

**State of Kansas  
Capacity Development Program**

**Small Public Water Supply  
System Corrosion Control Study  
Grants**

**Instructions and Application**

**April 2018**



Kansas Department of Health and Environment  
Division of Environment  
Bureau of Water  
Public Water Supply Section

1000 SW Jackson Street, Suite 420  
Topeka, Kansas 66612  
(785) 296-5514

## **I. General Information**

Small public water supply systems in Kansas face increasing challenges in complying with Safe Drinking Water Act (SDWA) requirements. This is especially true for small water systems which typically have low income populations. To help small public water supply systems achieve and maintain compliance with requirements of the Lead and Copper Rule, KDHE has established the **Small Public Water Supply System Corrosion Control Study Grant Program**. The purpose of this document is to explain the requirements and application procedures for participation in this program. This program will match sponsor funding “dollar-for-dollar” to pay for corrosion control studies required by the Lead and Copper Rule. This Public Water Supply program helps implement the Kansas Capacity Development Strategy for Existing Systems and is one of the tools used to help small water systems achieve and maintain Technical, Financial and Managerial (TFM) Capacity.

Included in this document:

- Eligibility Criteria for Applicants
- Cost Share and Payment Process
- Grant Project Timelines
- Engineer Selection Process
- Corrosion Control Report Criteria
- Application Form

## **II. Eligibility Criteria for Applicants**

The following criteria shall apply for project qualification.

1. The population served by the small water system must be 10,000 or less.
2. The small water system must have had an action level exceedance for lead or copper.
3. The small water system must be a publicly owned community water system.

## **III. Cost Share and Payment Process**

KDHE will provide a 50% cost-share match up to a maximum of \$3,000.00 to the small water system for development of a corrosion control study.

The following payment conditions will apply to all cost-share projects.

1. Project cost-share funding may NOT be used for engineering services provided prior to the date of the signed agreement between the small water system and the consulting engineer for the corrosion control study or prior to the date KDHE Notice of Approval for the application.
2. Upon signature of the grant agreement between the small water system and KDHE, one-half of KDHE’s portion of the cost share funding will be released to the water system.
3. Final payment will be forwarded to the small water system upon KDHE’s receipt and approval of the corrosion control study report.
4. The small water system is responsible for all payments for engineering services.

## **IV. Grant Project Timelines**

Applications will be accepted on a continuous basis as long as funding is available.

KDHE will use the following timelines for project management.

1. KDHE will provide notice of approval/denial of the grant to the small water system within 30 days of receipt of application.
2. The small water system must select the engineer within 3 months of Notice of Approval from KDHE.
3. Upon selection of the engineer by the water system, a grant agreement shall be signed by KDHE and the water system. The grant agreement will outline the payment process, the total project cost, the cost-share amounts that will be provided by KDHE and the water system, project completion date and the criteria that must be included in the final corrosion control study.
4. The water system shall have a separate agreement with the engineer for completion of the corrosion control study. A copy of the contract agreement between the water system and the engineer shall be provided to KDHE once finalized and signed.
5. Once selected, the engineer must complete and submit the final corrosion control study to KDHE within 18 months of KDHE's notice of requirement to perform a corrosion control study. A progress report must be submitted to KDHE within 9 months of KDHE's notice of requirement to perform a corrosion control study. A draft of the corrosion control study must be submitted to KDHE for comment within 15 months of KDHE's notice of requirement to perform a corrosion control study. The water system shall provide 3 copies of the final corrosion control study report to KDHE upon receipt from the engineer.

## **V. Engineer Selection Process**

There are no KDHE procurement regulations or required procedures for selecting engineering consultants. The small water system should use locally established procedures. If there are no locally established procedures the project sponsor may wish to use the procurement procedures as recommended by the Kansas Consulting Engineers or similar to K.S.A. 75-5801 thru 5807 (see Attachment A). The corrosion control study must be prepared by a professional engineer registered in Kansas.

