

BASIS FOR DECISION MEMO

Permit Processor: Tom Braum

Date: June 8, 2020

Permit No. MI0056723

Designated Site Name: Saddle Ridge Condo-Algoma

Monitoring Point 001A: Authorization to discharge 0.08 MGD of treated sanitary wastewater from Monitoring Point 001A through Outfall 001. Outfall 001 discharges to a wetland contiguous with the Rogue River.

<u>Parameter</u>	<u>Maximum Limits for Quantity or Loading</u>				<u>Maximum Limits for Quality or Concentration</u>				<u>Monitoring Frequency</u>	<u>Sample Type</u>	<u>Basis for Limits</u>
	<u>Monthly</u>	<u>7-Day</u>	<u>Daily</u>	<u>Units</u>	<u>Monthly</u>	<u>7-Day</u>	<u>Daily</u>	<u>Units</u>			
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow	PWJ
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)											
May – September	3	7	(report)	lbs/day	4	---	10	mg/l	2x Weekly	24-Hr Composite	AWT/AD
October – April	17	27	(report)	lbs/day	25	40	(report)	mg/l	2x Weekly	24-Hr Composite	STS
Total Suspended Solids (TSS)											
May – September	13	20	(report)	lbs/day	20	30	(report)	mg/l	2x Weekly	24-Hr Composite	PWJ/AD
October – April	20	30	(report)	lbs/day	30	45	(report)	mg/l	2x Weekly	24-Hr Composite	STS
Ammonia Nitrogen (as N)											
May – September	0.33	1.3/1.5	(report)	lbs/day	0.5	---	2.0	mg/l	2x Weekly	24-Hr Composite	AWT/AD
Total Phosphorus (as P)	0.33	---	(report)	lbs/day	0.5	---	(report)	mg/l	5x Weekly/ 2x Weekly	24-Hr Composite	WQBEL
Total Residual Chlorine (TRC) <i>Discharge Mode (See Part I.A.1.d.)</i>											
<i>Continuous (greater than 160 min/day)</i>	---	---	---	---	---	---	38	ug/l	see Part I.A.1.c./ Daily	Grab	WQBEL
<i>Intermittent (less than/equal to 160 min/day)</i>	---	---	---	---	---	---	200	ug/l	<i>Daily</i>	<i>Grab</i>	
<i>TRC Discharge Time</i>	---	---	---	---	---	---	(report)	min/day	<i>Daily</i>	<i>Report Total Discharge Time</i>	
Fecal Coliform Bacteria	---	---	---	---	200	400	(report)	cts/ 100 ml	2x Weekly	Grab	WQS

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<u>Parameter</u>					<u>Minimum % Monthly</u>		<u>Minimum % Daily</u>	<u>Units</u>	<u>Monitoring Frequency</u>	<u>Sample Type</u>	<u>Basis for Limits</u>
CBOD ₅ Minimum % Removal											
October – April	---	---	---	---	85	---	(report)	%	Monthly	Calculation	STS
TSS Minimum % Removal											
October – April	---	---	---	---	85	---	(report)	%	Monthly	Calculation	STS
					<u>Minimum Daily</u>		<u>Maximum Daily</u>				
pH	---	---	---	---	6.5	---	9.0	S.U.	2x Weekly/Daily	Grab	WQS
Dissolved Oxygen	---	---	---	---	4.0	---	---	mg/l	2x Weekly/Daily	Grab	WQBEL

Monitoring Point 002A: Authorization to discharge 0.005 MGD of wastewater associated with the production of potable water from Monitoring Point 002A through a storm sewer, a stormwater pond, and Outfall 002. Outfall 002 discharges to a wetland contiguous with the Rogue River.

