

M E M O R A N D U M

January 14, 1976

To: John Glynn

From: Darrel Anderson

Subject: Warm Beach Conference Grounds
Sewage Lagoon

On August 17, 1975 effluent samples were taken at the conference grounds sewage lagoons. Samples were taken out of the effluent before it entered the small creek and once more as it passed through the tidal gate to the bay (sample locations are noted on the Survey Report Form). At the time we took samples the conference grounds were closed, which accounted for the very low flow from the pond. Fecal coliform at the effluent was >4,000/100 ml, at the tidal gate is was est. 770/100 ml. Overall condition of the dikes are good.

DA:ee

STP Survey Report Form

Efficiency Study

City Warm Beach Plant Type Lagoon Pop. Served -- Design --
conference Grounds Capacity
 Receiving Water Port Susan-Puget Sound Perennial _____ Intermittent _____
 Date 8-17-75 Survey Period -- Survey Personnel D. Anderson
A. Moore
 Comp. Sampling Frequency -- Sampling Alequot Grab
 Weather Conditions (24 hr) Clear, warm Are facilities provided for complete by-
 pass of raw sewage? _____ Yes X No/Frequency of bypass None
 Reason for bypass -- Is bypass chlorinated? _____ Yes _____ No
 Was DOE Notified? _____ Discharge - Intermittent _____ Continuous _____

Plant Operation

Total flow No flows taken How measured _____
 Maximum flow _____ Time of Max. _____
 Minimum flow _____ Time of Min. _____
 Pre Cl₂ _____ #/day Post Cl₂ _____ #/day

Field Results

No Data

Influent

Effluent

<u>Determinations</u>	<u>Max.</u>	<u>Min.</u>	<u>Mean</u>	<u>Median</u>	<u>Max.</u>	<u>Min.</u>	<u>Mean</u>	<u>Median</u>
Temp °C								
pH (Units)								
Conductivity (µmhos/cm ²)								
Settleable Solids (mls/l)								

Laboratory Results on Composites

	<u>Influent</u>	<u>Effluent</u>	<u>% Reduction</u>
Laboratory No.	<u>(No Data)</u>	<u>75-4360</u>	
5-Day BOD ppm		<u>34</u>	
COD ppm		<u>123</u>	
T.S. ppm		<u>324</u>	
T.N.V.S. ppm		<u>217</u>	
T.S.S. ppm		<u>13</u>	
N.V.S.S. ppm		<u>2</u>	
pH (Units)		<u>7.1</u>	
Conductivity (µmhos/cm ²)		<u>550</u>	
Turbidity (JTU's)		<u>--</u>	

Laboratory Bacteriological Results

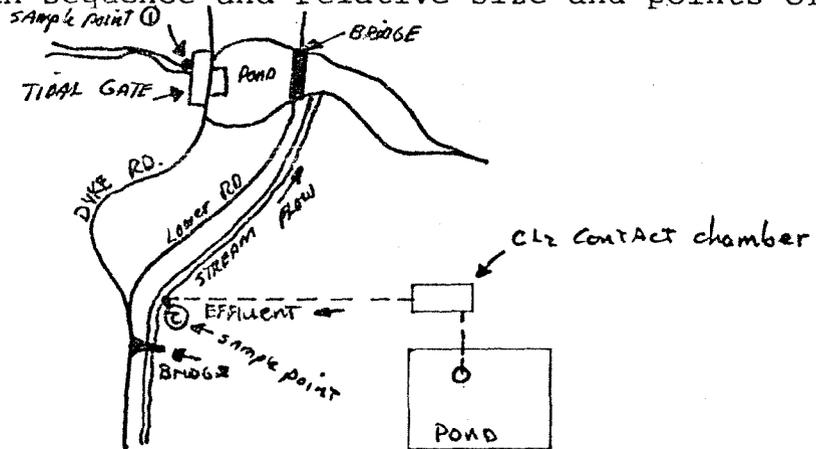
Lab No.	Sampling Time	Colonies/100 ml (MF)			Cl ₂ Residual
		Total Coliform	Fecal Coliform	Fecal Strep	
Effluent -					
75-4360		> 40,000	>4,000	--	None
Tidal Gate -					
75-4361		> 14,000	Est 770	--	None

Additional Laboratory Results

	Effluent	At Tidal Gate
NO ₃ -N ppm -	0.01	0.36
NO ₂ -N ppm -	<.02	<.02
NH ₃ -N ppm -	8.0	0.18
T. Kjeldahl-N ppm -	18.2	0.72
O-PO ₄ -P ppm -	0.68	0.16
T-PO ₄ -P ppm -	6.7	0.32

Operator's Name _____ Phone No. _____

Furnish a flow diagram with sequence and relative size and points of chlorination.



Type of Collection System

Combined Separate Both

Estimate flow contributed by surface or ground water (infiltration)

unk. _____ MGD

Plant Loading Information

Annual average daily flow rate(mgd)

Peak flow rate(mgd)

Dry _____ unk. _____

Dry _____ unk. _____

Wet _____

Wet _____

COMMENTS: Conference grounds were not in operation during time
samples were taken.

