

April 17, 1974

State of
Washington
Department
of Ecology



Memo to: Rhys Sterling

From: Pat Lee

Subject: Survey at Centennial Mills in Spokane.

A waste characterization study was run on Centennial Mills in Spokane on January 30, 1974, from 0830 to 1600 hours. The mill's effluent was composited every half hour from a manhole on the sewer line that connects Centennial Mills to the City of Spokane's waste water treatment system. The total flow as measured by the City's water meter was 2,600,000 gallons in the 8 hour survey period. The field results were as follows:

<u>16</u> Determinations	Effluent			
	Max.	Min.	Mean	Median
Temp. °C	29.4	26.6		28.1
pH*	-----	-----		-----
Conductivity (µmhos/cm ²)	700	450	-----	550
Settleable Solids	45.	40.	43.	45.

*No pH's due to faulty field meter.

The laboratory data was as follows:

Station:	Eff.	NH ₃ -N (unfilt)	8.1
pH	7.0	T.Kjeldahl-N (unfilt)	20.1
Turbidity (JTU's)	280.	O-PO ₄ -P (filt)	.06
Conductivity (µmhos/cm ²)	380	T-PO ₄ -P (unfilt)	2.0
COD	2330	T. Solids	2050
BOD(5 day)	1120	T.N.V.S.	157
T.Coliform (Col/100ml)	>800,000	T.S.S.	1773
F.Coliform (Col/100ml)	>16,000	T.S.N.V.S.	17
NO ₃ -N (Filt)	.32	Phenols	.006
NO ₂ -N (Filt)	ND	Total Oils & Greases	ND

ND=None Detected

Centennial was still working out the bugs on their treatment system so that could explain the large BOD and suspended solids.

PL:jmh

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

WATER QUALITY LABORATORY

DATA SUMMARY

ORIGINAL TO: P. Lee
COPIES TO:
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.....
LAB FILES:

Source CENTENNIAL MILLS @ SPokane

Collected By J. ARMSTRONG

Date Collected 1-30-74

Goal, Pro./Obj. _____

Log Number: 74-0321 0322

											STORET
Station:	EFF	@1510									
pH	7.0										00403
Turbidity (JTU)	280.										00070
Conductivity (umhos/cm)@25°C	380.										00095
COD	2330.										00340
BOD (5 day)	1,120.										00310
Total Coliform (Col./100ml)	-	>8 x 10 ⁵									31504
Fecal Coliform (Col./100ml)	-	>1.6 x 10 ⁴									31616
NO3-N (Filtered)	.32										00620
NO2-N (Filtered)	ND										00615
NH3-N (Unfiltered)	8.1										00610
T. Kjeldahl-N (Unfiltered)	20.1										00625
O-PO4-P (Filtered)	.06										00671
Total Phos.-P (Unfiltered)	2.0										00665
Total Solids	2050										00500
Total Non Vol. Solids	157										
Total Suspended Solids	1773										00530
Total Sus. Non Vol. Solids	17										
Phenols	.006										
TOTAL OILS & GREASES	ND										

Note: All results are in PPM unless otherwise specified. ND is "None Detected"
Convert those marked with a * to PPB (PPM X 10³) prior to entry into STORET

Summary By L. E. P. Doll Date 2-13-74