

Publication No. 73-e41

WA-01-0050

TO S. A. Messman
FROM Ron Devitt
SUBJECT Mt. Baker Plywood, Bellingham, WA
DATE September 6, 1973

State of
Washington
Department
of Ecology



On August 6, 1973, I met Donald Van, General Manager for Mt. Baker Plywood in Bellingham. The mill was shut down, but I inspected the "treatment system." The discharge flow was relatively small; there was no central discharge. The effluent from the pit seeps through aggregate and to the Bay.

On August 15, 1973, I revisited the industry. Since the previous inspection the aggregate dike had been replaced. The new rock permitted a much greater volume of discharge, also the mill was in production. There was no way to measure the flow.

A set of samples were taken at 12:15 hours; the tide was low. The effluent and the limits of the dilution zone were obvious by the color. Temperature was 28° centigrade.

The container used for the phenols sample contained copper sulfate and hypochlorous acid as preservative. The effluent reacted with the acid and formed a precipitate. Settling of the precipitate left a clear supernatant. This process took place in less than five minutes. It is possible that a similar chemical reaction might be used in treatment of their waste water.

It is doubtful if there was enough acid in the container to properly preserve the sample. The pH of the effluent was determined to be 10.6. This extremely basic discharge had a considerable effect on the receiving water as indicated by the attached sketch.

I phoned Larry Lewis (Northwest Region) and informed him of the violation of water quality standards. I also showed the precipitated sample to Mr. Van and explained the violation. Mr. Van said that they had had a problem with their system and that a considerable quantity of glue had been wasted or spilled. It was my understanding that there was a sump inside the building specifically for catching glue waste.

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Personnel from the Northwest Office were going to make an inspection within the following two weeks. I filed a formal complaint with the Department of Ecology several days later.

RD:jmh

LAB DATA MT. BAKER PLYWOOD

GRAB SAMPLES FROM EFFLUENT

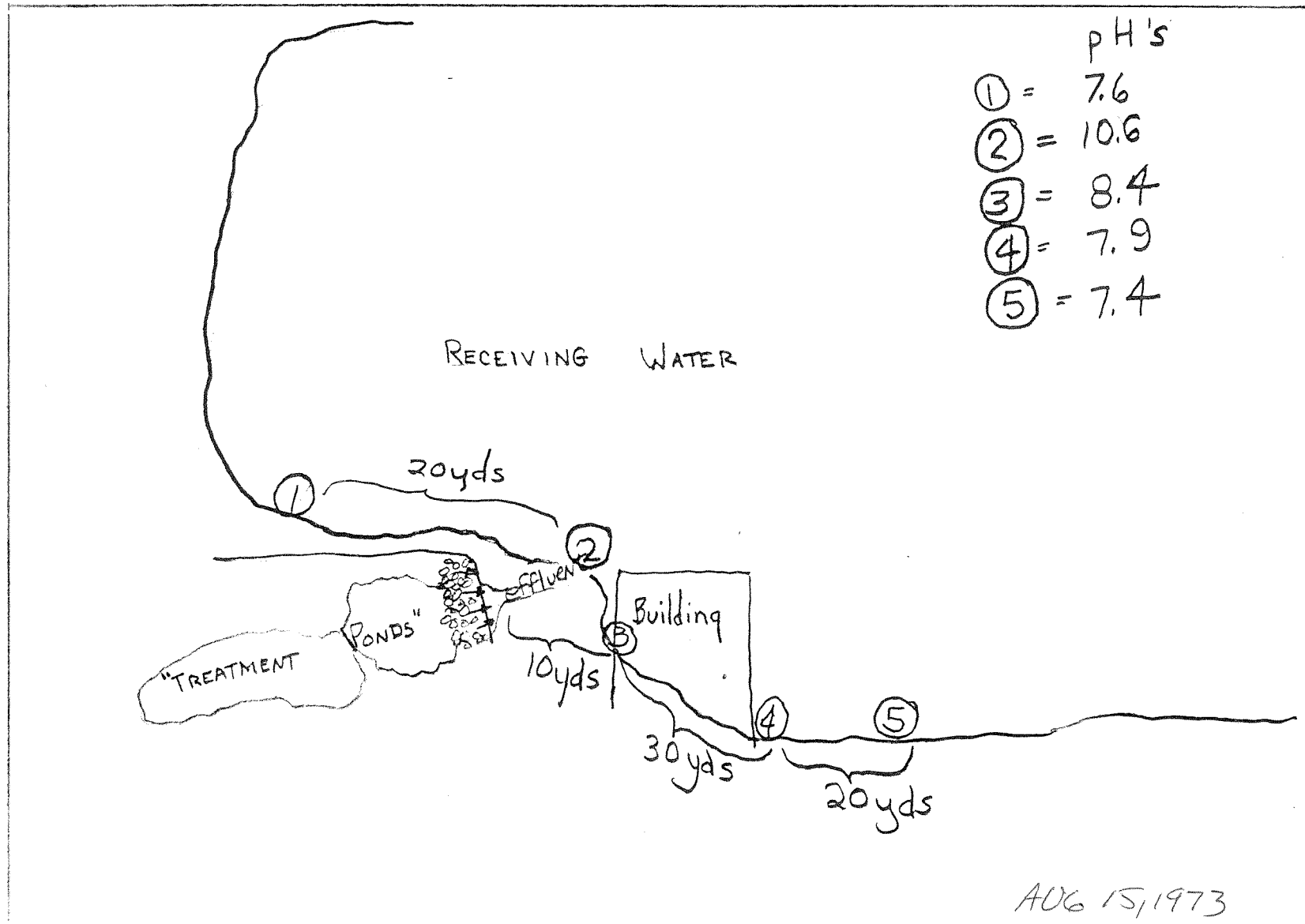
AUG 15, 1973

pH = 10.3	Color = 590 (color units)
Turbidity = 35 (JTU)	PBI = 100
Conductivity = 630 (umhos/cm)	*phenols = .024
COD = 189 ppm	Total Oils = 11 ppm
BOD = 12 ppm	

Total Coliform = 32,000 colonies/100 mls.
Fecal Coliform = greater than 8,000
Fecal Strep Coliform = greater than 8,000

NO ₃ -N (filtered) = .02 ppm	Total Solids = 333 ppm
NO ₂ -N (filtered) = ND ppm	Total Non Vol. Solids = 177 ppm
NH ₃ -N (unfiltered) = .96 ppm	Total Suspended Solids = 23 ppm
T. Kjeldahl-N	Total Suspended Non Vol.
(unfiltered) = 1.68 ppm	Solids = 3 ppm
T. Phos.-P	
(unfiltered) = 2.20 ppm	

*Preservative volume may have been inadequate.



⊗ = Aggregate
→ = seepage
○ = Sampling site
~ = distance