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WA State Department
of Ecology (SWRO)

City of Port Townsend
Compost Facility WWTP

#ST 6127

S4E Wasteload Assessment Report

Due June 1, 2022



**City of Port Townsend
Biosolids Composting Facility
Permit Number ST6127
Wasteload Assessment Report**

This is to provide a wasteload assessment as required in Section S4.E of the ST6127 permit for the City of Port Townsend Biosolids Composting Facility. This report is required one time per permit cycle and is due on June 1, 2022. This report covers the period of July 1, 2019, through April 30, 2022.

The facility has been operating well during the permit cycle with one permit violation and in full compliance with the permit effluent limits. The facility has been awarded the exemplary performance award several times during this permit cycle.

The average Nitrate-Nitrogen out of the wetlands during this period is **0.57 mg/L** with a maximum month of **2.30 mg/L**. The permitted level is 10 mg/L out of the wetlands. The Nitrate-Nitrogen in the monitoring well over this period on average has been **5.70 mg/L** with a maximum month of **9.07 mg/L**.

The flows into the system have been on the average during this period at **1,981** gallons per day (GPD) which is well below the permitted level of 4,000 GPD. We have had no issues of the maximum day flow with a maximum of 5,984 GPD during this period. The average maximum day flow for this period is 5,580 GPD. The permitted maximum flow is 6,200 GPD.

The facility has not been receiving high volumes of septage but a more steady flow into the facility. The local haulers are still taking some of their materials to a facility in Mason County mainly because we don't have the overall capacity to handle all of the septage from Jefferson County. The flow levels have fluctuated from month to month and depend on several factors such as weather and fuel costs. I have included graphs which show the flow levels in relation to the permitted levels.

The loadings to the facility fluctuate from month to month but have been on the average well below the design levels. The average lbs/day of BOD and TSS over this period has been **3** and **7** respectively. The design loading for BOD and TSS is 17 lbs/day and 16 lbs/day respectively. The BOD loading is on the average at **18** percent of the design level and the TSS loading is at **44** percent of the design level. The average loadings are more relevant and are being used to determine the load coming into the SBR system.

There is no present or design population or population equivalent for this facility because our flow stream is the pumping of septic tanks and the more relevant parameters are the loadings and flow into the facility. The population projection for Jefferson County is 1.46% per year.

To estimate the date upon which the Permittee expects the wastewater treatment plant to reach design capacity according to the most restrictive of the parameters shown in S4.E is difficult to estimate because we have the control to not accept the septage into the facility so we could hold our loadings to where the facility would go for many years. As part of

the City's Sewer Plan Update, that is being worked on currently, we are looking at ways to increase septage handling at the Compost Facility.

I have included several graphs that indicate how the facility is doing and the loadings into the system. I have also included a spread sheet that has the data for the facility for the period of July 2019 through April 2022.


If you have any questions about the enclosed materials, please feel free to contact me at (360) 385-3000 Ext. 3197

CERTIFICATION

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Prepared by: Bliss Morris, Operations Manager
Date: May 17, 2022