Prior to the contract award between the small water system and the engineer, the small water system shall provide a Scope of Work prepared by the selected engineer for KDHE review. KDHE will only review for consistency with report criteria; no recommendation for a specific proposal will be made.

## **VI. Corrosion Control Study Criteria**

The corrosion control study must be sufficient in scope and detail to evaluate the effectiveness of treatment regarding (1) alkalinity and pH adjustment; (2) Calcium hardness adjustment; and (3) addition of phosphate or silicate based corrosion inhibitor, as required by 40 CFR 141.82. In addition, the report must include the following.

1. Name, address, telephone and email of the engineering company.
2. Name of engineer with primary responsibility for report preparation.
3. Date of report submission.
4. Clear identification of the recommended alternative.

5. Discussion regarding evaluation and testing methods used to develop corrosion control strategies.
6. Discussion and evaluation of alternatives.
7. Justification for selection of recommended alternative.
8. Financing options including estimated annual costs and total costs for each alternative.
9. Estimated annual cost of operation, maintenance and replacement budget, etc. for each alternative.
10. Potential environmental impacts for each alternative.
11. The engineer must consult with KDHE to complete the waste stream summary review and disposal method consensus process for the selected alternative. The outcome of the waste stream summary review and disposal method consensus process shall be included in the report to ensure it being carried forward throughout the project.

# **Attachment A**

Local Government Procurement Procedures  
For  
Professional Engineering Services

And

K.S.A. 75-5801 thru 5807

**LOCAL GOVERNMENT  
PROCUREMENT  
PROCEDURE FOR  
PROFESSIONAL ENGINEERING SERVICES**

From Kansas Consulting Engineers

When a local government desires the services of a professional engineer, the procedure used to contract for such services has a great deal to do with how satisfied the government entity will be with the engineer and ultimately with the resulting public works project. Quite frequently the best procedure is simply to negotiate with the firm which has established a prior good relationship with the governing body, particularly if the design professional is qualified for the project under consideration.

There are, however, occasions when the local government will wish to consider several engineering firms; therefore, under these circumstances the procedure below is recommended.

This procurement procedure consists of four major elements: notice, submittals, review of submittals, and negotiations. Each element is discussed in some detail in the following paragraphs:

1. **Notice:** The notice to consultants can be formal or informal depending upon the size and complexity of the project under consideration. It can be done by letter to consultants with whom the local government is familiar, or by publication in newspapers and/or trade journals. The notice should be concise and as brief as possible containing the following information.
  - a. Name of the local government requiring services and the name of a contact person.
  - b. A description and location of the project.
  - c. The deadline for receipt of submittals from interested design professionals.
2. **Submittals:** All interested professional architect/engineers responding to the notice should provide the requested information in a convenient manner. This response should contain all the necessary information and shall also include the following information:
  - a. A statement of the technical approach to be utilized in performing the project.
  - b. A statement of his proposed schedule for accomplishment.
  - c. Facilities, equipment and personnel available for the project.
  - d. Any other supporting material as may be applicable.
3. **Review of Submittals:** The governmental body should establish a review panel to receive and review submittals for the proposed work. The review panel should meet promptly after the deadline date and should review and evaluate all submittals received. A short list comprised of three submittals (if available) should be established and ranked in order of preference. The panel is encouraged to check references of the firms by phone or letter.

The review panel may desire to further examine the experience and qualifications of the short-listed firms through personal interviews. In such cases, the firms identified by the ranked submittals should be contacted and invited to schedule interviews. Adequate, but

specified time should be allowed for this interview.

After the interviews, or when the selection is determined, the top-ranked firms should be invited to negotiate terms and conditions of the contract for professional services.

4. **Negotiations:** The governmental body should undertake to negotiate with the top-ranked firm as soon as possible after the selection has been made.

In the event the governmental body is unable to negotiate a suitable contract with the first-ranked firm, negotiations should be terminated with that firm, and the governmental body should then initiate negotiations with the second-ranked firm. This process should be continued until suitable contractual arrangements with the firm have been satisfactorily consummated. All unsuccessful firms should be so advised by letter.

