



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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April 8, 2019

Joe Stump
Yakima County Public Services
128 N. 2nd Street, Fourth Floor Courthouse
Yakima, WA 98901

RE: Minor Revision of National Pollutant Discharge Elimination System (NPDES) Permit No. WA0052132 for the Community of Buena Publicly Owned Treatment Works (POTW)

Dear Joe Stump:

Thank you for bringing to our attention the typographical error contained in Footnote "g" of S2.A. Monitoring Requirement table. This revision includes the following:

- *Change Footnote (g), the TSS equation for percent removal, to show a division of 0.1 (previously showed a division of 0.9.) (page 9).*
- *Correct punctuation on BOD₅ % removal footnote (f) – remove the comma (,) after footnote (f) (page 8).*

The revised calculation more accurately captures the Buena septic tanks solids removal rate.

Enclosed are replacement pages for your NPDES Permit No. WA0052132.

The changes do not affect the stringency of the permit and therefore does not require public notice. Please have your staff replace the original pages of the permit with the revised pages for each copy of the permit made. The pages are clearly marked at the bottom "**THIS PAGE REVISED ON APRIL 8, 2019**".

We regret the necessity to make this correction, but as the permit will be in effect for up to five years, it is prudent to have it in the best possible form. Should you or your staff have any questions, please contact Erik Van Doren at 509/457-7119 or erik.vandoren@ecy.wa.gov.

Sincerely,

David B. Bowen
Section Manager
Water Quality Program

Enclosure: Revised Permit Pages

By Certified Mail 7004 1160 0002 6158 1488



S2. Monitoring requirements

S2.A. Monitoring schedule

The Permittee must monitor in accordance with the following schedule and the requirements specified in Appendix A.

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
(1) Wastewater influent			
Wastewater Influent means the raw sewage flow from the collection system into the treatment facility. Sample the wastewater entering the headworks of the treatment plant excluding any side-stream returns from inside the plant.			
Flow	MGD	Continuous ^a	24-hr Measurement
Biochemical Oxygen Demand (BOD ₅)	mg/L	1/week	24-hr Composite ^b
BOD ₅	lbs/day	1/week	Calculation
Total Suspended Solids (TSS)	mg/L	1/week	24-hr Composite
TSS	lbs/day	1/week	Calculation
(2) Final wastewater effluent			
Final Wastewater Effluent means wastewater exiting the last treatment process or operation. Typically, this is after or at the exit from the chlorine contact chamber or other disinfection process. The Permittee may take effluent samples for the BOD ₅ analysis before or after the disinfection process. If taken after, the Permittee must dechlorinate and reseed the sample.			
BOD ₅ ^c	mg/L	1/week ^d	24-hr Composite
BOD ₅	lbs/day	1/week	Calculation ^e
BOD ₅	% removal ^f	1/month ^h	Calculation
TSS	mg/L	1/week	24-hr Composite
TSS	lbs/day	1/week	Calculation
TSS	% removal ^g	1/month	Calculation
Fecal Coliform ⁱ	# /100 ml	1/week	Grab ^j
pH ^k	Standard Units	3/week ^l	Grab
Temperature ^m	°C	3/week	Grab
Dissolved Oxygen ⁿ	mg/L	3/week	Grab
Total Ammonia	mg/L as N	1/month	Grab

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S1.B. Mixing zone authorization

Mixing zone for Outfall 001

The paragraphs below defines the maximum boundaries of the mixing zones.

Chronic mixing zone

The width of the chronic mixing zone is limited to a distance of 3 feet. The length of the chronic mixing zone extends 300 feet downstream of the outfall. The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the chronic zone must meet chronic aquatic life criteria and human health criteria.

Acute mixing zone

The width of the acute mixing zone is limited to a distance of 0.3 feet in any horizontal direction from the outfall. The length of the acute mixing zone extends 30 feet downstream of the outfall. The mixing zone extends from the bottom to the top of the water column. The concentration of pollutants at the edge of the acute zone must meet acute aquatic life criteria.