Bliss Morris


Date


John Mauro City Manager


Date

Liquid Data JULY 2013 – APRIL 2016

Compost Facility Liquid Data																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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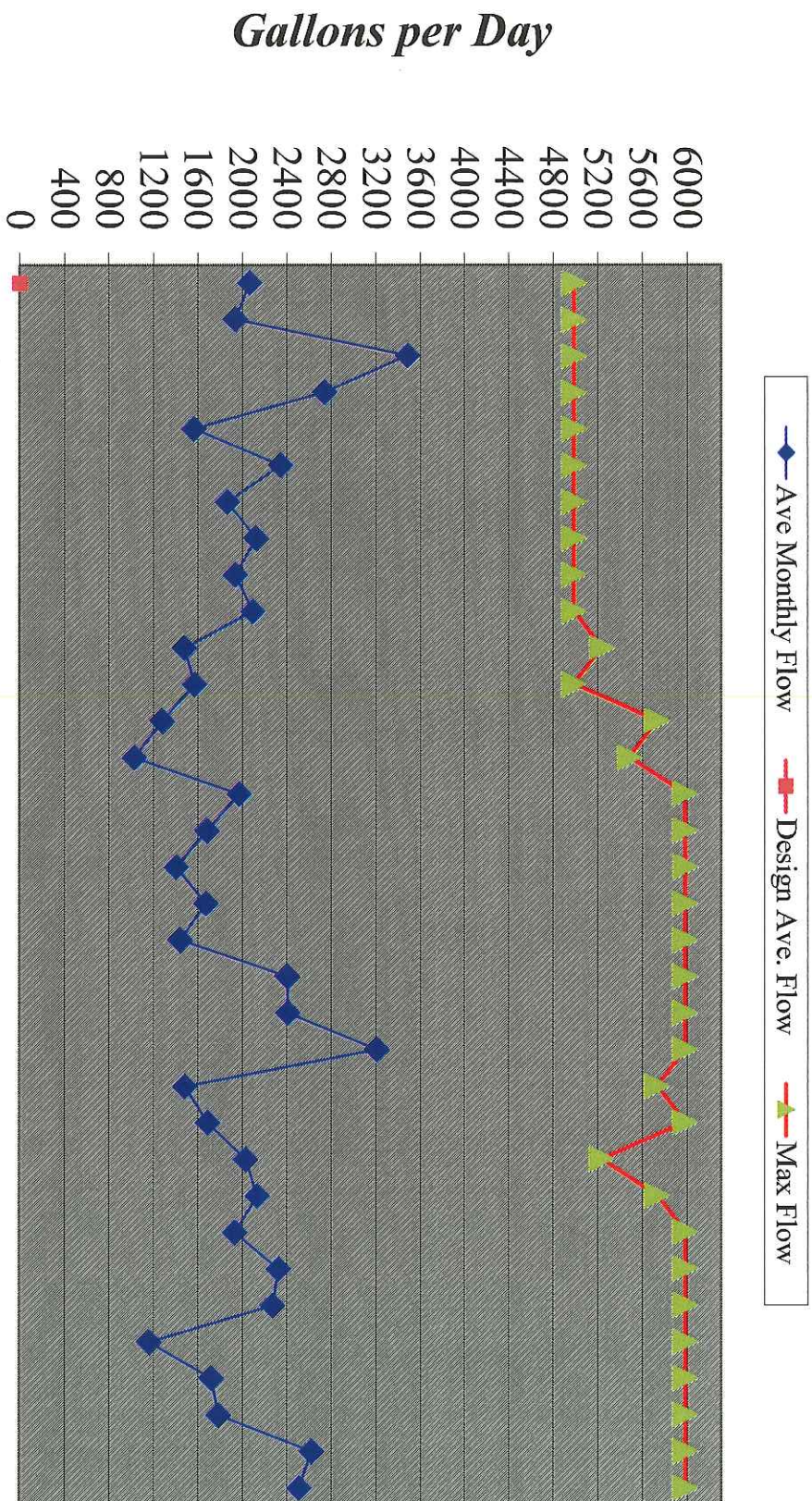
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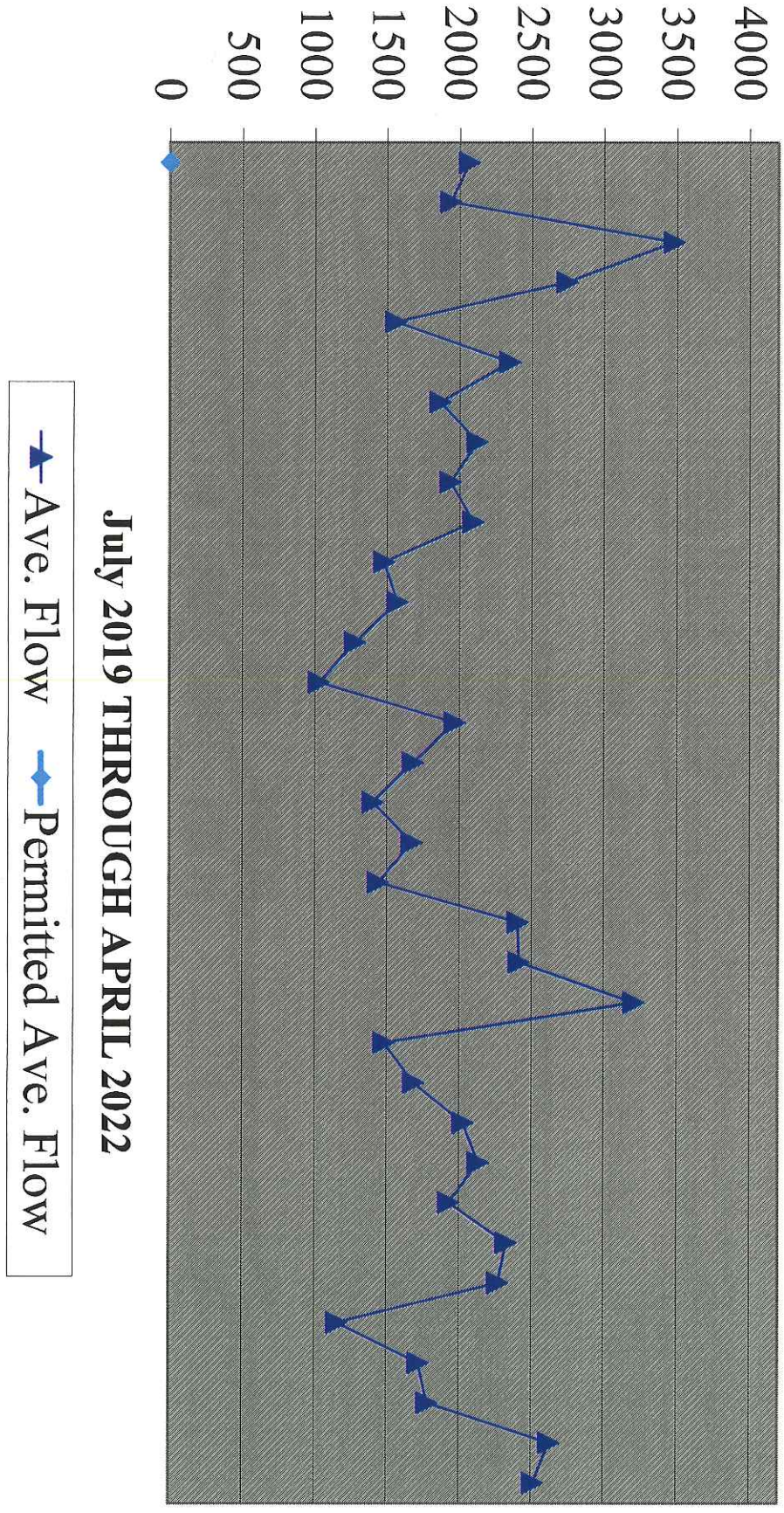
CITY OF PORT TOWNSEND
COMPOST FACILITY
PERMIT # ST6127



