Publication No. 72-e38

WA-11-1010

MEMORANDUM

TO: RON ROBINSON

DATE: January 28, 1972

FROM: RON PINE

SUBJECT: E.I. DuPont and Sequallitchew Creek

The above study was conducted on December 28, 1971. The objective of the study was to determine the effect of the DuFont operation upon the water quality of Sequallitchew Creek.

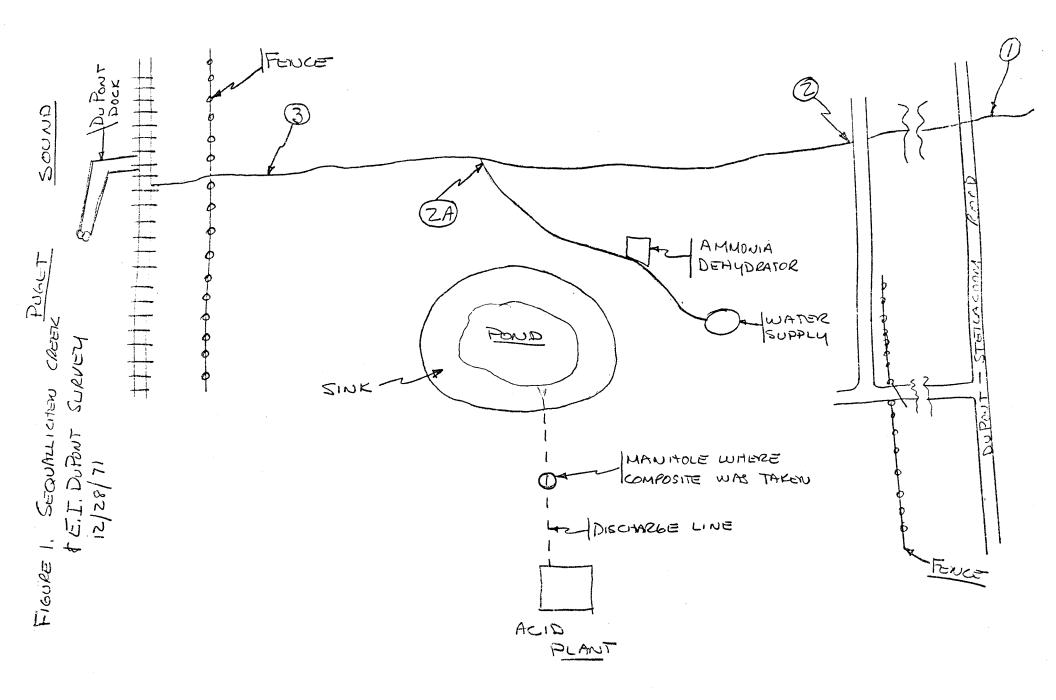
Samples were collected from Sequallitchew Creek at the stations shown on Figure 1 and the results are presented in Table 1. A 24-hour composite sample was collected from the acid plant effluent as shown in Figure 1. The acid plant discharges into a sink from which there is no surface outlet. The discharge into Sequallitchew Greek is from the plant water supply overflow and seepage from the ammonia dehydrator.

The analytical results of the composite sample from the acid plant is as follows:

pH	6.8
Chloride	218 mg/1
Alkalinity as CaCO ₃	34 mg/l
BODS	N11
COD	7.0
Total Coliform	1,750 colonies/100 mls
T.S.	589 mg/1
T.N.V.S.	449 mg/1
T.S.S.	2 mg/l
T.S.N.V.S.	1 mg/l
T.S.V.S.	1 mg/1
T-PO4	0.69 mg/1
Organic KjelN	0.02 mg/1
NO2-N	0.05 mg/1
NO3-N	4.88 mg/1
NH3-N	0.00 mg/1

Discussion

The water entering Sequallitchew Creek from the ammonia dehydrator (Station 2A) is high in nitrate-nitrogen, ammonia and total solids; however, its effect upon the creek at Station 3 is barely discernible. A biological evaluation of the creek showed a substantial number and variety of aquatic invertebrates both above and below the discharge. This further indicates that there is little or no effect from the discharge since these organisms are continually subjected to its influence.



MEMORANDUM

Department of Ecology P. O. Box 829 OLYMPIA, WASHINGTON 98501

Information For Action Permit Other

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TO: Mike & Files & Pete Hildebrandt

DATE: October 6, 1971

FROM: Ron Robinson

SUBJECT: E. I. Du Pont - Pierce County - Sampling

We would like to have sampling done at E. I. Du Pont de Nemours & Co. at Du Pont, Washingotn.

Samples of the effluent and the receiving water above and below the discharge point will be necessary. The receiving water is Sequallitchew Creck which begins at Lake Sequallitchew and it would be good to sample the lake also. Analysis for Temperature, pll, bacterial count, ammonia, nitrate, phosphorus, alkalinity, COD, TDS, and volatile solids at each location.

