Poor Quality

SW-57 SJF

JUL 20 1981

Mr. Harold E. Tangatz
Regulatory Functions Branch
St. Paul District, U.S. Army Corps of Engineers
1135 U.S. Post Office and Custom House
St. Paul, Minnesota 55101

Dear Mr. Tangatz:

RE: NCSCO-RF (81-181-05) (M-109)
Richard McCowan
Minnesota River, Dakota County
Exp. Date: April 20, 1981

In a previous letter to you dated April 22, 1981, the Minnesota Pollution Control Agency (MPCA) requested that the referenced project be held in abeyance until an Environmental Assessment Worksheet (EAW) is completed. Since the date of that letter MPCA staff have been assessing the potential impacts of the proposed project to determine the appropriate action under Section 401 of the Clean Water Act, and we have reached the following conclusions.

We now understand that due to exceptions in the mandatory category no EAW will be required for the project. However, EAWs are conducted under procedures governed by the Environmental Quality Board (EQB) and the applicant should establish the need for an EAW directly with the EQB.

The proposed barge slip was evaluated to determine proper waterway classification. According to 6 MCAR 4.8020 the Minnesota River in this reach is classified 2C, 3B, Rough Fisheries and Recreation and Industrial Consumption. The barge slip would be considered part of the river at this point and have to maintain 2C, 3B Water Quality Standards. In addition Class 3C, 4A, 4B, 5 and 6 water quality standards are also applicable.

Circulation of the water in the barge slip will be limited and the amount of reduction of leachate strength by dilution is not known. We are concerned that any increases in volume and/or concentration of leachate could lead to elevated levels of parameters such as metals, ammonia, chlorides, BOD_5 and other parameters of concern in the barge slip.

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The concentration of leachate parameters may be significantly increased due to the breaching of the natural silty clay levee which exists along the river channel. The silty clay levee and 400 feet setback of the landfill from the river currently act to provide attenuation of the leachate and reduction in strength as the leachate seeps laterally to the Minnesota River. Construction of the barge slip will eliminate a section of the clay levee and decrease the setback of the western slope of the landfill. The ease of leachate migration to the River may be dramatically increased with a resulting loss of attenuation, and with little mitigation by dilution in the relatively small, confined area of the slip. The effectiveness of the existing control measures is illustrated in studies conducted by Barr Engineering. A 1971 study of the landfill, indicated that "BOD5 beneath the landfill is being reduced from 620 mg/l to approximately 20 mg/l in 100 feet of silty alluvial material". The elimination or reduction of this attenuation could result in water quality violations occurring within the slip.

The volume of leachate also has the potential to increase after the construction of the slip. The western edge of the landfill is protected from flooding by a 720 foot dike. It is also now protected by a natural elevation of the river bank which rises several feet above the existing ground surface. Removal of the natural elevated berm, which offers some protection from rising water levels, may mean that the landfill dikes will get more exposure to flood waters from the river, with the resulting increase in the seepage of water through the landfill dikes.

In another Barr analysis,"Impact of Seepage from Freeway Sanitary Landfill on the Minnesota River", the mitigation effectiveness of the silty clay levee on flow rates was analyzed (1978). Under typical conditions "lateral seepage to the Minnesota River from the landfill property through the silty clay levee (ks) at a calculated rate of 1×10^{-4} gpm". In one instance where the water level in the landfill was 2 feet higher than the surface of the clay levee, the Barr calculations indicated a dramatic increase in the lateral seepage to 13.5 gpm.

We therefore do not feel it would be appropriate to issue Section 401 Certification for the project and we request that this project be held in abeyance or denied. Should new plans or information be brought to our attention which demonstrates that the project will comply with the applicable provisions of the Clean Water Act, we would reconsider our position at that time.

Thank you for this opportunity to comment. If you or the applicant have any questions please feel free to contact me or Mr. Louis Flynn of my staff at (612) 296-7225.

