



Memo To: Bill Burwell, Inspector

From: Allen Moore

**Subject: STP Survey Study at Walla Walla County
Farm Labor Camp**

Date: December 23, 1974

On October 9, 1974, I took a grab sample at the Farm Labor Camp S.T.P.

The lab data shows very little coliforms in the effluent due to the high chlorination rate. The rest of the data except for the BOD is quite confusing, probably due to the extremely run down condition of the plant.

Mr. Marlow, the camp manager and person in charge of the S.T.P. told me that lack of money was the reason for the run down condition.

The data should reflect conditions much like that in the busy growing season. At the time of the survey approximately 75 people were living there and the camp can hold no more than 85 at peak capacity.

AM:eme

Attachment

STP Survey Report Form

Efficiency Study

Walla Walla County
 City Farm labor camp Plant Type Secondary Pop. Served 65 Design Capacity
 Receiving Water Walla Walla River Perennial X Intermittent _____
 Date 9 Oct. 1974 Survey Period Grab at 1200 Survey Personnel Allen Moore
 Comp. Sampling Frequency _____ Sampling Alequot _____
 Weather Conditions (24 hr) Cloudy, calm, and warm Are facilities provided for complete by-pass of raw sewage? _____ Yes X No/Frequency of bypass _____
 Reason for bypass _____ Is bypass chlorinated? _____ Yes _____ No _____
 Was DOE Notified? _____ Discharge - Intermittent _____ Continuous X

Plant Operation

Total flow _____ How measured Parshall Flume - measuring stick
 Maximum flow _____ Time of Max. _____
 Minimum flow* .01938 MGD Time of Min. _____
 Pre Cl₂ _____ #/day Post Cl₂ _____ #/day

* Approximates average flow.

Field Results

Determinations	Influent				Effluent			
	Max.	Min.	Mean	Median	Max.	Min.	Mean	Median
Temp °C					65°F			
pH (Units)					6.6			
Conductivity (µmhos/cm ²)					250			
Settleable Solids (mls/l)					<.1		<.1	<.1

Laboratory Results on Composites

Laboratory No.	Influent	Effluent	% Reduction
	<u>74-4025</u>	<u>74-4026</u>	
5-Day BOD ppm	<u>50</u>	<u>20</u>	<u>60%</u>
COD ppm	<u>114</u>	<u>162</u>	<u>-42%</u>
F.S. ppm	<u>312</u>	<u>330</u>	<u>- 6%</u>
F.N.V.S. ppm	<u>171</u>	<u>197</u>	<u>-15%</u>
F.S.S. ppm	<u>53</u>	<u>58</u>	<u>- 9%</u>
V.V.S.S. ppm	<u>ND</u>	<u>ND</u>	<u>---</u>
pH (Units)	<u>7.2</u>	<u>7.0</u>	
Conductivity (µmhos/cm ²)	<u>350</u>	<u>440</u>	
Turbidity (JTU's)	<u>---</u>	<u>--</u>	

Laboratory Bacteriological Results

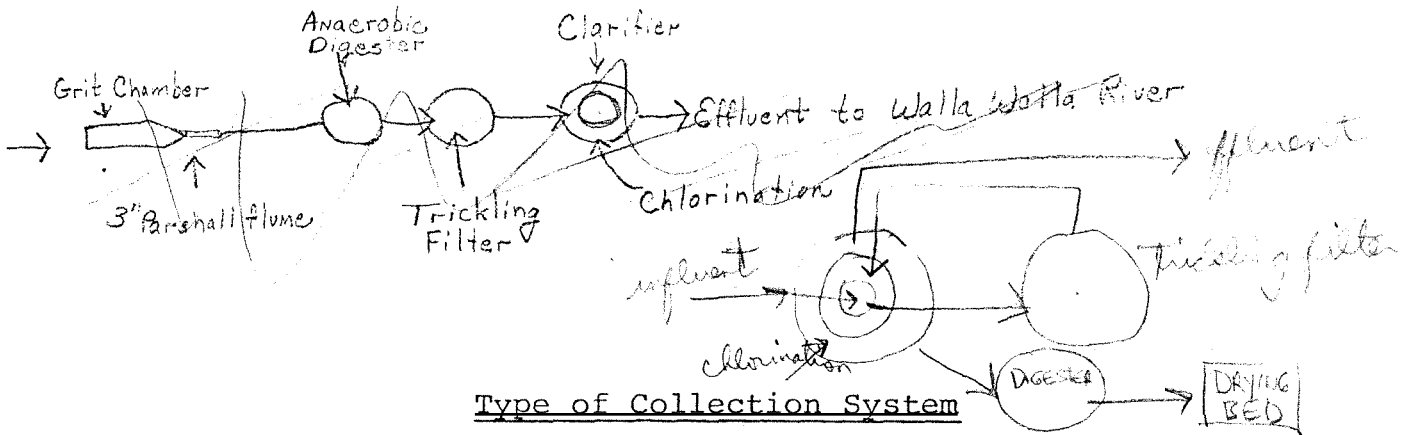
Lab No.	Sampling Time	Colonies/100 ml (MF)			Cl ₂ Residual
		Total Coliform	Fecal Coliform	Fecal Strep	
	1200	<20	<10		1.2

Additional Laboratory Results

NO ₃ -N ppm	-	0.10	
NO ₂ -N ppm	-	ND	
NH ₃ -N ppm	-	13.0	
T. Kjeldahl-N ppm	-	17.2	
O-PO ₄ -P ppm	-	3.9	
T-PO ₄ -P ppm	-	4.5	

Operator's Name Mr. Marlow Phone No. 525-6853

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)

None MGD

Plant Loading Information

Annual average daily flow rate (mgd)

Peak flow rate (mgd)

Dry No data available

Dry _____

Wet _____

Wet _____

COMMENTS: _____