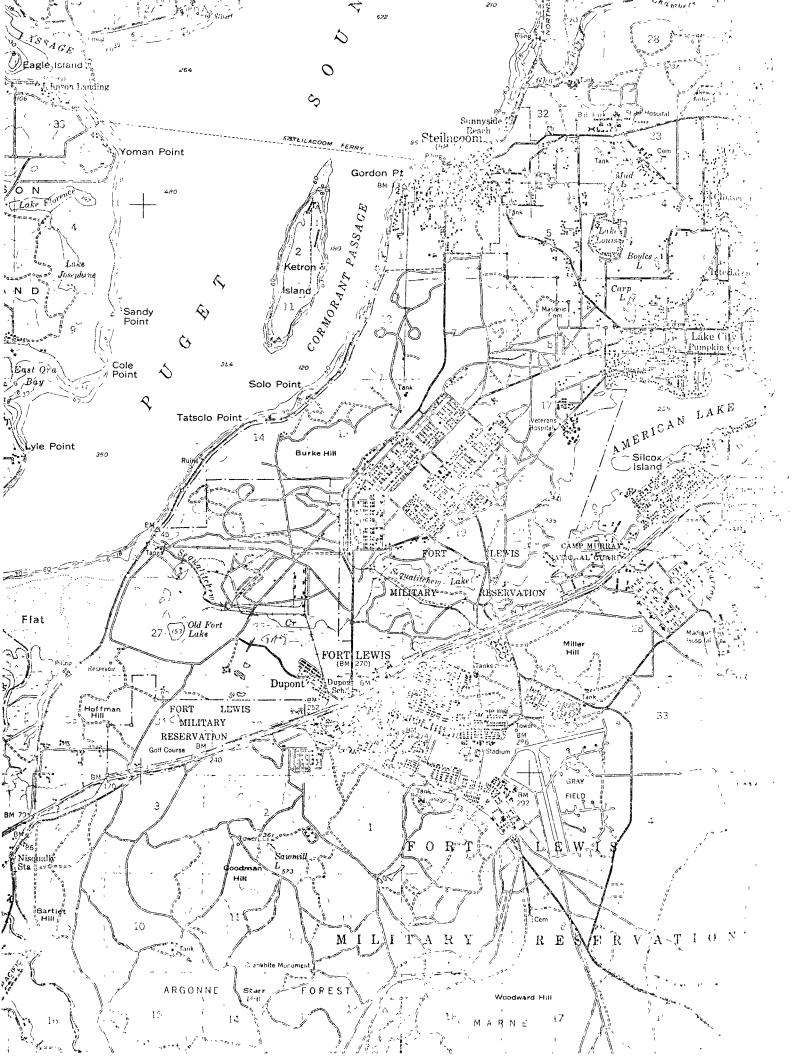
Contact H. D. Means, Mgr. or Stanley E. Bye, Tech. Engineer at (206) JU 4-1616 for setting up a visit. You must have prior appointment to get through the gate. They will be expecting a call from you. The above information is needed for writing a permit.

Please contact me or Mike Price if additional information is needed. No boat is needed but possibly boots for wading the creek.

Lake Sequallitchew is on Fort Lewis property and is west of the south end of American Lake. Contact with Fort Lewis to sample it may be necessary.

RSR:dlb . 10-13-71

A.C. "TONY" URSIC -TUES. 28TH JACK MINOR



REQUEST FOR ANA	LYSIS
	Date $12/20/7/$
REQUESTED BY ROW PINE	RECEIVING WATER SEAUALLITCITER 4
COLLECTED BY ROW RIVE & NORM THOMAS	PROCESS WATER
DATE WERE (WILL BE) COLLECTED $\frac{\frac{2}{2}}{\frac{3}{7}}$	OTHER
PRIORITY: REASONABLY SOON AS POS	SSIBLE X EMERGENCY
SAMPLES WILL ARRIVE: DATE 12/28/71 APPROXIM	TATE TIME 4 PM CARRIER CAR
ROUTE DATA SUMMARY TO: RON PINE	
ADDITIONAL INFORMATION (PROBLEM, BACKGROUND,	INTERFERENCES, PATTERNS, ETC.)
INFORMATION IS NEED FOR A NEW	PEVEMIT.

For Lab Use Only

Type of Analyses Required	Number of Samples	Approx. Range	Preservative Type – Vol.	Laboratory Number	Analyst	Date	Notes	
BODS	6		Icen					
BODS COD	6							
CALDEIDE	6							
ALALININ	6							
TOTAL COLIFORN	6							
NH,-N	6		MERLURIC					
$\frac{NH_{2}-N}{NO_{2}-N}$ $\frac{NO_{2}-N}{K-N}$ $\frac{K-N}{T-PO_{4}}$	6							
NO,-N	_6							
K-N	6							
T-P04	6		0					
TS	6	5 	ICEO					
Tavis	6							
TSS	6	-					• ••••••••••••••••••••••••••••••••••••	
<u>TSNVS</u> TSVS	6							
TSVS			4					
	TOTAL							

Fill out as completely as possible. Some Analyses (bacteriological, biological, BOD, etc.) and large numbers of samples should be scheduled ahead of time. Specific questions should be directed to the Analyst supervising the particular analysis desired. Lab. phone: 206-753-2362.

DEPARTMENT OF ECOLOGY

OFFICE OF TECHNICAL SERVICES

Original to <u>LABORAT</u> Copies to: _________

_ Merley McCall

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ANALYTICAL REPORT SHEET Ron ine "o:

The following are the analytical results from survey conducted at:

Dupont 03-02.23 12/21/71 - Collected _ -ies ppm as C.CO. ppm ppm ppm STATION Total . chlorides Coliform Alkalinity BOD COP ρH LAB. NO. NO. 2. 7. 6.8 34. 1,750. 218. 71-4108 . ppm ppm ppm A?m ppm TNUS. T.S. N.V.S. T.S.V.S. T.5. T.S.S. 449. 581. 2. 1. 1, 71- 4108 **.** . PPm No3.N <u>pp</u> ppm Noz-N NH3-N T. PO4-P Digasie Kjeldohl-N .69 4.88 02 05 ,00 71-4108 • • : ÷ . . -• Lee K7 "Summarized by _

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					· · · ·	ollected_	12/28	71
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Summarized by Pol dee Date 1/5/77