July 2019 - April 2022

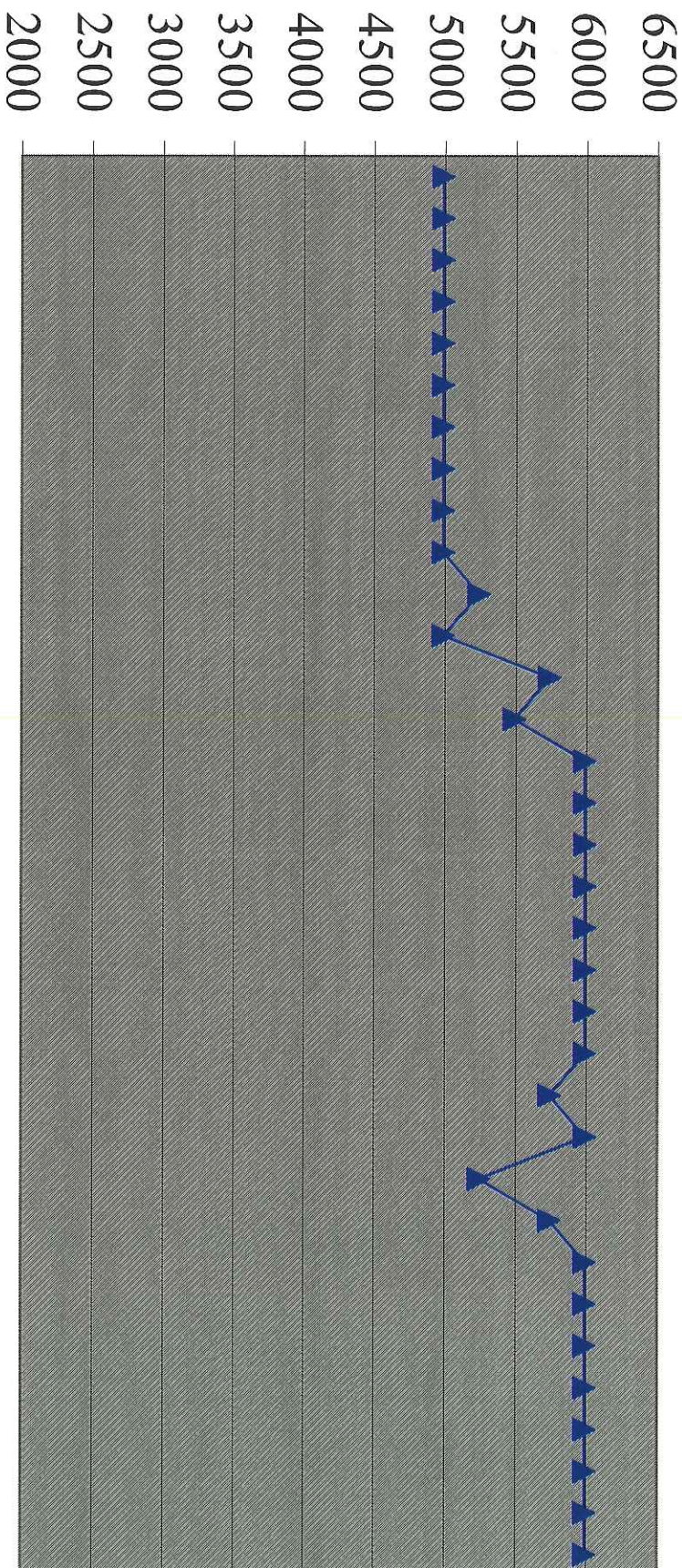
CITY OF PORT TOWNSEND
COMPOST FACILITY
PERMIT # ST6127

