

Wastewater Treatment Technology Alternative Application

The Town of Paradise is soliciting technology ideas in determining the best local wastewater treatment and dispersal alternative for the Paradise Sewer Project. In an effort to ensure all ideas are considered, the Town is inviting community and vendor input. Understanding the basic scope of the project and complexities driven by a reduced population as a result of the 2018 Camp Fire, staff has prepared a list of preferred criteria for consideration of potential options. If you are interested in meeting with Town staff to discuss your input, please refer to the Application form and Treatment Technology Requirements checklist below:

Proposed treatment technology name/description:

Name, title & organization of Contact Person:

Email of Contact Person:

Phone number of Contact Person:

Treatment Technology Requirements - check each box that the proposed treatment technology fulfills:

- □ There are at least 5 full-scale installations of proposed treatment technology (provide list of locations)
- □ There is at least 1 permitted California installation that Town staff could visit (indicate on list of locations)
- □ Proposed treatment technology can treat a flow of 0.1 MGD (min) and scale up to treat 1 MGD (provide information about scalability)
- Proposed treatment technology can receive and treat municipal, commercial, or industrial waste
- Proposed treatment technology can meet the Central Valley Regional Water Quality Control Board waste discharge requirements for either land discharge (SWRCB Order WQ 2014-0153-DWQ) or surface water discharge (NPDES Municipal General Order R5-2023-0025):

Land Discharge Requirements:

Step 1 - Effluent Limitations Based on Technology Performance							
Activated Sludge, MBR, or similar (not including residential aerobic treatment units)							
Constituent	Units	Limit					
BOD	mg/L	30 (monthly average), 45 (7-day average)					
TSS	mg/L	30 (monthly average), 45 (7-day average)					
Wastewater Pond or Trickling Filter ¹ (not including residential recirculating sand filters)							
Constituent	Units	Limit					
BOD	mg/L	90 ²					
TSS		Not Applicable					

Step 2 - Effluent Limits Based on Low/High Threat Situation (flow rate >20,000 gpd)					
Constituent	Units	Limit			
Total N	mg/L	-			
Low Threat	mg/L	50 % ³			
High Threat	mg/L	10			

Surface Water Discharge Requirements:

Table 3. Effluent Limitations – Secondary Treatment Requirements

Parameters	Units	Average Monthly Effluent Limitation (AMEL)	Average Weekly Effluent Limitation (AWEL)	Maximum Daily Effluent Limitation (MDEL)
Biochemical Oxygen Demand, 5-day @ 20°Celsius (BOD5)	milligrams per liter (mg/L)	30	45	60
BOD5	pounds per day (lbs/day)	See Table Note 1	See Table Note 1	See Table Note 1
Total Suspended Solids (TSS)	mg/L	30	45	60
TSS	lbs/day	See Table Note 1	See Table Note 1	See Table Note 1
Settleable Solids	milliliters per liter (ml/L)	0.1	0.2	

Table 3 Note:

1. As specified in the Notice of Applicability, mass-based effluent limitations shall be established based on the design average dry weather flow.

(b) **Percent Removal.** The average monthly percent removal of BOD₅ and TSS shall not be less than 85 percent.

(c) Total Coliform Organisms. Effluent total coliform organisms shall not exceed the following at Monitoring Location EFF-001 or other monitoring locations specified in the Notice of Applicability:

(1) 23 most probable number (MPN) per 100 mL, as a 7-day median; and

(2) 240 MPN/100 mL, more than once in any 30-day period.

Provide the following additional documentation:

- List of other facilities/processes needed to meet effluent requirements (headworks, screens/filters, primary clarification, disinfection, etc.)
- List of acceptable residuals/solids management processes
- Modifications necessary to meet Title 22 effluent quality limits
- Include in the list of full-scale installations if each installation received state or federal grant funding, and if so from which agencies.

This form and supplemental information can be submitted via email to Kieran Jellema at <u>kjellema@townofparadise.com</u> or by delivering a hard copy to Town Hall at 5555 Skyway, Paradise, CA. All information must be received by Friday, March 21, 2025. Staff anticipates scheduling follow-up meetings with interested parties as soon as possible.

NOTE: Submittal of your completed copy of this checklist and all required documentation does not guarantee a meeting with Town staff nor does it guarantee that the Proposed Treatment Technology will be included in the Paradise Sewer Project Alternative Analysis.