LANDFILL TEAM

SW-57

Noise - D. Kempeka

Water Quality

Brad Sielaff, Groundwater
Randy Burnyeat, Permits
Gary Kimball, Permits
Virginia Reiner, S&G

Air Quality - Mike Valentine

Solid Waste
Jerry Stahnke
Sandra Forrest
Don Kyser
Larry Dugdale

EPRU Cliff, Ed, Janet

Minne

July 30, 1980

RECEIVED
JUL 31 1980
MINN. POLLUTION CONTROL AGENCY

Paul Smith
Metropolitan Council
300 Metro Square Building
7th & Robert Streets
St. Paul, Minnesota 55101

Dear Mr. Smith:

The Minnesota Pollution Control Agency has reviewed the draft EIS on the Freeway Sanitary Landfill expansion. Many of the comments given on the Pine Bend and Burnsville Landfill EIS's equally apply for the Freeway EIS. Unfortunately, this document references the Pine Bend and Burnsville draft EIS's which do not contain the MPCA comments and Metropolitan Council's responses presented in the final EIS's. Consequently, this EIS does not contain an adequate discussion on alternatives, material recovery, soils, cover and closure requirements, area wells, etc. The comments and responses given for the Pine Bend and Burnsville draft EIS's should be reviewed for applicability to the Freeway EIS and so noted. In addition, the attached page-by-page and general comments were made by the staff in the following subject areas:

1. Alternatives - pp. 3, 145-149
2. Water quality and leachate production - pp. 2, 3, 44, 78, 80, 83, 118, 120 and 121
3. Surface water runoff - p. 72
4. Area drinking water wells - pp. 121 and 122
5. Flooding potential and effects - p. 56
6. Vegetative cover - p. 72
7. Cover materials - p. 19
8. Management - pp. 46, 72 and general comments

Sincerely,

Terry Hoffman
Executive Director

Phone: 296-7301
1935 West County Road B2, Roseville, Minnesota 55113
Regional Offices · Duluth/Brainerd/Detroit Lakes/Marshall/Rochester
Equal Opportunity Employer

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MPCA Comments on
Freeway Sanitary Landfill Draft EIS
July 23, 1980

Page 2 The vertical expansion may increase the rate of leachate flow due to the increase pressure corresponding to higher elevations. During rainfall periods water can enter the saturated mass at a higher rate to replace that which is moving vertically through the mass. For every foot of increase in elevation or head, there is almost a half a pound per square inch pressure increase which in effect increases the flow rate through the mass into the underlying soil. Therefore, there will be an increase in the total leachate production from the landfill.

Page 3 There is a statement that the proposed expansion will not affect wells if pumping rates remain the same. It would be more usefull to provide an evaluation as to the pumping rate which will likely cause contamination problems. This will provide information on the limitations placed on the resource as a result of the proposed action. Page three indicates that traffic congestion and litter are impacts of the proposed action. However, an alternative, no action, does not indicate that this impact will be mitigated. For the most part the no action alternative has not been fully or properly evaluated.

Page 15 In the description of the monitoring systems the depth of all wells should be included to indicate what aquifer or portion of the aquifer is being sampled.

Page 19 In the closure discussion of the landfill, the type of soil material and degree of compaction should be specified, so that infiltration can be minimized.

Page 44 There should be a discussion within this section regarding the other processes which also contribute to leachate attenuation such as oxidation reduction, chemical reaction, absorption and dilution. We agree that attenuation in this situation is probably not an important factor in considering environmental effects.

Page 46 The EIS indicates that bedrock varies from 3-45 feet. It should be noted, however, that visual bedrock outcrops were observed in unfilled areas of the permitted site. Therefore, waste materials are currently being placed directly on bedrock.

Page 56 The significance of the fact that flood waters can inundate portions of the landfill are not fully evaluated.

Page 68 -third paragraph- Does the Freeway site violate SW 6 (1) with respect to distance from the "high water mark of a lake, pond or flowage and at least 300 feet from a stream?" If so, has a variance been secured?

Page 69 Table III - 15 - Correct the following:

pH - should be: 6.0-8.5
Total dissolved solids should read total dissolved salts.
There is no total Alkalinity Standard in 4A.
The sulfate standard is not applicable in this case.
It is intended for wild rice areas.

Page 72 Vegetative cover on finished portions of the landfill is very sparse and can not be considered vegetative cover from a typical open grass area. Therefore, runoff calculations are probably in error. With respect to runoff calculations, there should be information regarding the loss of soils from the fill area and the need for long term perpetual maintainence as well as settling basins to remove suspended materials prior to the runoff entering the river.

Page 73 - third paragraph - "The saturated material" What does this refer to? If it is solid waste, does this increase in water retention increase the decomposition rate and hence methane production?

Pages 78,80 - Are these calculations based on Freeway or Burnsville Loadings? definition of L indicates the values come from Burnsville.

