



City of Grand Junction, Colorado 81501

250 North Fifth St., 303 243-2633

August 29, 1979

RECEIVED

Colorado Department of Health
Water Quality Control Division
4210 East 11th Avenue
Denver, CO 80220

SEP 1 1979

Attention: Ronald G. Schuyler, Chief
Technical Services and Grants Section

WATER QUALITY

D. E. _____

Dear Ron:

Re: Grand Junction and Mesa County, Colorado Wastewater Treatment Facilities

The City of Grand Junction and Mesa County have reached a critical point in the development of additional sewage treatment capacity to serve the Grand Junction "201" Facilities Plan area. The staff and the governing bodies of the City and the County have felt up until now that development in the area and progress toward providing the needed additional sewage treatment capacity were relative to each other and that each was to a large extent subject to the control and directive activities of the City and County staff and elected bodies. If a controlled and stable balance between need and capacity is to be maintained it is imperative that progress toward providing additional treatment capacity proceed without delay. We feel that the City and the County have been very responsive and responsible in the actions taken toward providing the needed capacity. At this point there are certain actions and determinations that must be made by the State Water Quality Control Commission and/or EPA to allow our projects to proceed.

In June and July of this year it was determined through the self-monitoring process that the existing sewage treatment plant was out of compliance on occasion with state standards for BOD and bacteria counts. Although these incidents have been minimal and have little adverse effect on the receiving stream it is indicative of the pressing need for additional treatment capacity.

Sometime ago the City and County developed a plan to continue to meet the increasing demands for sewage treatment capacity while the new Persigo Wash Treatment Plant was being designed and built. The purpose of the plan was to avoid the tremendous economical and social upset that would be caused by a ban on additional sewer taps while waiting on a new sewer plant. The Grand Junction area is under tremendous pressure associated with renewed emphasis on energy development. This area along with the services provided has become an

important factor in both the local and national goals for energy development. The plan that was developed was to construct the River Road Interceptor line and provide for interim treatment capacity of 1 MGD at the new plant site. If construction on these projects begins this year they can be completed in about 12 months and should be able to accommodate the additional sewage generated prior to the completion of the new Persigo Wash plant in 1982. This plan received favorable response from the State Water Quality Control Commission. At a public Water Quality Control Commission meeting in Grand Junction the Commission directed the Water Quality Control Division staff to assist in getting approval of the EPA to proceed with this plan.

If this plan is not implemented very soon it may not provide the extent of relief that it otherwise could. The City and County have proceeded to make provisions for issuing revenue bonds to provide the local funds for these projects. We are ready to proceed. We need a determination that these projects can be a grant fundable project at this time. We have submitted a Step III grant application for the River Road and Paradise Hills Phase II Sewer Interceptors. Please advise us as to the eligibility to submit a Step III grant application for the construction of the flow equalization basin and related appurtenances of the new Persigo Wash Plant which can be used as a 1 MGD interim plant until the new plant is completed.

I received a copy of the August 22, 1979, letter from Jeb Love to Pete Heye (HDR Inc). I am encouraged by Jeb's comments and agree with his reasoning, except that we do not feel that the River Road sewer line is oversized for storm water flows, although it can be utilized for combined flows for short periods of time. My only request at this time is that we do get those issues resolved as soon as possible so that we can proceed with our projects.

In addition to the above, a review of the preliminary report, "Ammonia Toxicity Study in the Colorado River near Grand Junction, Colorado," prepared by Engineering Science, Inc. (ES) in April 1979 reveals several concerns. The EPA criteria for un-ionized ammonia in receiving waters of 0.02 mg/l as $\text{NH}_3\text{-N}$ is the basis for the allowable in-stream concentration for fresh³ water fish and other aquatic life. Important to note is that this criteria is based on tests conducted on trout and not the four endangered fish species in question. In our opinion, performance of bioassays on the endangered fish species is the only way the un-ionized ammonia toxicity can be determined; however, such experiments would not be permitted by law under The Endangered Species Act of 1973. Perhaps the time and money should be dedicated to conduct bioassays on related non-endangered fish species so that toxic un-ionized ammonia levels can be established as the basis to determine whether or not nitrification is required at the wastewater

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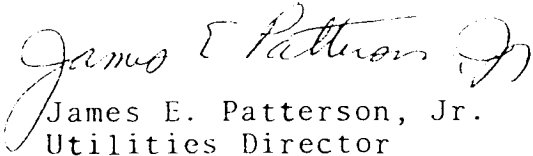
treatment plant, rather than spending millions of dollars in capital and operation and maintenance costs for nitrification facilities that may not be needed. Apparently the endangered fish species already survive in areas of the Colorado River where the in-stream concentration of un-ionized ammonia exceeds the 0.02 mg/l level as measured and documented by ES at their sampling stations.

Another concern is that the ES preliminary report fails to acknowledge the recently adopted Colorado Department of Health water quality standard of 0.06 mg/l for un-ionized ammonia that applies to the subject segment of the Colorado River. If the study is truly to determine discharge requirements for the Grand Junction and Fruita wastewater treatment plants to meet an allowable in-stream concentration of un-ionized ammonia, then the final report should provide an allowable monthly discharge in pounds of ammonia as N at the treatment facilities for both the speculative 0.02 mg/l and 0.06 mg/l levels or a level scientifically representative for the endangered fish species.

In addition, the amended Negative Declaration for this project states that the ES preliminary report should determine if the grantee should construct costly nitrification equipment. Since the ES preliminary report has been released, a response on this matter is requested.

In summary, we feel that we have done all that we can do at this time toward increasing our sewage treatment capacity. Our hands are somewhat tied until the above issues can be resolved. I can appreciate what you and your staff have done and are doing. I only hope that this can continue to be a project on which the local, state, and federal agencies can continue to control on a timely basis rather than having to catch up and correct a situation that develops while we are trying to determine the right thing to do.

Yours truly,


James E. Patterson, Jr.
Utilities Director

JEP/hm

cc - Jim Wysocki
Maxine Albers
Karl Henrichsen
William Hormberg
Dick Bowman

Mr. [unclear]



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250 North Fifth St., 303 243-2633

Handwritten notes and stamps in a box, including "8/29/79" and initials.

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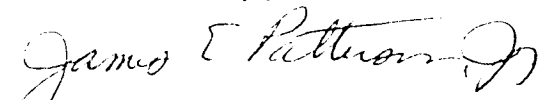
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