CITY OF PORT TOWNSEND AVERAGE FLOW



CITY OF PORT TOWNSEND
COMPOST FACILITY
PERMIT # ST6127

CITY OF PORT TOWNSEND MAXIMUM FLOW

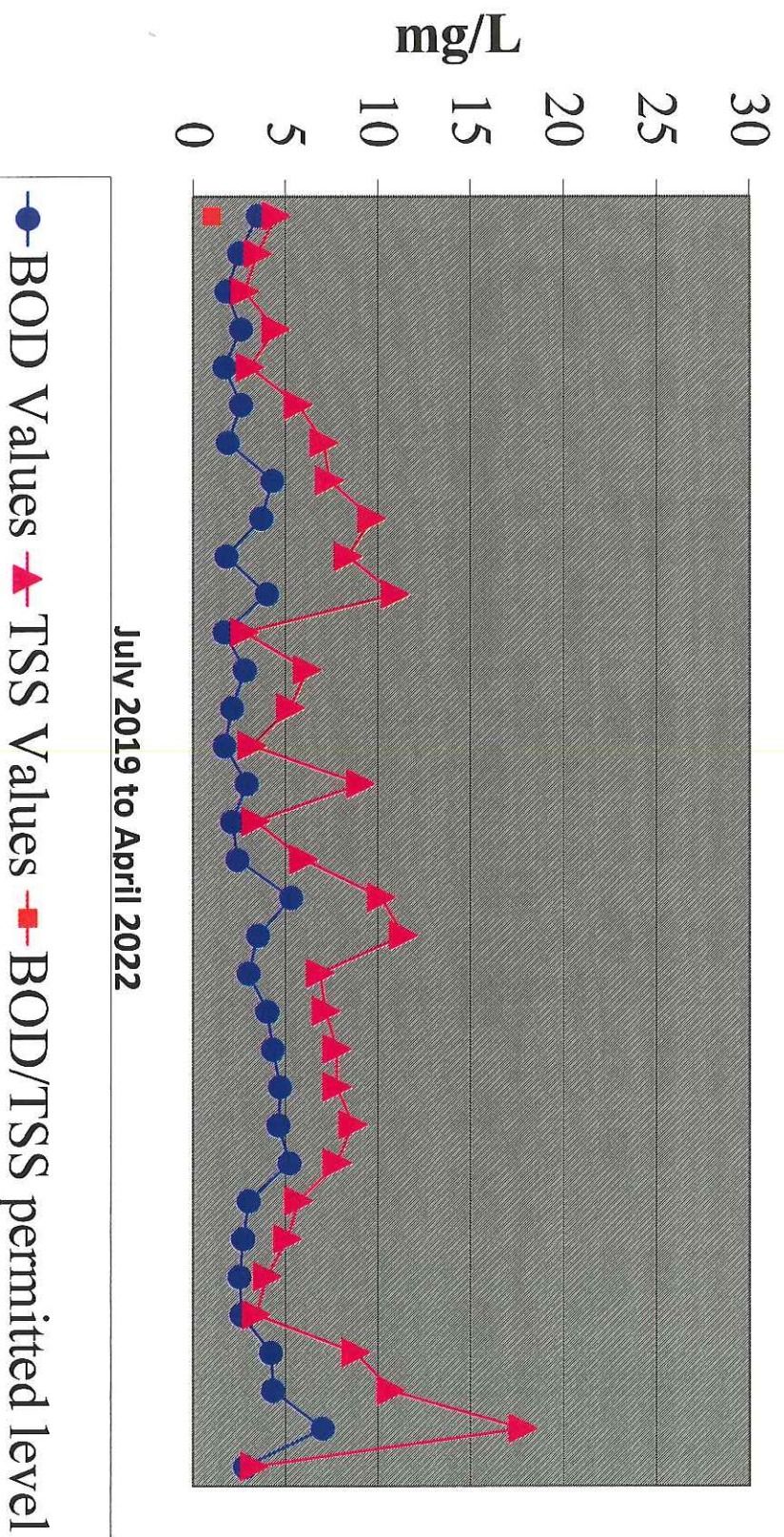


