

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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WA-24-2020

MEMORANDUM

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WA-24-2020

MEMO TO: NELSON GRAHAM
FROM: RON DEVITT *Rcd*
SUBJECT: Weyerhaeuser - Raymond
Industrial Survey

On August 25, 1971, I composited Weyerhaeuser's industrial clarifier at Raymond. The influent was composited as it entered the clarifier (sedimentation tank); the effluent as it crested the weir, there was no flow from the effluent until 0822 hours. The results of this sampling are attached.

In addition, other discharges were inspected, beginning from the chimney south of the sedimentation tanks. The following were observed proceeding west and south. Estimates are approximate.

1. 12 inch pipe about 1/3 full - many wood chips in the discharge.
@ 1015 hrs. the T=41C
2. 6 inch pipe, small volume, about 1/16 full, directly west of chimney. T=90°C
3. T=48°C
4. 36 inch culvert, main flow, T=29°C

One sample was taken for coliform analyses for background data. Values taken from the Willapa River in the vicinity of the mill recorded values for total coliform of less than 300/100 mls. For fecal coliform less than 40/100 mls. The numbers of coliform in the effluent were total, greater than 160,000/100 mls. ~~Fecal~~, greater than 1200/100 mls. These high values originating from a fecal source, whether from a sanitary hook-up or a regrowth, represent a potential health hazard. It could be determined if this were due to regrowth by sampling the influent to the clarifier and the effluent, and comparing the values. Additional samples should be taken to verify that disinfection is required.

RD:mh
62/5

DATA REPORT FORM

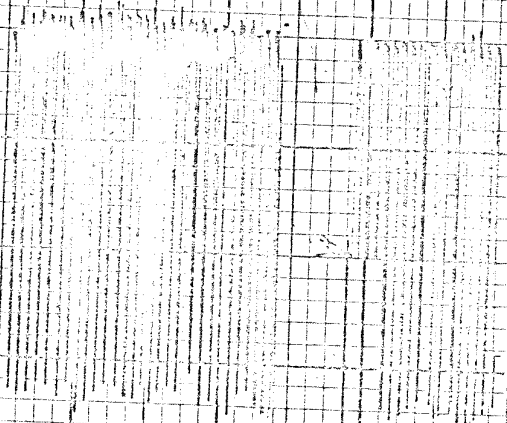
Location: Weyerhaeuser @ Raymond

Station and Log number

Field Results	Influent				Effluent			
	Max.	Min.	Mean	Median	Max.	Min.	Mean	Median
Temp °C	27.8	24.8	26.7	26.6	31.0	22.8	28.3	28.9
pH	7.2	6.6	7.0	7.0	7.2	6.6	6.9	7.0
Settleable Solids	35	5	23	27	.5	.1	.3	.2

Lab. Results	71-2853 Influent	71-2854 Effluent	% Reduction
BOD	175	150	14
COD	1,950	920	53
TS	24,092	21,596	10
TNVS	19,352	17,565	9
TSS	2,332	204	91
TSNVS	1,382	97	92
SCS	950	107	89
Settleable Solids	25	0.1	
Color	630	1,490	
pH	6.9	6.8	
Turbidity	300	54	
Conductivity	30,500	30,600	

396 ft →



0.0 ft. →

Cipolletti weir

BASE = 12 inches

Wayco @ RAYMOND

8-25-71