DEPARTMENT POLLUTION CONTA

STATE OF MINNESOTA

Office Memorandum

DATE:

TO

: Cliff Anderson

Environmental Planning

and Review Unit

FROM . : Tom Clark, Chief

Hlash Enforcement Section Solid Waste Division

11-27-79 d

PHONE: 6-7395

SUBJECT: Related Action EIS on Proposed Sanitary Landfill Expansion

EAW's - Your Memo of November 21, 1979

Due to a heavy schedule for Wednesday, November 28, I may miss all or part of some of the meetings with each of the four proposers. My comments on your revised draft memo are as follows. I have not made reference to grammatical and spelling errors. There are several minor ones which you are probably aware of already.

- The document is clearer, more concise and more factually correct than the original memo. issue statement, however, in no way reflects the conclusions and implications of the discussion.
- 2. P.2., lines 22-24 - Use of the term "elevated values" should be explained.
- з. P.3., lines 1-2 - Is the failure of Pine Bend to comply with the siting criteria with regard to being 1000 ft. from a pond, lake or flowage due to its proximity to the on-site leachate pond? If this pond were to be included as part of the approved permit plan, would this siting criterion still be violated?
- 4. P.3., line 20 The "drinking water standard" should be cited, i.e., 1962 USPHS Drinking Water Standards, or whatever. Likewise for the "2B water quality standard" in line 21.
- P.3., line 22 Same comment as 2. above. 5.
- P.3., lines 24, 25 If there are no standards for COD and BOD, upon what was the conclusion that values of 297 mg/l and 160 mg/l respectively represent "very high levels" based? Was background ground water quality in the area considered?
- 7. P.4., lines 1-5 How were these values determined to be "elevated?" For example, an ammonia value of 2.6 ug/l in ground water seems small compared to a mean value for ammonia in landfill leachate from 103 samples from an Illinois study of 158 mg/l (158,000

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- ug/1). (Clark and Piskin, 1977, Chemical Quality and Indicator Parameters for Monitoring Landfill Leachate in Illinois, <u>Environmental Geology</u>, v. 1., p. 329-339.)
- 8. P.4., line 24 The casual reader might wonder what definition the author used in stating that "the landfill is located...in a stream." This is a very opinionated remark without citing some technical or scientific basis for making it.
- 9. P.5., lines 6-8 As an informational item, the Dakota County Board voted recently not to renew the Freeway Sanitary Landfill operating license beyond December 31, 1979.
- 10. P.5., lines 12-26 Same comments as 2., 4., 6., and 7. above.
- 11. P.6., lines 5-6 Is the ground water referred to within the 0-25 feet of overburden or within the dolomite? Is either an aquifer?
- 12. P.6., line 7 Is there evidence leachate enters the quarry?
- 13. P.6-7, lines 25-27 and 1-6 Same comments as 2., 4., 6., and 7. above.
- 14. P.7., lines 9-11 What basis is there for the statement that leachate "would tend to enter the bedrock aquifer" and then discharge to the river? In order to travel 48 feet to ground water (Attachment A), one might assume intuitively that leachate would intercept the river before reaching the bedrock.
- 15. P.8., lines 23-25 Same comments as 2., 4., 6., and 7. above.
- 16. P.8., lines 25-27 On what basis is the monitoring program at Pine Bend any "more" or "less" effective than those programs of the other three landfills discussed? Does the fact that data collected to date doesn't show the presence or absence of leachate make the monitoring program "ineffective"? What measures can or should be taken to effectively monitor a landfill where the depth to ground water exceeds 100 feet, for the most part?

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17. P.9., line 1 - Finally the reader learns that the "2B water quality standards" referred to throughout the first 8 pages of the memo are from WPC-14. (See comment 4).

18. P.9., line 3 - A semantic point, perhaps, but what is a "real" water quality violation? "Implication" of a landfill for "violation" of any ground water standard should not be attempted on a technical basis without a discussion of background water quality for the aquifer in question. The same argument applies to the next to last line of Attachment A, "Groundwater Violations".

TPC:ds

cc: Dale McMichael, EPRU, Administration

: .Dale Wikre, Acting Director, SWD

: Bob Moilanen, SAAG

: Dan Comeau, Enforcement Section, SWD