July 2019 THROUGH APRIL 2022

Max. Flow Permitted Ave. Flow

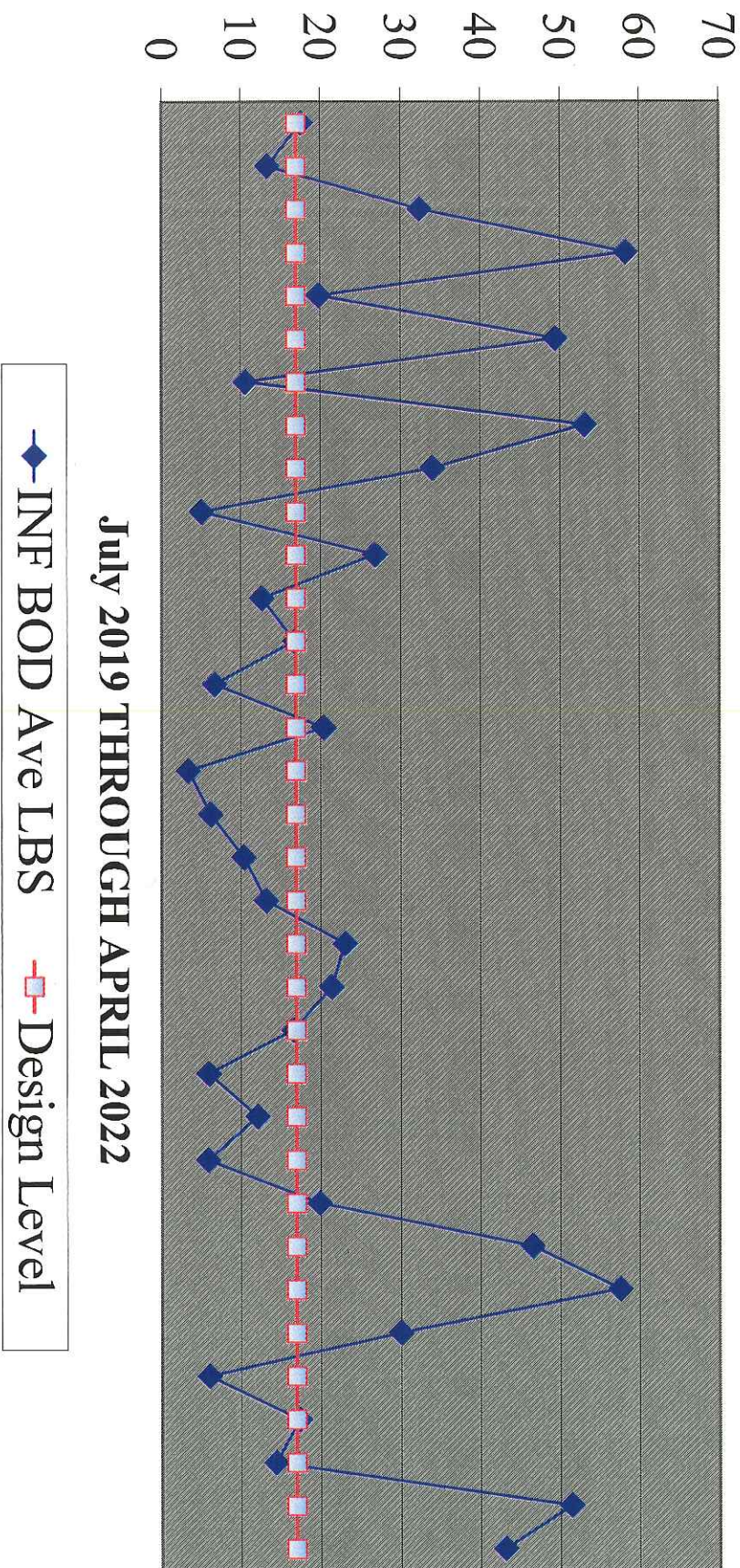
CITY OF PORT TOWNSEND
BIOSOLIDS COMPOSTING FACILITY

