOUS SUBSTANCES.

NOTES:

1. Constituent loadings must be equal to or less than the monthly and annual masses, and the stipulated flow-weighted concentrations.
2. The industry may exceed the monthly contracted volumes so long as the total discharge for the four consecutive months of November through February is not in excess of 4,852,943 cubic feet.

THE CONTRACTED USER CERTIFIES THAT THE ABOVE SCHEDULE IS ACCURATE AND COMPLETE AND  
THAT THE WASTEWATER SHALL NOT CONTAIN ANY TOXIC OR HAZARD SUBSTANCES OTHER THAN  
THOSE LISTED ABOVE.

CONTRACTED USER

EXECUTIVE DIRECTOR, PORT OF SUNNYSIDE



DATE:

PORT OF SUNNYSIDE  
INDUSTRIAL WASTEWATER TREATMENT FACILITY

USER CONTRACT  
SCHEDULE "A" - PAGE 1

INDUSTRY: Darigold, Inc. Draft

Outfall 004 COW Water

	HYDRAULIC DISCHARGE CONTRACTED SEE BELOW FN 1 MONTHLY TOTAL GALLONS	CHEMICAL OXYGEN DEMAND		TOTAL KJELDAHL NITROGEN		MONTHLY TOTAL POUNDS		MONTHLY TOTAL POUNDS		MONTHLY TOTAL POUNDS		MONTHLY TOTAL POUNDS	
		MONTHLY TOTAL POUNDS		MONTHLY TOTAL POUNDS		MONTHLY TOTAL POUNDS		MONTHLY TOTAL POUNDS		MONTHLY TOTAL POUNDS		MONTHLY TOTAL POUNDS	
		11,752		1,396		1,396							
JANUARY	9,300,650	11,752		1,396		1,396							
FEBRUARY	8,700,607	10,994		1,306		1,306							
MARCH	9,300,650	11,752		1,396		1,396							
APRIL	9,000,628	11,373		1,351		1,351							
MAY	9,300,650	11,752		1,396		1,396							
JUNE	9,000,628	11,373		1,351		1,351							
JULY	9,300,650	11,752		1,396		1,396							
AUGUST	9,300,650	11,752		1,396		1,396							
SEPTEMBER	9,000,628	11,373		1,351		1,351							
OCTOBER	9,300,650	11,752		1,396		1,396							
NOVEMBER	9,000,628	11,373		1,351		1,351							
DECEMBER	9,300,650	11,752		1,396		1,396							
ANNUAL TOTAL	109,807,669	138,750		16,482		16,482							

THE FOLLOWING CONTAINS ALL WASTEWATER COMPONENTS WHICH MAY BE CONSIDERED  
TOXIC OR HAZARDOUS SUBSTANCES.

NOTES:

- Capital Charges are based on monthly contract volumes; see user contract for excess volumes.
- The monthly flow-weighted average chloride concentrations shall not exceed 250 mg/L

THE CONTRACTED USER CERTIFIES THAT THE ABOVE SCHEDULE IS ACCURATE AND COMPLETE AND  
THAT THE WASTEWATER SHALL NOT CONTAIN ANY TOXIC OR HAZARD SUBSTANCES OTHER THAN  
THOSE LISTED ABOVE.

CONTRACTED USER

EXECUTIVE DIRECTOR,  
PORT OF SUNNYSIDE



Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
d	To determine the daily average temperature and ammonia, use the temperature/ammonia value on the hour from the chart for the 24-hour period and calculate the average of the values. [or as determined by instrumentation]		
e	"1/week" means one time during each calendar week and on a rotational basis throughout the days of the week, except weekends and holidays.		
f	"Grab" means an individual sample collected over a 15-minute period, or less.		
g	24-hour composite samples shall be collected on days when an actual discharge is occurring.		
h	Grab samples triggered by total ammonia exceedances lasting more than 30 minutes as shown by continuous monitoring of Outfall # 001 final effluent.		
i	Total Nitrogen concentration calculated by adding together TKN and Nitrate/Nitrite concentrations.		
j	NTU means Nephelometric Turbidity Units.		
k	Samples shall be obtained concurrently with the sampling of NTU at the sump vault, at a location immediately upstream, or a location reasonably accessible upstream, of the discharge location.		

**S2.B. Monitoring schedule for discharge to the Port of Sunnyside IWWTF (Outfall 002)**

The Permittee must report results of monitoring performed by the Port of Sunnyside IWWTF. The permittee or the Port of Sunnyside IWWTF must monitor wastewater at the sampling point on the flume in accordance with the following schedule and the requirements specified in **Appendix A**.

