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FORMATON

WA-43-9160

то	Dan Neal, Ron Pine, Ron Devitt
FROM:	Hans Cregg
SUBJECT: _	Medical Lake (CAGOON)
DATE	July 2, 1973



On May 16, 1973, an efficiency study was conducted on the Medical Lake lagoon system. The system consists of three lagoons, two of which are influent lagoons and one effluent lagoon. The operator has the option of switching the incoming waste water between the two influent lagoons.

Laboratory results indicate that the solids reduction is rather low and does not meet water quality standards. The data regarding coliforms is somewhate indecisive due to laboratory error.

HC:bjj

Attachments

STP SURVEY REPORT FORM (EFFICIENCY STUDY)

City Medical Lake	Plant Typ	e Lagoon	Populati Served	on <u>3500</u>	Desi			
Receiving Water Deep Creek Engineer W. E. Thompson								
Date 5-16-73	Survey Per	iod <u>8 hou</u>	rs S	urvey <u>Pers</u>	onne1_Har	ns Cregg, Jim Armst		
Comp. Sampling Freque	ency Hourly		her Conditi t 48 hours)	ons <u>Cle</u>	ear & warr	n		
Sampling Alequot 1	000 mls							
		PLANT O	PERATION				V	
Total Flow				red				
Max. (Flow)	Time of Max.		Min.		Time	of Min		
Pre Cl ₂ none	# /day	Post Cl ₂	none	#/day				
		FIELD	RESULTS	Black Control of the	ggermanappun registraspin tagaspitimasir iakapa titlami saadi			
	Inf	luent		E	Effluent			
Determinations	Max. Min.	Mean Me	dian Max	. Min.	Mean	Median		
Temp. °C pH Conductivity	15 14 8.2 7.6		4.2 23 7.8 10.		21.5	22 10.4	A comments of the same of the	
(umhos/cm) Settleable Solids	8.0 7.7	7.9	7.9	1 <.1	<.1	<.1	Production of contract	
	LABORAT	ORY RESULTS	ON COMPOSI	TE IN PPM				
Laboratory Number	Influent	E	ffluent	7/2	Reduction		, and the same of	
5-Day BOD COD	73-1849 158 376		73-1850 29 196		81.65 47.88			
T.S. T.N.V.S.	625 358		458 265		26.72 25.98			
T.S.S. N.V.S.S.	203		128		39.95		-	
pli	21 7.4	Maria de la composición del composición de la composición de la composición de la composición del la composición del composición del composición de la composición del composición	24 10.6		12,50		- 1	
Conductivity	850		460	an against the annual stage of the stage of the stage of the stage and the stage of	and the second of the second o		***	
Turbidity	70	ì	56	1	20		-	

	* 4		***				
	74 A	~~	. ~ .	1 7	U 0		
	171		~1 (10	K 8		
700	and the same	-				 described by the second	

BACTERIOLOGICAL RESULTS

Na₂S₂O₃ added to sample hefore sample AXXXX was taken XXXXX.

LAB #	SAMPLING TIME	COLONIES, Total	/100 MLS (MF) Fecal	C1 P	esidual (after secs)
73-1851	1000	400	<400	NONE	NONE
73-1852	1200	<400	<400		
73-1853	1600	<400	<400		b
	·				

⊃erator's	Name		Phone #
===ments:	Coliform count was	taken without the benefit of	chlorination.
		nationalistic has nitro in a service of the order of the	
nagandamus varagga, arasas, pro-usis, que paragons em influenzagang y a, sa system en			
Haddistration of the management of the control of			
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STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

WATER QUALITY LABORATORY

DATA SUMMARY

ORIGINA		
H. CK	.c.6	
COPIES	TO:	

LAB FILĖS

Date 5-29-73

Source Medical LAKE	STP	• -				,	Collec	ed By_	H. C.	15.A	
Date Collected		-							j. <u>?</u>		
Log Number: 23 ~	1849	1850	1851	1825	1853	. 4	-		4	*	STORET
Station:	INF	EFF	1000	1200	1600						
рН	7.4	10.6								The second second	00403
Turbidity (JTU)	70.	56			_					and the same of th	00070
Conductivity (umhos/cm)@250	850	460.	~								00095
COD	376	196	-								00340
BOD (5 day)	158	29	_								00310
Total Coliform (Col./100ml)	<u> </u>		400	400	4400						31504
Fecal Coliform (Col./100ml)	_		4400	1400	2400						31616
NO3-N (Filtered)											00620
NO2-N (Filtered)											00615
NH3-N (Unfiltered)							_				00610
T. Kjeldahl-N (Unfiltered)			-								00625
O-PO4-P (Filtered)											00671
Total PhosP (Unfiltered)											00665
Total Solids	625	458		¥							00500
Total Non Vol. Solids	358	265		_							
Total Suspended Solids	203	128	~.		-						00530
Total Sus. Non Vol. Solids	21	24	_			N. Marining and Control of the Contr					
						-					
						-					
						· Martin Company and Company					
											Edward Stranger and Stranger an
Note: All results are in Pl Convert those marked	PM unle with a	ess oth a * to	erwise PPB (1	e speci PPM X 1	ified. 10 ³) pr	ND rior	is "No to ent	ne Dete	cted" STORE	T	