SBR Effluent BOD/TSS



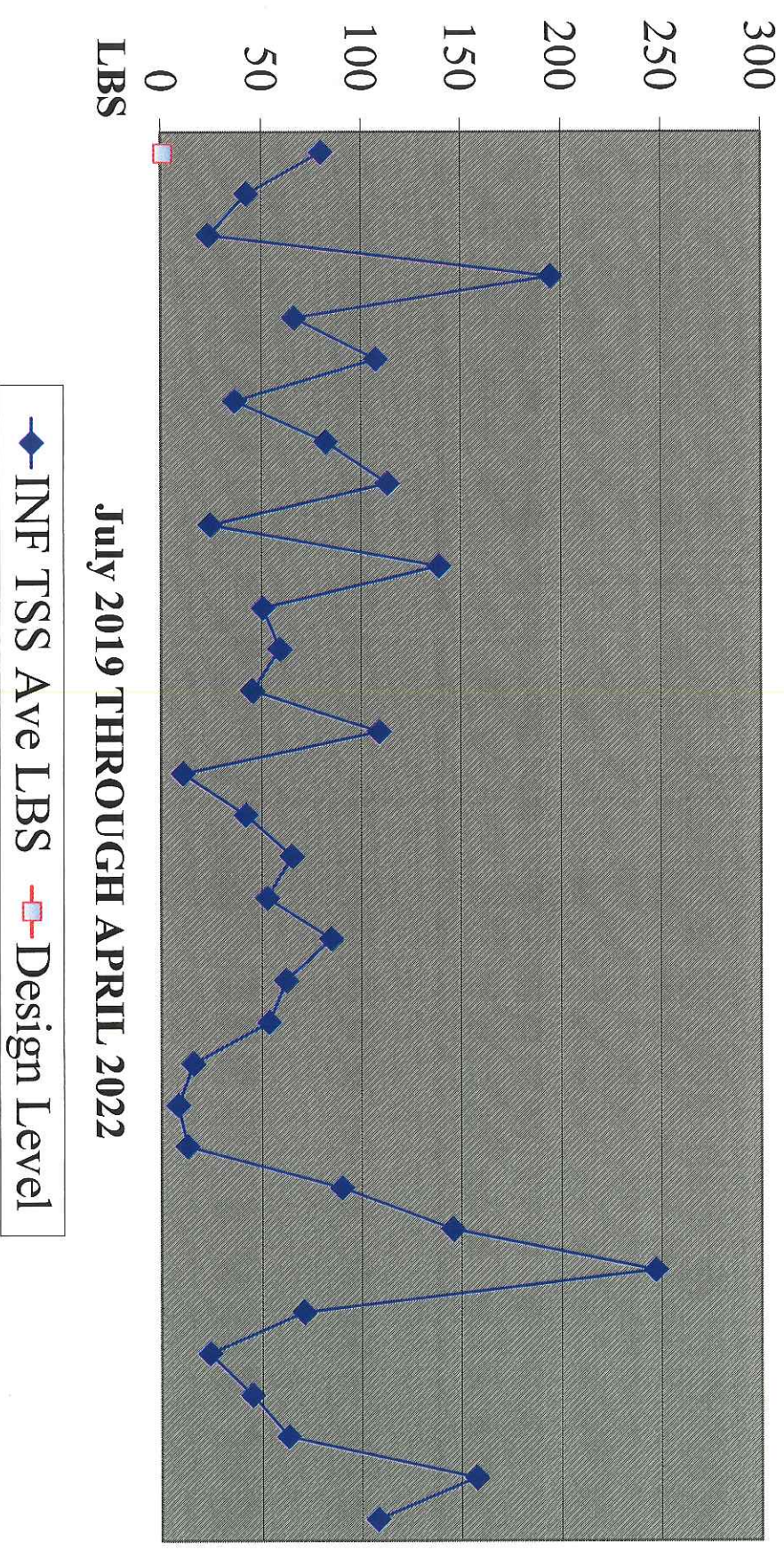
CITY OF PORT TOWNSEND
COMPOST FACILITY
PERMIT # ST6127

