

July 22, 2007

Donna J. Crawford
Grant Administrator
Governmental Assistance Services
905 Joseph Drive
Lawrence KS 66049

RE: Environmental Review – Wetmore, KS Grant #07-PF-615
Sanitary Sewer Treatment System Improvements

Dear Ms. Crawford:

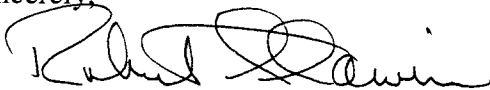
The Kansas Geological Survey (KGS) has received your letter dated June 22, 2007, asking us to review the above referenced project. In general, the project involves constructing a new three-cell lagoon treatment system, pump station, and 100 linear feet of piping at a proposed site approximately 0.5 mile east of Wetmore, Kansas. The existing wastewater treatment plant will be demolished.

A review of regional geologic information and project information provided by Governmental Assistance Services indicate that there are no unduly adverse geologic conditions that should affect this project. Site-specific conditions should be considered by the applicant prior to construction.

This letter is an assessment based on the regional geologic conditions available at the KGS and cannot be used in substitute of a detailed site characterization. Other geologic conditions, not discussed herein, or for which the KGS has no knowledge, may affect the viability of the project. It is the responsibility of the applicant to provide any necessary characterization, geotechnical or environmental testing, or design by a licensed professional geologist or engineer to complete the project.

If you have any questions please feel free to contact me at (785) 864-2099.

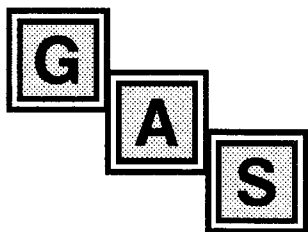
Sincerely,



Robert S. Sawin
Geologist

Enclosures

cc: Dan Suchy, KGS Data Resources Library



Governmental Assistance Services

905 Joseph Drive

Lawrence, Kansas 66049

785-832-2141 • Fax 785-832-1111

Toll Free 888-832-3335

e-mail: gasdonnaa@sunflower.com

June 22, 2007

Dr. William Harrison
Kansas Geological Survey
University of Kansas
1930 Constant Ave.- Campus West
Lawrence, KS 66047

RE: Environmental Review - Wetmore, KS Grant #07-PF-615 – Sanitary Sewer
Treatment System Improvements

Dear Dr. Harrison:

On June 18, 2007 the City of Wetmore, Kansas received a grant of \$400,000 from the Kansas Dept. of Commerce to complete sanitary sewer treatment system improvements. KDHE will fund \$471,137 of the proposed improvements of \$871,137.

new three-cell treatment system,
The city will be constructing a ~~third treatment cell~~, pump station and installing 100 LF of piping. Demolition of the existing plant will occur as well as adding an auxiliary generator and miscellaneous construction. Please note the attached maps depicting the improvement location.

The city has been issued a Schedule of Compliance dated August 1, 1996.

Project alternatives are attached. The cell location is in the SE quarter of Section 12, Township 5 South, Range 14 East of the 6th p.m. in Nemaha County. (See attached Option to Purchase.)

Please send your responses to Governmental Assistance Services, 905 Joseph Dr., Lawrence, KS 66049. If you have questions please call me at 888-832-3335.

Sincerely,

Donna J Crawford
Donna J. Crawford
Grant Administrator

Enc/ Maps

Alternatives

Option to Purchase (land description)

Phone call from Donna - 6/26/07 - to correct wording in letter.

FORM E – PUBLIC FACILITIES

1. PROJECT NEED

Upgrade of Wetmore's sanitary sewage treatment system has become the most important need in the city. The system constructed in 1959 has lost its useful life. KDHE issued a Schedule of Compliance and a letter on December 15, 2003 stating "We suggest you carefully read the terms and conditions of your permit and understand these terms & conditions are enforceable under both state and federal law."

Wetmore cannot meet the new Kansas Water Pollution Control Permit which was issued 12/15/03 or the U.S. EPA National Pollutant Discharge Elimination System Permit. The city was advised they must achieve compliance by 12/31/06. KDHE has given an extension on the compliance time to allow the city to apply for your assistance and to prevent additional increases in monthly sewer charges.

EPA & KDHE states it will not tolerate constant violations which have escalated since 2001. From 2001 to 2003 a total of 4 violations occurred. Three BODs and one TSS. The new NPDES permit requires a geometric average of 4800 colonies/10 ml. Wetmore has an effluent range from 14,000 to 72,000 colonies/100 ml.

Wetmore will never meet permit limits without constructing a completely new system. The new construction to meet permit levels affects every household in Wetmore whether rich or poor. If the city has to borrow the money without your partnership rates will escalate to approximately \$27 - \$32 per month depending on the financing.

2. PROJECT ALTERNATIVES

A. Alternatives

Fear of higher rates and massive fines has heightened the City Council's desire to complete this much needed project as cost effectively as possible. Financial alternatives and alternative solutions were investigated, not only with the engineer, but with KDHE's project assistance.

Wetmore certainly did not have the "do nothing" alternative. Acceptance of fines is out of the question and would only add to the financial burden of our low-to-moderate income families.

Therefore, upgrading the existing plant was studied. This system requires the wastewater treatment plant disinfect effluent before disposal. Ultraviolet would be added because UV inactivates most viruses, spores and cysts. KDHE requires filtration prior to UV of the city's trickling filter system. The UV system will also require a building to house its parts.

Other locations in the plant also need upgraded as was stated under Community Needs. Parts are also difficult to find on a plant constructed as far back as 1959, even though the system had an upgrade in 1980 adding a biological contractor. This alternative will cost more to maintain - \$27,500 and \$625,856 to construct.

A non-discharging lagoon system was not investigated. This type of system is designed not to overflow based upon average rainfall, soil permeability, and evapotranspiration and wastewater inflow volumes. This part of the State of Kansas does not have adequate weather to allow non-discharging systems to function properly. This type of system would be much more costly than the two alternatives being considered.

Irrigation was discussed but did not represent a long term solution and landowners would have to give permission for the irrigation process.

The design of a 3-cell discharging stabilization lagoon treatment system with 120-day detention time is a user friendly alternative. Basing the design conservatively, a population of 525 users will only increase the capital cost by 5% cutting the operation & maintenance costs to \$15,500.

KDHE's letter dated October 13, 2005 states "The Department has completed the review of the referenced preliminary plans for the construction of a 3-cell lift station. The plans and specifications are conditionally approved." KDHE feels the best choice to meet their requirements is the 3-cell treatment system and to demolish the mechanical plant. The cost to complete all aspects of the proposed project is \$871,137.

KDHE, the city and the engineer have agreed that the useful life of the lagoon system is longer. It is user friendly as far as maintenance and the cost to operate & upgrade is less costly.

Funding alternatives were investigated as well. A KDHE 20 year loan @ 2.7% would cost each user \$31.68 for Alternative #2, 3-cell treatment system. This is far above the state average. If you partner with the city an affordable rate can be established at \$20.00 per month.

USDA, Rural Development was also considered, however, citizens stated they did not want to have a 40 year loan at 4.125% or higher. The rate would not be much lower than the 20 year loan with KDHE. Rural Development would create a \$28.32 cost if coupled with your funds. Citizens did not feel the 40 year Rural Development loan was the financial alternative due to the interest to be paid back in 40 years. The city could build two new systems with the interest payment.

Wetmore citizens are requesting a \$400,000 grant from you to lower project payback costs to \$454,087. Each household feels they can afford the \$20.00 a month to resolve KDHE and EPA violations.

