Memo to: Rhys Sterling, Howard Bunten

From: Pat Lee

Subject: Columbia Lighting, Spokane Industrial Park.



An effluent characterization study was run on Columbia Lighting at the Spokane Industrial Park on January 29, 1974. The effluent from the plant was composited every half hour for eight hours, 0800 hours to 1600 hours. Field tests were run every half hour and are summarized below:

PLANT OPERATION

<u>Total Flow - .042 Million Gallons in 8 hrs.</u> How measured-Parshall Flume

Max. Flow - .140 MGD Time of Max. Almost all day Min. - .076 MGD

Time of Min. - 1600 hours Pre Cl₂ ---- Post Cl₂ ----

FIELD RESULTS

17 determinations	Effluent						
	Max.	Min.	Mean	Median			
Temp °C	23	15		19			
pН	9.6	8.4		9.0			
Conductivity							
(umhos/cm)	1700	450		650			
Settleable							
Solids	nil	nil	nil	nil			

The lab results on the composite and the grabs for oils and coliform are as follows:

На	9.2			
•				
Turbidity (JTU)	60			
Conductivity	560			
(umhos/cm)				
COD	35			
BOD (5 day)	<16			
T. Coliform (Col/100m)	>40,000			
F. Coliform (Col/100m)				
NO ₃ -N (Filt)	1.0			
NO2-N (Filt)	.04			
NH3-N (Unfilt)	. 2			
T.Kjeldahl-N (Unfilt)	• 5			

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O-PO<sub>4</sub>-P (Filt)
                          .06
T. Phos.-P (Unfilt)
                          1.0
Total Solids
                          416
T. Non Vol. Solids
                          283
T. Suspended Solids
                          70
T. Sus. Non Vol. Solids 55
Chromium
                          None Detected
Copper
                         <0.1
Phenols
                         .006
Total Oils (@ 0930 hr)
                            4
Total Oils (@ 1430 hr)
                            4
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As can be seen, there was nothing surprising in the results. The operator at the Spokane Industrial Park, which treats the wastes from Columbia Lighting, suspects that the occasional batches of oil which come through the plant are from Columbia Lighting but none were evident in their effluent during our 8 hour survey.

PL:jmh

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

WATER QUALITY LABORATORY

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COPIES TO:

ORIGINAL TO: P.Lec.

DATA SUMMARY

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Date Collected 1-29-74			Goal, Pro./Obj						
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EFF	EFF								
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560			ļ	<u> </u>		ļ			00095
35			ļ		ļ				00340
416	- JL		ļ		ļ				00310
	24764		ļ	ļ	ļ	<u> </u>			31504
<u> </u>	_*								31616
1.00		-			ļ				00620
,04		***************************************			ļ		· -		00615
,2	-								00610
.5									00625
.06									00671
1.0							-		00665
416	-								00500
283		-							
70							-		00530
55		· New	***************************************						
<u> </u>									
(0.1									
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4,									
<u>4.</u>									
with	a * to	PPB (PPM X	10 ³) p	rior t	o entr	y into	STORET	
* SAMPLE WAS MORE THAN 30 hours OLD. No FECAL Summary By Stepher 9. Pull Date 2-28-74									
	296 EFF 9.2 60. 560 35 416 	296 297 EFF EFF 9.2 60. 560 35 416 - >416 - >416 - >416 1.00 416 283 70 55 NP (0.1 0.006 4. 4. Munless othwith a * to Than			EFF EFF 9.2 60. 560 35 416 -	(Goal, Pr 9296 297 EFF EFF 9.2 60. 560 35 416 -	Goal, Pro./Obj 9296 297 EFF EFF 9.2 60. 560 35 416 - ** - ** 1.00 .04 .2 .5 .06 1.0 416 283 70 55 NP (O.1) 0.006 4. 4. 4. M. unless otherwise specified. ND is 'None Detewith a * to PPB (PPM X 10°) prior to entry into Than	Goal, Pro./Obj

ANALYSIS.