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
<b>(1) Wastewater Effluent</b>			
Flow	Gallons / day	Continuous <sup>a</sup>	Flow meter <sup>b</sup>
Flow	Gallons / month	Monthly	Calculation
Flow	cubic feet / month	Monthly	Calculation
Flow (Annual Total)	cubic feet / year	Annual	Calculation

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
pH	Standard Units	1/week <sup>c</sup>	Grab <sup>d</sup>
BOD <sub>5</sub>	mg/L	4/week	24-hour composite <sup>e</sup>
BOD <sub>5</sub>	lbs/month	Monthly	Calculation <sup>f</sup>
BOD <sub>5</sub>	lbs/year	Annual	Calculation
Chemical Oxygen Demand (COD)	mg/L	1/day <sup>g</sup>	24-hour composite
COD	lbs/day	1/day	Calculation
COD	lbs/month	Monthly	Calculation
COD	lbs/year	Annual	Calculation
Total Kjeldahl Nitrogen (TKN)	mg/L as Nitrogen (N)	2-4/week	24-hour composite
TKN	lbs/month	Monthly	Calculation
TKN	lbs/year	Annual	Calculation
Chloride	mg/L	1/week	24-hour composite
Chloride (Monthly Flow Weighted Average)	mg/L	Monthly	Calculation <sup>h</sup>
a	Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. The Permittee must sample daily when continuous monitoring is not possible.		
b	Metered sampling for flow, Thermo Datalogger (or recorder) sampling for temperature, continuous pH Meter, and continuous total ammonia analyzer.		
c	"1/week" means one time during each calendar week and on a rotational basis throughout the days of the week, except weekends and holidays.		
d	"Grab" means an individual sample collected over a 15-minute period, or less.		
e	24-hour composite samples shall be collected on days when an actual discharge is occurring.		



Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
f	Monthly lbs loading calculated: (Total gallons per month/1,000,000) x Avg monthly concentration x 8.34 If the flow value is originally in cubic feet, first covert to gallons: total gallons = total cubic feet x 7.48052		
g	"1/day" means one time during calendar day.		
h	Chloride Monthly Flow Weighted Average calculation: $\sum$ [daily concentration x (daily flow in gal ÷ total monthly flow in gal)].		

### S2.C. Monitoring schedule for discharge to Outfall 003

The Permittee must monitor Outfall #003 by calculating the volume of water based on measured weight in each tanker truck or using the in-line flow meter in accordance with the following schedule and the requirements specified in Appendix A.

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
<b>(1) Wastewater Effluent</b>			
Flow	gallons/day (gpd)	Continuous <sup>a</sup>	Calculation Flow meter <sup>b</sup>
Flow	gallons/month	Monthly	Calculation
a	Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. The Permittee must sample daily when continuous monitoring is not possible.		
b	Metered sampling for flow, Thermo Datalogger (or recorder) sampling for temperature, continuous pH Meter, and continuous total ammonia analyzer.		

### S2.D. Monitoring schedule for discharge to the Port of Sunnyside IWWTF Lagoon No. 4 (Outfall 004)

The Permittee must report results of monitoring performed by the Port of Sunnyside IWWTF. The permittee or the Port of Sunnyside IWWTF must monitor wastewater at the in-line sampling point at the control box for the



Outfall 001 and Outfall 004 splitter in accordance with the following schedule and the requirements specified in **Appendix A**.

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
<b>(1) Wastewater Effluent</b>			
Flow	gallons/day (gpd)	Continuous <sup>a</sup>	Flow meter <sup>b</sup>
Flow	Gallons / month	Monthly	Calculation
Flow	cubic feet/month	Monthly	Calculation
Flow (Annual Total)	cubic feet/year	Annual	Calculation
pH	Standard Units	1/week <sup>c</sup>	Grab <sup>d</sup>
BOD <sub>5</sub> <span style="color: red;">COD</span>	mg/L	1/week	24-hour composite <sup>e</sup>
BOD <sub>5</sub> <span style="color: red;">COD</span>	lbs/month	Monthly	Calculation <sup>f</sup>
BOD <sub>5</sub> <span style="color: red;">COD</span>	lbs/year	Annual	Calculation
<del>BOD<sub>5</sub> (Monthly Flow-Weighted Average)</del>	<del>mg/L</del>	<del>Monthly</del>	<del>Calculation <sup>g</sup></del>
<del>Total Suspended Solids (TSS)</del>	<del>mg/L</del>	<del>1/week</del>	<del>24-hour composite</del>
<del>TSS</del>	<del>lbs/month</del>	<del>Monthly</del>	<del>Calculation <sup>f</sup></del>
<del>TSS</del>	<del>lbs/year</del>	<del>Annual</del>	<del>Calculation</del>
<del>TSS (Monthly Flow-Weighted Average)</del>	<del>mg/L</del>	<del>Monthly</del>	<del>Calculation <sup>g</sup></del>
Total Kjeldahl Nitrogen (TKN)	mg/L as Nitrogen (N)	<span style="color: red;">2/month</span> <del>1/week</del>	24-hour composite
TKN	lbs/month	Monthly	Calculation <sup>f</sup>
TKN	lbs/year	Annual	Calculation
<del>TKN (Monthly Flow-Weighted Average)</del>	<del>mg/L as Nitrogen (N)</del>	<del>Monthly</del>	<del>Calculation <sup>g</sup></del>
<del>Ammonia (Total)</del>	<del>mg/L</del>	<del>1/week</del>	<del>24-hour composite</del>
<del>Ammonia (Total)</del>	<del>lbs/month</del>	<del>Monthly</del>	<del>Calculation</del>
<del>Ammonia (Total)</del>	<del>lbs/year</del>	<del>Annual</del>	<del>Calculation</del>