Page 83 - third paragraph - This paragraph needs to reflect more accurately the current status of the drainageway with respect to standards. (See Schade's memo to Cliff Anderson, 5/9/80 and G. Blaha's memo to C. Anderson, 5/2/80). The water in the drainageway may exceed recreational and fisheries standards. However, the Agency has made a determination that more appropriately, the drainageway should be classified as a Limited Resource Value water, allowing the application of less stringent standards. This recommendation for a new classification is currently under review by the hearing examiner and a decision on its appropriateness is expected in early fall.

Page 83 - The statement "Where difference exist between WPC 14 and WPC 22, the more stringent conditions are applied." This should read "conditions shall be applied."

Page 83 The significance of a 23 percent increase in BOD is determined by the dissolved oxygen content resulting from the organic decomposition in the river. Therefore, there should be information on the DO concentration effects on the river. In particular, there should be information regarding cumulative effects of BOD from all sources that effect this river segment. Recognizing that the water quality of the river is considerably degraded by point and nonpoint sources from the Metropolitan area all controllable sources of water pollution should be evaluated as to the treatablility and ultimate benefit on the river. This evaluation has not been made and should be a part of the EIS.

Page 84 - last paragraph - What WPC 14 standards are referred to here? Groundwater standards do not cover ammonia and specific conductance.

Page 89 Figure 14 does not show where the U.S. Portland Cement well is located.

Page 118 Statements regarding the leachate production rate should be revised to account for higher production rates due to increased elevation head.

Page 120 - top paragraph - Refer to comment regarding p. 83.

Page 121 The combined effects of the landfills with the expansions will increase significantly the background concentrations of several parameters in the river. Recognizing that the downstream dischargers rely on dilution to meet water quality standards, the landfill may become a significant contributer to the problem. The section on cumulative impact should contain an evaluation on whether there will be additional downstream violations or an aggravation of existing violations. The combined landfills will increase ammonia in the Minnesota River from 0.7 mg/l NH_3-N to 1.0 mg/l (43%). Lesser increases are noted for other water quality parameters. The expansion will prolong leachate discharge and no conclusion could be reached regarding whether or not leachate concentration will increase (p. 119). In view of this, the landowner wants to develop a mariner harbor (p. 19). This subject should be addressed in this EIS. Based on the above information, it is quite possible that the marina

will provide a direct route for leachate to enter the river more expeditiously from the landfill. The leachate may have less time to degrade, undergo less dilution and be released in higher concentrations than expected. Furthermore, the new water quality standards will probably address un-ionized ammonia. A projected 43% increase in un-ionized ammonia in the final downstream mix may violate the new un-ionized standard during low flow. In fact, current upstream total ammonia concentrations may calculate to un-ionized ammonia concentrations that would exceed proposed water quality limits.

Page 121-123 It is stated that the wells at the site should remain free of leachate influence based on the ground water flow characteristics underneath the landfill. This in not necessarily the case since an increase in concentration of leachate constituents could have an impact. Also, what ground water is used for should be indicated for wells at the site. In addition, the impact of additional wells and increased withdrawal rates should be evaluated in regard to ground water flows.

Page 134 In the Aesthetics Section there should be an evaluation of the visual impacts of any additional 20 foot high expansion. What was previously flood fringe and low lying land will now be a mound with steep slopes. Presumably the distance from which this landfill will be seen will be substantially increased. Also its final configuration as it relates to the natural setting should be evaluated.

Page 136 There should be a discussion on increased fugative dust because the top elevation of the landfill will be 20 feet higher. Presumably, it will be exposed of greater wind erosion. Also the environmental and estetic impact of blowing litter should be evaluated along with potential mitigating measures.

Page 139 - paragraph 3 - Do we have any specific evidence that the operations do now include daily cover? Any recent site inspections?

Page 145 The no action alternative indicates that there will be impacts such as increase fuel costs, etc. However, the Burnsville landfill is located very close to the existing Freeway landfill which presumably would be the most logical alternative landfill. Are, in fact, fuel costs going to increase? If so, are the increased costs significant?

The EIS indicates that a new landfill would be required nine months earlier if the proposed action were denied. This, however, is the only impact which applies to this discussion. Siting activities, construction, leachate collection systems, cost, etc. will all occur regardless of this expansion. The EIS gives a false impressions that 4.2-5.6 million dollars of site development cost will be required if this landfill expansion does not occur. The EIS does not seriously evaluate alternative sites to this proposed action. The significant impacts of this proposed action cannot be evaluated against alternatives with the information currently provided in the draft EIS.

Page 152 The Minnesota River is an intrastate water body.

Page 154 The Freeway landfill is refered to as the Burnsville landfill when reviewing the proposed action with the policy framework.

GENERAL:

In general, the EIS fails to adequately evaluate the impacts and the severity of the impacts of the alternatives which are, also, not fully evaluated. The staff believes that the no build alternative should be further evaluated and compared to a more thorough evaluation of environmental effects of the proposed action. It does not appear that alternatives have been seriously considered. The relatively small amount of additional capacity this landfill provides to the Metropolitan area may be replaced by existing landfills and by new landfills which will need to be constructed in the future.