<u>Parameter</u>	<u>Maximum Limits for Quantity or Loading</u>				<u>Maximum Limits for Quality or Concentration</u>				<u>Monitoring Frequency</u>	<u>Sample Type</u>	<u>Basis for Limits</u>
	<u>Monthly</u>	<u>7-Day</u>	<u>Daily</u>	<u>Units</u>	<u>Monthly</u>	<u>7-Day</u>	<u>Daily</u>	<u>Units</u>			
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow	PWJ
Total Suspended Solids (TSS)	---	---	---	---	30	---	50	mg/l	Weekly	Grab	BPJ
Total Iron	---	---	---	---	5.0	---	(report)	mg/l	Weekly	Grab	WQBEL
Total Phosphorus (as P)	0.02	---	---	lbs/day	0.5	---	(report)	mg/l	Weekly	24-Hr Composite	WQBEL
Total Residual Chlorine	---	---	---	---	---	---	38	ug/l	see Part I.A.2.c.	Grab	WQBEL
Chloride	---	---	---	---	(report)	---	(report)	mg/l	Monthly	Grab	WQC
Sulfate	---	---	---	---	(report)	---	(report)	mg/l	Monthly	Grab	WQC
Total Manganese	---	---	---	---	(report)	---	(report)	ug/l	Monthly	24-Hr Composite	WQC
					<u>Minimum Daily</u>		<u>Maximum Daily</u>				
pH	---	---	---	---	6.5	---	9.0	S.U.	Weekly	Grab	WQS
Outfall Observation	(report)	---	---	---	---	---	---	---	Weekly	Visual	PWJ

PERMIT CONDITIONS:

Final Effluent Limitations - Wastewater Treatment Plant, Monitoring Point 001A

Final Effluent Limitations – Water Treatment Plant, Monitoring Point 002A**Additional Sampling****Intake Screen Backwash****Request for Approval to Use Water Treatment Additives****Quantification Levels and Analytical Methods for Selected Parameters**

Untreated or Partially Treated Sewage Discharge Reporting and Testing Requirements

Facility Contact

Monthly Operating Reports – Wastewater Treatment Plant**Asset Management****Continuous Monitoring**

Storm Water Pollution Prevention (not required)

Industrial Waste Pretreatment Program

Residuals Management Program for Land Application of Biosolids

NOTES:

The facility has an unpermitted discharge to surface waters of the state from their water treatment plant. The facility entered into an ACO with the Department on December 2, 2019. The ACO required the facility to apply for an NPDES permit for this discharge. The Department provided two options to the facility in order to complete this requirement: 1) apply for coverage under the Potable Water Supply General Permit, or 2) add this discharge to their existing NPDES permit for their wastewater treatment plant discharge. The facility chose to add this discharge point to their existing NPDES permit. Permit language and final effluent limitations and monitoring requirements have been included in the permit consistent with the Potable Water Supply General Permit requirements for oxidation/filtration treatment systems and in accordance with recommendations from the biologist.

Total Residual Chlorine (TRC) limits have been revised for the wastewater treatment plant discharge. It was determined to be difficult to determine the discharge time of chlorine products and whether the discharge was continuous or intermittent. A daily limit of 38 ug/l when chlorine products are in use is now in place regardless of discharge length and frequency. Part I.A.1.c. Total Residual Chlorine has been modified to specify compliance requirements for this limit. The facility can request a monitoring frequency reduction for TRC after one year of TRC monitoring. TRC requirements have also been included for the water treatment plant discharge.

The monitoring frequency for pH and Dissolved Oxygen has been changed from Daily to 2x Weekly. The facility requested this monitoring frequency reduction and it was subsequently approved by the Department.

Less stringent concentration limits are recommended for CBOD₅, TSS, and Ammonia Nitrogen for Monitoring Point 001A for the months of May through September. Based on review of the facility's existing effluent quality, Permits Section determined that it is appropriate to retain the current limits under antidegradation.

Part I.A.9. Monthly Operating Reports – Wastewater Treatment Plant has been modified to specify that it applies only to the Wastewater Treatment Plant and not to the Water Treatment Plant.

Permits Section and the Grand Rapids District Office determined that Part I.A.10. Asset Management should be included because of past maintenance deficiencies that had developed at the facility. This condition will help ensure proper maintenance in the future.

Limit Change Key

Normal Type = existing requirement - carried over from previous version of permit

Bold Type = new requirement - not in previous version of permit

Italic = deleted requirement - not carried over from previous version of permit

Basis for Limits Key

BPJ - Best Professional Judgment of appropriate treatment technology-based effluent limits in the absence of applicable federal guidelines

WQBEL - Water Quality-Based Effluent Limit

STS - Secondary Treatment Standard

AWT - Advanced Wastewater Treatment

WQC - Water Quality Concern

WQS - Water Quality Standard

PWJ - Permit Writer's Judgment

AD – Antidegradation