

18C

DEPARTMENT OF ENVIRONMENTAL QUALITY

Fred M. Evans - Main Office  
Phone 515/281-5970

April 28, 1983

Jerry Rattenborg  
Regional Administrator  
Department of Environmental Quality  
Region 1  
L O C A L

RE: Lagoon Improvements  
Denver, Iowa

Dear Jerry:

We have reviewed the proposal from the Cedar Valley Engineering Company for lagoon improvements at Denver, Iowa. These review comments have been summarized in a memo, a copy of which is included for your information. Based upon the engineering proposal, there are at least four design items that would require variances from our design standards for lagoons (Chapter 18C). These design items are: 1) design flow, 2) lagoon depths, 3) organic loading on primary cells, and 4) number of secondary cells. Lavoy Haage has discussed the need for such variances with Joe Obr, Director, Program Operations Division, and they have advised that in view of the number of variances that would be required for this proposal, we could not approve such a project as now presented.

Lavoy and Joe have suggested that the proposed new cell could be enlarged by expansion to the north of existing city property so as to serve as a primary cell meeting required organic loading and the existing cells could be used as the secondary cells. Another possibility would be to add aeration equipment initially to the existing lagoon and convert the facility to an aerated lagoon at the present time.

Also, Lavoy and Joe feel that we should definitely encourage the city to get accurate flow data on the existing raw sewage flows. In this regard, we note that the consulting engineer advises that the lift station pumps are being replaced and that the new pumps will be calibrated for obtaining more accurate flows. We trust that the lift station pumps are equipped with elapsed time meters and event recorders. If not, we strongly recommend that such equipment be provided.

We are returning the copies of the monthly monitoring reports for the Denver

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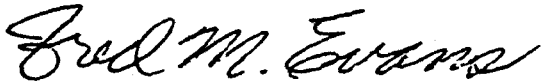
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Jerry Rattenborg  
Region 1 - Manchester, IA  
April 28, 1983  
Page Two

lagoon which were submitted to this office. We appreciate your providing the reports for our information in reviewing the engineering proposal.

Sincerely,

PROGRAM OPERATIONS DIVISION

A handwritten signature in cursive script that reads "Fred M. Evans".

Fred M. Evans, P.E.  
Wastewater Permits Branch

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