Sincerely,

Louis J. Breimhurst
Executive Director

LJB:mg
cc: See attached list

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Mr. Harold L. Taggatz
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Copies of letter sent to:

Director, Division of Waters, NDNR
U.S. Fish & Wildlife Service
U.S. Environmental Protection Agency, Chicago
Frederick S. Richards; Popham, Haik, Schnobrich, Kaufman & Doty Ltd.

cc LLF, Rand
VA, Pendleton & Angle
SF, Sacramento Dist.
Clifa Andrews APL

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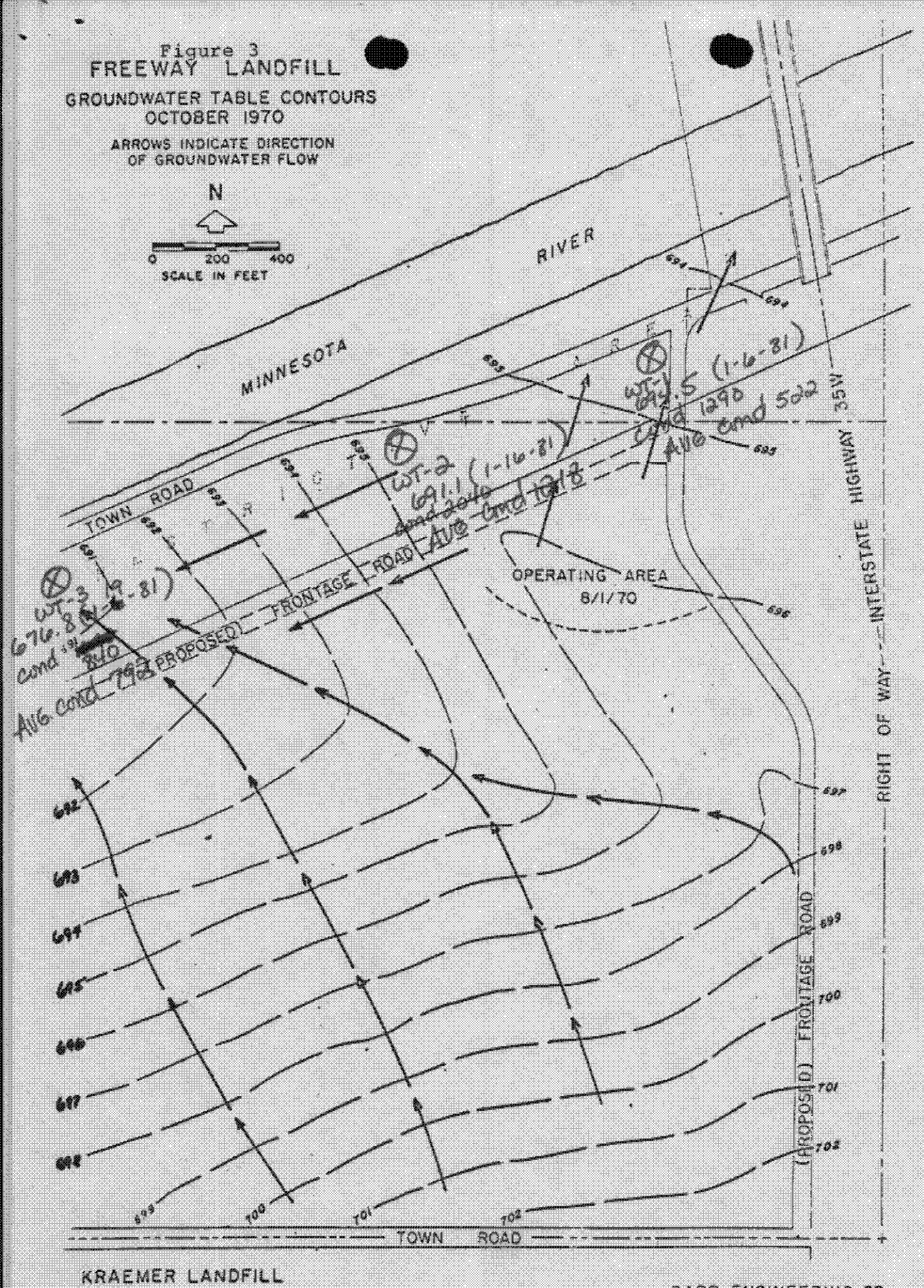
Figure 3
FREEWAY LANDFILL
GROUNDWATER TABLE CONTOURS
OCTOBER 1970



KRAEMER LANDFILL

BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

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