Available Dilution (dilution factor)	
Acute Aquatic Life Criteria	1.2
Chronic Aquatic Life Criteria	3.0

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
(3) Permit renewal application requirements – final wastewater effluent			
The Permittee must record and report the wastewater treatment plant flow discharged on the day it collects the sample for priority pollutant testing with the discharge monitoring report.			
Total Kjeldahl Nitrogen	mg/L as N	Once per year ^o	Grab
Nitrate plus Nitrite	mg/L as N	Once per year	Grab
Oil and Grease	mg/L	Once per year	Grab
Phosphorus (Total)	mg/L as P	Once per year	Grab
Total Dissolved Solids	mg/L	Once per year	Grab
Total Hardness	mg/L	Once per year	Grab
Total Alkalinity	mg/L	Once per year	Grab
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 every hour during working hours when continuous monitoring is not possible.		
b	24-hour composite means a series of individual samples collected over a 24-hour period into a single container, and analyzed as one sample.		
c	Take effluent samples for the BOD ₅ analysis after the disinfection process.		
d	1/week means one (1) time during each calendar week throughout the days of the week, except weekends and holidays.		
e	Calculated means figured concurrently with the respective sample, using the following formula: Concentration (in mg/L) X Flow (in MGD) X Conversion Factor (8.34) = lbs/day		
f	$\left[\left(\frac{\text{Influent Concentration}}{0.7} - \text{Effluent Concentration} \right) \div \frac{\text{Influent Conc.}}{0.7} \right] \times 100$ <p>Calculate the percent (%) removal of BOD₅ using the above equation.</p>		
g	$\left[\left(\frac{\text{Influent Concentration}}{0.1} - \text{Effluent Concentration} \right) \div \frac{\text{Influent Conc.}}{0.1} \right] \times 100$ <p>Calculate the percent (%) removal of TSS using the above equation.</p>		
h	1/month means one (1) time every calendar month during alternating weeks.		
i	Report a numerical value for fecal coliforms following the procedures in Ecology's <i>Information Manual for Wastewater Treatment Plant Operators</i> , Publication Number 04-10-020 available at: https://fortress.wa.gov/ecy/publications/SummaryPages/0410020.html . Do not report a result as too numerous to count (TNTC).		
j	Grab means an individual sample collected over a fifteen (15) minute, or less, period.		

Parameter	Units & Speciation	Minimum Sampling Frequency	Sample Type
k		Report the daily pH and the minimum and maximum for the monitoring period.	
l		3/week means one (3) times during each calendar week throughout the days of the week, except weekends and holidays.	
m		Temperature grab sampling must occur when the effluent is at or near its daily maximum temperature, which usually occurs in the late afternoon. If measuring temperature continuously, the Permittee must determine and report a daily maximum from half-hour measurements in a 24-hour period. Continuous monitoring instruments must achieve an accuracy of 0.2 degrees C and the Permittee must verify accuracy annually.	
n		Report the daily dissolved oxygen concentration and the minimum for the reporting period.	
o		Once per year means one (1) time every calendar year during alternating months.	

S2.B. 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. The Permittee must conduct representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions that may affect effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 (or as applicable in 40 CFR subchapters N [Parts 400–471] or O [Parts 501-503]) unless otherwise specified in this permit. Ecology may only specify alternative methods for parameters without permit limits and for those parameters without an EPA approved test method in 40 CFR Part 136.

S2.C. Flow measurement and continuous monitoring devices

The Permittee must:

1. Select and use appropriate flow measurement, continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard, the manufacturer's recommendation, and approved O&M manual procedures for the device and the wastestream.
3. Calibrate continuous monitoring instruments weekly unless it can demonstrate a longer period is sufficient based on monitoring records.

The Permittee:

 - a. May calibrate apparatus for continuous monitoring of dissolved oxygen by air calibration.