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Memo to: Mike Price and Ron Robinson

From: Jim Armstrong

uecember 28, 1973

Subject: Seashore Villa Sewage Treatment Plant Study.

On Wednesday, December 5, 1973, an efficiency study was conducted at the Seashore Villa sewage treatment plant. The survey lasted from 0830 hours to 1630 hours with samples taken every one half hour.

The plant is well fenced and locked at all times. There should be more warning signs posted.

The BOD was 20 ppm with an 89% reduction and the suspended solids was 23 with an 83% reduction.

The settleability was as follows:

TIME	15 min.	30 min.	45 min.	60 min.
0955	975 mls.	950 mls.	950 mls.	925 mls.
1155	975 mls.	950 mls.	925 mls.	900 mls.
1400	975 mls.	950 mls.	925 mls.	900 mls.

The fecal coliforms were both less than 100 colonies per 100 mls.

JA:jmh

SIE SUKVEI KEPORT FOR	1.1
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(EFFICIENCY STUDY)

		6	TOTOROF OF	0.017				
<u>City Seashore Vi</u>	lla Plant T	ype	Aeration Po	 pulation	n	Des	ign	
•			Se	rved		Cap	acity	
Receiving Water B	udd Inlet		•	_Engine	erMike	Price	• •	
Date 12-5-73	Survey P	eriod 08	30-1630 h	ourssu	vey Per	sonnel J	im Armstron	
Comp Sampling Ere	AND AN ANARY	12 hour			Pain			
comp. Sampring <u>Fre</u>	quency every 1		\cdot Weather C	onditior	ns	·		
Compline Alexant			(1851 40	noursj			·	
Sampring Alequot							······	
889 (* 19 4) on de Fritz, haftigen en familie († 19 - 20 - 19 de general maine de ser de se de se de ser de se								
ΛΥΕ		PL.	ANT OPERAT	ION				
Total Flow .004	MGD		How	Measure	d			
		· · ·						
nax. (rlow)	Time of Mar	X		Min		Time	of Min	
Pre Cl.	#/dav	Post	r C1		Hldow			
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Da barren bereza ir entre entre einer da entre de entre dans dans dans de entre dans de entre entre entre entre								
		F	TELD RESULT	CS		1		
	Ir	fluent			E	ffluent		
Determinations	Nov. No.	1	<u>,, ,,</u>]					
	max. Min.	Mean	Median	Max.	Min.	Mean	Median	
Temp. C	13.9 10.2	11.5	11.2	10.8	10.21	10.5	10.4	
Conductivity	9.0 6.6		6.8		6.2		6.6	
(umhos/cm)	600 200		300	300	200	801 903	250	
Settleable	23 1 5	10 3	6 5	1	< 1		~ 1	
Solids		10.5					~ . 1	
Mannan yan an a								
	LABORA	TORY RES	ULTS ON CO	MPOSATE	IN PPM			
	Terfluer							
Laboratory Number		<u> </u>	Effluen	<u>t</u>	1 %	Reductio	n	
	73-4474		73-447	5				
-Day BOD	185		20		89%			
:0D `S	300		40		13%			
N.V.S.	178	<u> </u>	242		46%			
.S.S.	133		23		<u> </u>			
.V.S.S.	13			<u> </u>		92%	_ «.	
Н	8.1			7.2				
		1	290					
onductivity	360	1	290)				

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Seashore Villa

BACTERIOLOGICAL RESULTS

Na₂S₂O₃ added to sample <u>before sampling</u> after ______min.

				Cl Residual			
LAB #	SAMPLING TIME	Total	/100 MLS (MF) Fecal	ppm	(after secs.)		
73-4476	1105	1240	<100 ·	.75	<u> 3 min.</u>		
73-4477	1505	<40	< 100	>1	<u>3 min.</u>		
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n managan kang sang sang sang sang sang sang sang s							

Operator's Name_____ Phone # _____

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Comments:

	Nutrients	
NO ₃ -N Filte	red 1.80	
NO ₂ -N Filte	red.01	
NH3-N Unfil	tered 1.40	
T-Kjeldahl-	N Unfiltered 3.20	
0-P0 ₄ -P Fil	tered .14	
Total Phos-	P Unfiltered .90	

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

WATER QUALITY LABORATORY

DATA SUMMARY

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source Seachage Un		
Date Collected 12/5/7	23	-
Log Number: 73 -	4424	, 75
Station:	INF	EFF
рH	8.1	7.2
Turbidity (JTU)	60.	8.
Conductivity (umhos/cm)@25C	360.	290
COD	300.	40.
BOD (5 day)	185	20.
Total Coliform (Col./100ml)	-	-
Fecal Coliform (Col./100m1)	-	
NC3-N (Filtered)	~	1.80
NO2-N (Filtered)	<u> </u>	.01
NH3-N (Unfiltered)		1. 4
T. Kieldahl-N (Unfiltered)		3. 7
0-P04-P (Filtered)		.14
Total Phos -P (Unfiltered)		90
Total Solids	1111 5	242
Total Non Vol. Solida	178	270
Total Suspended Solida	())	22
Total Sus Nor Val Califi	133	<u> </u>
TOLAT SUS. NON VOL. SOLIDS		

Collected By <u>J</u>.<u>A</u>.

Goal, Pro./Obj._____

dog Rumber.	14/1	r 1	1	'i	t	· r	1	1	· r	3	STORET_
Station:	INF	EFF	1105	1505			l				
рН	8.1	7.2									00403
Turbidity (JTU)	60.	8.									00070
Conductivity (umhos/cm)@25c	360.	290									00095
COD	300.	40.				l					00340
BOD (5 day)	185	20.									00310
Total Coliform (Col./100ml)	-	-	1240	(100					I		31504
Fecal Coliform (Col./100m1)	-	-	(40	6200							31616
NO3-N (Filtered)	-	1.80									00620
NO2-N (Filtered)	~	.01						T			00615
NH3-N (Unfiltered)		1.4									00610
T. Kjeldahl-N (Unfiltered)	-	3. Z									00625
0-PO4-P (Filtered)		.14					-				00671
Total PhosP (Unfiltered)	_	.90			-						00665
Total Solids	445	242						1			00500
Total Non Vol. Solids	178	164			• ••••••••••••••••••••••			Í			
Total Suspended Solids	(33	23							•		00530
Fotal Sus. Non Vol. Solids	13	1						1			, 1999-1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -
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All results are in PPM unless otherwise specified. ND is "None Detected" Note: Convert those marked with a \star to PPB (PPM X 10³) prior to entry into STORET

Date /2-27-73

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