CITY OF PORT TOWNSEND COMPOST FACILITY

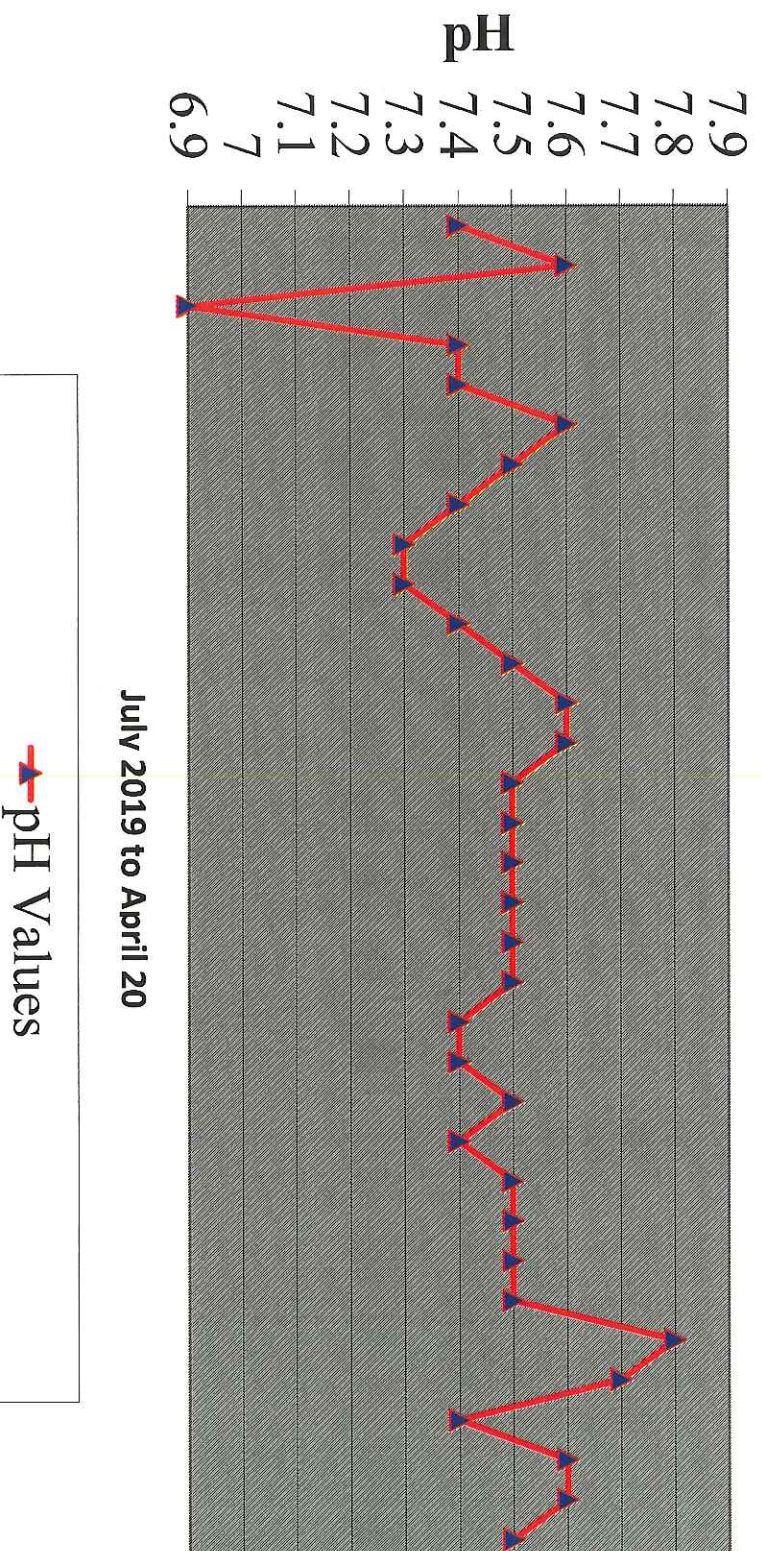


CITY OF PORT TOWNSEND
COMPOST FACILITY
PERMIT # ST6127

CITY OF PORT TOWNSEND COMPOST FACILITY



SBR Effluent pH



CITY OF PORT TOWNSEND
COMPOST FACILITY
PERMIT # ST6127

CITY OF PORT TOWNSEND