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
<del>Ammonia (Total) (Monthly Flow Weighted Average)</del>	<del>mg/L</del>	<del>Monthly</del>	<del>Calculation <sup>g</sup></del>
Nitrate plus Nitrite N	mg/L as N	1/week	24-hour composite
<del>Nitrate plus Nitrite N</del>	<del>lbs/month</del>	<del>Monthly</del>	<del>Calculation <sup>f</sup></del>
<del>Nitrate plus Nitrite N</del>	<del>lbs/year</del>	<del>Annual</del>	<del>Calculation</del>
<del>Nitrate plus Nitrite N (Total) (Monthly Flow Weighted Average)</del>	<del>mg/L as N</del>	<del>Monthly</del>	<del>Calculation <sup>f</sup></del>
Total Nitrogen	mg/L as N	1/week	Calculation <sup>h</sup>
<del>Total Nitrogen</del>	<del>lbs/month</del>	<del>Monthly</del>	<del>Calculation <sup>f</sup></del>
<del>Total Nitrogen</del>	<del>lbs/year</del>	<del>Annual</del>	<del>Calculation</del>
<del>Total Nitrogen (Monthly Flow Weighted Average)</del>	<del>mg/L as N</del>	<del>Monthly</del>	<del>Calculation <sup>g</sup></del>
Total Phosphorus	mg/L as P	1/week	24-hour composite
<del>Total Phosphorus</del>	<del>lbs/month</del>	<del>Monthly</del>	<del>Calculation <sup>f</sup></del>
<del>Total Phosphorus</del>	<del>lbs/year</del>	<del>Annual</del>	<del>Calculation</del>
<del>Total Phosphorus (Monthly Flow Weighted Average)</del>	<del>mg/L as P</del>	<del>Monthly</del>	<del>Calculation <sup>g</sup></del>
Chloride	mg/L	1/week	24-hour composite
<del>Chloride</del>	<del>lbs/month</del>	<del>Monthly</del>	<del>Calculation <sup>f</sup></del>
<del>Chloride</del>	<del>lbs/year</del>	<del>Annual</del>	<del>Calculation</del>
<del>Chloride (Monthly Flow Weighted Average)</del>	<del>mg/L</del>	<del>Monthly</del>	<del>Calculation <sup>g</sup></del>
Total Dissolved Solids (TDS)	mg/L	1/week	24-hour composite
<del>TDS</del>	<del>lbs/month</del>	<del>Monthly</del>	<del>Calculation <sup>f</sup></del>
<del>TDS</del>	<del>lbs/year</del>	<del>Annual</del>	<del>Calculation</del>
<del>TDS (Monthly Flow Weighted Average)</del>	<del>mg/L</del>	<del>Monthly</del>	<del>Calculation <sup>g</sup></del>



Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
Fixed Dissolved Solids (FDS)	mg/L	1/week	24-hour composite
FDS	lbs/month	Monthly	Calculation <sup>f</sup>
FDS	lbs/year	Annual	Calculation
FDS (Monthly Flow-Weighted Average)	mg/L	Monthly	Calculation <sup>g</sup>
a	Continuous means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 30 minutes. The Permittee must sample daily when continuous monitoring is not possible.		
b	Metered sampling for flow, Thermo Datalogger (or recorder) sampling for temperature, continuous pH Meter, and continuous total ammonia analyzer.		
c	"1/week" means one time during each calendar week and on a rotational basis throughout the days of the week, except weekends and holidays.		
d	"Grab" means an individual sample collected over a 15-minute period, or less.		
e	24-hour composite samples shall be collected on days when an actual discharge is occurring.		
f	<p>Monthly lbs loading calculated: (Total gallons per month/1,000,000) x Avg monthly concentration x 8.34</p> <p>If the flow value is originally in cubic feet, first covert to gallons: total gallons = total cubic feet x 7.48052</p>		
g	<p>Monthly, flow weighted, average concentration calculation:</p> $\sum [\text{daily concentration} \times (\text{daily flow in gal} \div \text{total monthly flow in gal})]$		
h	Total Nitrogen concentration calculated by adding together TKN and Nitrate/Nitrite concentrations.		

## S2.E. Sampling and analytical procedures

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters,