

1930 Constant Avenue
Lawrence, KS 66047-3724
February 2, 2009

Rose Marie Saunders
Ranson Financial Consultants L. L. C.
200 West Douglas, Suite 600
Wichita, KS 67202

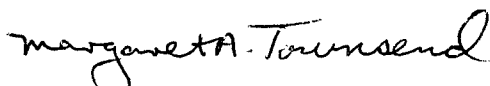
Dear Ms. Saunders:

I was asked to review the City of Ogden plans for lining a cell in the wastewater treatment lagoon and changing the facility to a continuous discharging facility. The soils in the area appear to be Hanie very fine sandy loam (NRCS WebSoilSurvey (<http://websoilsurvey.nrcs.usda.gov/>)) which would definitely require a liner to prevent leakage. Because your design includes a liner to rectify the current leakage problem these soils should be adequately protected in the future.

Use of new discharge pipe to make the facility a continuing discharge station should be fine as long as the stream the discharge is entering is able to carry the load. I would discuss this with your engineering company.

The above comments are based on regional geologic conditions and limited information available to the KGS at the time of writing and cannot be used in substitute for a detailed site characterization. Other geologic conditions, not discussed here, or for which the KGS has no knowledge, may affect the viability or safe operation of this facility or property. Geotechnical engineering and design are outside the purview of the KGS. It is the responsibility of the applicant to produce any detailed site characterizations, geotechnical or environmental testing, or design by a licensed professional geologist or engineer to complete the project.

Sincerely,



Margaret A. Townsend
Geohydrology Section

The following form may be used by the Review Agency/Commission for comments in response to the request for clearance from the proposed Water Pollution Control Loan Fund Project.

☐ Army Corps of Engineers
☐ Kansas Biological Survey
☐ State Conservation Commission
☐ Kansas Corporation Commission
☐ Division of Water Resources/Kansas Department of Agriculture
☒ Kansas Geological Survey
☐ Kansas State Historical Society/State Historic Preservation Office
☐ Kansas Water Office
☐ Kansas Department of Wildlife & Parks
☐ U.S. Dept. of Agriculture, Natural Resources Conservation Service
☐ Kansas Department of Health & Environment
☐ U.S. Department of the Interior, Fish & Wildlife Services

Agency Review Comments: (to be completed by reviewing agency and returned to applicant contact person at name and address shown below)

Comments: _____

Recommended Action: (to be completed by reviewing agency and returned to applicant contact person at name and address shown below)

☒ Clearance of project should be granted
☐ Clearance of project should not be granted
☐ Clearance of project should be delayed until the issues or questions have been clarified
☐ Clearance of project should not be delayed, but the applicant (in the application) should Address or clarify the questions or concerns indicated above.

Margaret A. Townsend KGS 2-2-09
Reviewer's Name Division/Agency/Commission Date

Project Title: Public Water Supply Loan Fund Application

Applicant: City of Ogden, Kansas

Contact Person: Rose Mary Saunders, Ranson Financial Consultants, L.L.C.

Address: 200 West Douglas, Suite 600

City, State: Wichita, KS 67202

Ranson
Financial Consultants, L.L.C.

December 17, 2008

Mr. William Harrison, Director
Kansas Geological Survey
University of Kansas
1930 Constant Avenue, Campus West
Lawrence, KS 66047

RE: City of Ogden, Kansas
Wastewater System Improvements
KWPCRF Project No. C20-1711-01

Dear Mr. Harrison:

The City of Ogden, Kansas has submitted an application to the Kansas Department of Health and Environment for a loan from the Water Pollution Control Revolving Loan Fund for improvements to its wastewater treatment facility. The City has also submitted an application to the Kansas Department of Commerce Small Cities Program for the balance of the funding.

The existing 3-cell non-discharging treatment plant does not meet current KDHE regulations. The entire facility is within the required 10' groundwater separation and the third cell has a higher seepage rate than that allowed by KDHE. Therefore, it is proposed to line Cell No. 3 to eliminate the seepage problem. It has also been recommended to convert the existing treatment facility to a continuous discharging facility. Also, the discharge line will need to be relocated due to the proposed re-alignment of Kansas Highway 18.

The following is a description of the proposed work:

Treatment Facility: Installation of: 700' of force main, 1 force main cleanout, 1 distribution structure, 2 transfer manholes, 2 transfer structures, 1,100' Interior Transfer Piping (In Place), 1 tiered discharge structure, 515,950 sq. ft. of HDPE geomembrane, 4,000' of discharge piping (In Place), 200' of steel casing (0.25" min. thickness-Jack & Bore), 250' of steel casing (0.25" min. thickness-open trench), 8 standard manholes (48" dia.) 30 Vert. Ft of Extra Depth in Manhole (48" Dia.), one River Discharge Structure, 5,500' of fencing, excavate 20,000 cy of dirt, modify existing structure, upgrade road surface, mobilization, construction staking, clearing and grubbing and seeding.

Discharge Line: Installation of: 275' of 10" SDR 26 Sanitary Sewer, 96' of 10" DIP Sanitary Sewer, 36' of 18" Steel Casing, 4 Standard Manholes (48" Dia.), 9 Vert. Ft. of Extra Depth in Manhole (48" Dia.), 150' of 4" Sch. 40 Service Laterals (Solvent Welded), 7 each 10" x 4" Service Wyes, 2 Concrete Headwalls (In Place), 230 Tons 6" Combined Materials (AB-3),

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Remove 2 Existing Headwalls, Remove and Replace 9 s.y. gravel surfacing, Remove and Dispose of 416 s.y. of asphalt surfacing, 600' Pre-TV inspection and Connection to Existing MH-B (Complete in Place). Also included would be mobilization, clearing and grubbing, seeding and erosion control.

The estimated project cost is \$1,789,799.00

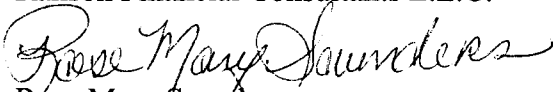
The proposed project is located in the South Half, Southeast Quarter, Section 12, Township 11 South, Range 6 East, Riley County, Kansas. The attached map shows the existing lagoons and discharge line for your information.

No persons will need to be relocated due to the construction of this project. If there are any special permits or conditions that apply, please let us know. We would appreciate receiving your comments by January 18, 2009 regarding this project. A Project Review Form has been enclosed for your convenience. If it would be more convenient to respond by e-mail, my address is rsaunders@ransonfinancial.com.

If you have any questions regarding the construction, please contact Patrick Cox, PE or Thaniel Monaco PE at (785) 537-1448. If you have any questions regarding the City's application, please feel free to call me at (316) 264-3400.

Sincerely,

Ranson Financial Consultants L.L.C.


Rose Mary Saunders
Senior Consultant

Enc.

Plant Site

Latitude $39^{\circ} 06' 10.20'' N$

Longitude $96^{\circ} 42' 29.17'' W$

