

November 23, 1973

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WA-CR-1020

Memo to: John Hodgson and John Arnquist

From: Pat Lee

Subject: Sandvik Special Metals

State of
Washington
Department
of Ecology



A waste characteristic survey was conducted on Sandvik Special Metals in Finley on October 16, 1973. The effluent was composited every 45 minutes for 5 hours. Due to intermittent flow, no measurements of total flow were possible. The field and laboratory results are included below. The results showed remarkable consistency with their Corps of Engineers report from the summer of 1971. The only parameters exceeding the maximum concentrations reported in the Corps application were BOD, temperature and $\text{NH}_3\text{-N}$. The BOD and temperature values were slightly above the reported maximum, while $\text{NH}_3\text{-N}$ was three times the reported maximum value. I inspected the effluent line to the Columbia River and found it to be corroded and part of the effluent was being discharged on the beach. This was reported to plant personnel.

FIELD RESULTS

Final Effluent

8 Determinations

	Max.	Min.	Mean	Median
Temp °C	28.0	24.5	25.8	25.0
pH	6.8	6.0	---	6.4
Conductivity ($\mu\text{mhos/cm}$)	2900	750	1270	1050
Settleable Solids	0.7	0.0	0.1	0.0

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

WATER QUALITY LABORATORY

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

DATA SUMMARY

Source SANLUIS SPECIAL METALS

Collected By P. Lee

Date Collected 10-16-73

Goal, Pro./Obj. _____

Log Number: 73- 3769

											STORET
Station:	EFF										
pH	6.7										00403
Turbidity (JTU)	16.										00070
Conductivity (umhos/cm)@25°C	1800.										00095
COD											00340
BOD (5 day)	23.										00310
Total Coliform (Col./100ml)	>4x10 ⁴										31504
Fecal Coliform (Col./100ml)	<40										31616
NO3-N (Filtered)	3.18										00620
NO2-N (Filtered)	.22										00615
NH3-N (Unfiltered)	1.5										00610
T. Kjeldahl-N (Unfiltered)	1.5										00625
O-PO4-P (Filtered)	.88										00671
Total Phos.-P (Unfiltered)	3.80										00665
Total Solids	1187.										00500
Total Non Vol. Solids	70%										
Total Suspended Solids	49.										00530
Total Sus. Non Vol. Solids	38.										
FLUORIDES	18.2										
COLOR	11.										
TOTAL OILS	3.										

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 Stephen P. Roll Date 11-2-73