

MEMORANDUM  
Department

Publication No. 72-e20

TO: Dick Burkhalter

DATE: May 25, 1972

FROM: Ron Devitt

SUBJECT: ITT Rayonier

On April 5, 1972 samples were taken at the following locations at ITT Rayonier at Hoquiam:

1. Clarifier effluent at insert behind the venturi on effluent line, using the industry's proportional sampler. Composite was made between 1030 and 1615 hours.
2. Combined Pumping Station (CPS) discharge to clarifier from manhole on pier southwest corner of plant property after trash rake.
3. Number 1 diffuser (D<sub>1</sub> line) discharge using a vacuum pump from a pressure line on the composite sampler near center of plant.
4. Wood mill discharge to clarifier sampled at two different locations: pit before trash rake southeast of vacuum filter building from 1200 through 1425 hours; trough inside wood mill from 1425 through 1710 hours. Sample locations were changed because of sludge return.

Inclement weather, gale winds and distance between sites prevented the use of a precise sampling and testing schedule, but samples were collected as frequently as possible.

The composite sample from the clarifier was taken from the industry's proportional sampler. The rest of the composites were taken at 2000 mls per sample. Laboratory results were run on these four composites.

In addition, a sample collected by industry from Rennie Island was shipped to our laboratory and proportioned according to reported flow rates for D<sub>1</sub> and the clarifier effluent composite to represent the total combined effluent. A bioassay was conducted.

RD:bj

cc: Ron Pine  
Files

DATA REPORT FORM

Field Results

Location: ITT Rayonier @ Hoquiam

	Time	C <sup>o</sup> T	pH	umhos/cm Cond.	ml/l Settleable Solids
Clarifier effluent	1030	16.9	3.6	600	.1
	1215	12.8	4.0	600	---
	1335	11.8	4.1	550	---
	1520	9.8	3.6	600	---
	1615	10.2	3.7	550	---
CPS	1045	17.1	3.3	700	125
	1230	15.7	3.4	825	---
	1400	17.8	3.9	450	---
	1530	17.2	5.0	400	---
	1635	16.4	4.2	500	---
D <sub>1</sub>	1120	20.4	2.8	2300	10
	1300	16.4	4.2	1800	---
	1420	15.9	3.4	2300	---
	1545	15.2	2.8	2500	---
	1650	13.3	3.4	1800	---
Wood Mill	1200	14.8	5.6	90	6.0
	1315	13.9	5.2	65	---
	1425	12.9	5.2	60	---
	1600	13.0	5.7	95	---
	1710	12.2	5.2	115	---

DATA REPORT FORM

Location: ITT Rayonier - Hoquiam

Station and Log number

Lab. Results	CPS	Wood Mill	D <sub>1</sub>	Clarifier Effluent	Rennie Island
Solids					
Total	1399	1548	2178	1065	52,640
Total Suspended	701	1094	61	154	375
Total Non-Volatile	255	220	884	343	3,700
Total Non-Volatile	255	215	6	66	37
Suspended					
Suspended Combustible	446	879	55	88	338
BOD	347	>120	483	234	---
Lead	ND	ND	ND	ND	---
Zinc	0.10	0.04	1.20	0.05	---

ND = < .1  
all values in ppm

April 27, 1972

To: Dick Burkhalter  
From: Bert Bowen  
Subject: Static Toxicity Bioassay Result from  
ITT Rayonier at Aberdeen, Washington  
Combined Effluent Logged as 72-0986

Conditions:

Bioassay: Standard procedure and method as established in accordance with the 13th Ed. of Standard methods.

Treatment: The effluents were combined in the ratios of 2.2 mls. of Rennie Island to 11.5 mls. of D-1 sewer to 13.4 mls. of clarifier effluent. This combined effluent was then aerated, neutralized and diluted with tap water.

Test Species: Oncorhynchus kisutch, coho salmon fry.

Results:

TL<sub>50</sub> @ 96 hrs. = 13.4% or 135 grams/l.

Analyst Comment:

The TL<sub>50</sub> curve is based upon 4 statistically sound points.

BB:mh  
B/4