



KANSAS GEOLOGICAL SURVEY

1930 Constant Ave., Campus West
The University of Kansas
Lawrence, Kansas 66047-3726
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Proposed Project for Application to the Kansas Department of Health and Environment for the Kansas Water Pollution Control Revolving Loan Fund, and to the Kansas Department of Commerce for a Community Development Block Grant

Applicant: City of Edna
Wastewater Collection and Treatment System Improvements

Contact Person: Mike Dalrymple, P.E.
Address: Kramer Engineering, P.A.
2348 SW Topeka Blvd.
Topeka, KS 66611-1286

Sent to the Kansas Geological Survey for environmental review.

Agency Review Comments:

The long-term benefits of the improvements to the wastewater collection system should not only reduce the amount of storm water inflow and ground-water infiltration during wet periods, but decrease the amount of ground-water contamination during dry periods when the hydraulic heads within the sewer lines are greater than those in the subsurface outside the lines. The long-term benefits of the improved wastewater treatment system include the improved quality of effluent discharged to surface waters. These long-term benefits should offset any short-term adverse environmental impacts during construction.

Recommended Action:

- ☒ 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

Donald Whittemore
Reviewer's Name

Geohydrology Section, Kansas Geological Survey
Division/Agency

8/21/06
Date

Reviewer's Signature

The above discussion represents our best assessment based on the information that the Kansas Geological Survey has about this locality and/or proposed project at the time of this writing. Other geologic conditions, not discussed herein, or for which the Kansas Geological Survey has no knowledge, may affect the viability or safe operation of this facility or property. The information provided in this letter is from regional or county-wide studies and should not be used as a substitute for detailed site characterization by a licensed geologist or engineer. It is the responsibility of the applicant to provide any required site characterizations.



KRAMER ENGINEERING, P.A.

CONSULTING ENGINEERS • SURVEYORS

2348 SW TOPEKA BLVD • TOPEKA, KANSAS 66611 • 785-234-6600 • FAX 785-234-6611

July 18, 2006

Re: Wastewater Collection and Treatment System Improvements
City of Edna, Kansas

Dear Addressee:

Enclosed for your comments are Intergovernmental Review Forms for the referenced project with attached project description and site location map. Please complete the transmittal form and return it to our office by August 18, 2006.

The City of Edna, Kansas, is preparing an application to the Kansas Department of Health and Environment for a loan from the Kansas Water Pollution Control Revolving Loan Fund and Kansas Department of Commerce for CDBG grant funds to finance the referenced project. This project will comply with appropriate state laws concerning the application.

If you have any questions about the review or the project, please contact me at (785) 234-6600.

Sincerely,

KRAMER ENGINEERING, P.A.

Mike Dalrymple, P.E.
Vice President

MAD/cs

Enclosures

**WASTEWATER COLLECTION AND TREATMENT
FACILITIES IMPROVEMENTS FOR
CITY OF EDNA, KANSAS
July 17, 2006**

Wastewater collection system and treatment facility improvements are being proposed for the City of Edna, Kansas. The City of Edna is located in South Central Labette County approximately 15 miles east of Coffeyville on U.S. Highway 166 and its corporate boundaries consist of nearly 260 square miles. See Figure I-1 for the Planning Area map.

The City of Edna maintains its own sewer collection system, which flows into waste stabilization ponds for treatment. The system serves the City's population of approximately 434 residents, and consists of 21,200 linear feet of 8-inch gravity sewer line and 76 manholes. The system also contains approximately 4,900 feet of force main and three pump stations.

The City's sewer system was originally designed as a separate sewer system to transport only wastewater flows. A study of the existing wastewater flows during various weather patterns has shown that the system is experiencing significant storm water inflow and groundwater infiltration. Some of the flows measured during storm events exceed the hydraulic capacity of the sewer lines and cause surcharging and sewer back-ups.

All of the City's wastewater flows into the City's lagoon, which is located approximately one-half mile southwest of town within the City limits, as shown in Figure I-1. The existing treatment facility is a three-cell waste stabilization lagoon and discharges into the Verdigris River Basin via Deer Creek.

KDHE reported in November 2005 that severe erosion of the interior cells of the wastewater lagoon was occurring. The City is proposing, in this project, to correct this soil erosion by adding rock riprap to all interior dike cells. Also, lagoon piping and structures will be modified

The proposed improvements to the City of Edna's sewer collection and treatment facility include cleaning and TV inspection of all sewer lines, the repair and replacement of 1,300 feet of 8-inch sewer and 12 wyes, pump station improvements, and erosion control for the existing three cell wastewater treatment lagoon.

The opinion of probable costs for the project is \$ 662,000. The City is proposing to use Kansas Water Pollution Revolving Loan and CDBG grant funds to finance the project. All proposed improvements will take place within City limits and all improvements to be constructed are above the 100 year flood plain.

FIGURE 1-1



KRAMER ENGINEERING P.A.
TOPEKA, KANSAS

INTERGOVERNMENTAL REVIEW TRANSMITTAL FORM

Comments By: Kansas Geological Survey Transmittal Date July 18, 2006

Project Title: Wastewater Collection and Treatment System Improvements,
City of Edna, Kansas

Contact Person: Mike Dalrymple, P.E., Project Engineer

Return To: KRAMER ENGINEERING, P.A.
2348 SW Topeka Blvd.
Topeka, Kansas 66611-1286

This form provides notification and the opportunity for your agency to review and comment on the proposed project as required by Executed Order 12372. Please complete Parts I and II as appropriate. Your response by August 18, 2006 will be appreciated.

PART I - AGENCY REVIEW COMMENTS:

PART II - RECOMMENDED ACTION COMMENTS:

- ☐ Clearance of the project should be granted.
 - ☐ Clearance of the project should not be granted.
 - ☐ Clearance of the project should be delayed until the issues or questions have been clarified.
 - ☐ Clearance of the project should not be delayed, but the Applicant should (in final design and/or permit application) address and clarify the questions or concerns indicated above.
 - ☐ Request the opportunity to review final application prior to submission to the federal funding agency.
 - ☐ Request the State Process Recommendation in concurrence with above comments.
-

Reviewer's Name: _____

Date: _____