This procedure has been carefully prepared for the mutual protection of the client and the consultant. It has stood the test of time and is widely accepted as the best for the client and the design professional.

# Article 58 - State Engineering and Land Surveying Services

**75-5801. State policy.** The legislature hereby declares it to be the policy of this state to publicly announce all requirements for engineering services, and to negotiate contracts for engineering services on the basis of demonstrated competence and qualification for the type of professional services required and at fair and reasonable fees.

**History:** L. 1977, ch. 287, ' ' 1; April 21.

**75-5802. Definitions.** As used in this act unless the context specifically requires otherwise:

(a) "Firm" means any individual, firm, partnership, corporation, association, or other legal entity permitted by law to practice the profession of engineering and provide engineering services or practice the profession of land surveying and provide land surveying services.

(b) "Engineering services" means those services described in subsection (i) of K.S.A. 74-7003 and amendments thereto.

(c) "Land surveying" means those services described in subsection (j) of K.S.A. 74-7003, and amendments thereto.

(d) "Agency head" means the chief administrative officer of a state agency, as that term is defined in subsection (3) of K.S.A. 75-3701 and amendments thereto but shall not include the chief administrative officer of any state institution.

(e) "Negotiating committee" means a committee designated to negotiate as provided in this act, and consisting of (1) the agency head of the state agency for which the proposed project is planned, or a person designated by such agency head, (2) the secretary of administration, or a person designated by said secretary, and (3) the chief administrative officer of the state institution for which the proposed project is planned, or when the proposed project is not planned for a state institution, the agency head shall designate a second person in lieu of the chief administrative officer of a state institution.

(f) "Project" means any capital improvement project or any study, plan, survey or program activity of a state agency, including development of new or existing programs and preparation of federal grant applications.

(g) "State building advisory commission" means the state building advisory commission created by K.S.A. 75-3780 and amendments thereto, or any duly authorized officer or employee of such commission.

**History:** L. 1977, ch. 287, ' ' 2; L. 1978, ch. 337, ' ' 30; L. 1992, ch. 240, ' ' 30; L. 1996, ch. 48, ' ' 1; Mar. 28.



**75-5803. Qualification statements of engineering and land surveying firms; annual list of qualified firms; selection of firms from list prepared by state building advisory commission in certain cases; procedure.**

(a) In the procurement of engineering or land surveying services, each agency head which utilizes engineering or land surveying services shall encourage firms engaged in the lawful practice of their profession to annually submit a statement of qualifications and performance data to the agency head and to the state building advisory commission. The agency head shall thereafter cause to be prepared annually a list of firms qualified, based upon criteria established and published by such agency head, to provide such engineering or land surveying services.

(b) Except as otherwise provided in subsection (c), when a project requiring engineering or land surveying services is proposed for a state agency, the agency head for such state agency shall evaluate current statements of qualifications and performance data on file with the agency head, together with those that may be submitted by other firms regarding the proposed project. The agency head may establish time frames for the receipt of qualifications statements and performance data from any firm wishing to be considered for the proposed project. The agency head shall conduct discussions with not less than three firms regarding anticipated concepts and the relative utility of alternative methods of approach for furnishing the required engineering or land surveying services and then such agency head shall select from among all such firms, on a rotational basis, the firm to perform the engineering or land surveying services, unless such firm refuses to provide such engineering or land surveying services.

(c) In any case where a project requiring engineering or land surveying services is proposed which concerns the construction of any building or facility or any major repairs or improvements to any building or facility, including in any case but not limited to any heating, cooling or power facility, for a state agency and a negotiating committee is not convened under K.S.A. 75-5804 and amendments thereto, the agency head of the state agency shall notify the state building advisory commission and shall request a list of firms qualified to provide the engineering or land surveying services for such project. Upon receipt of any such request, the state building advisory commission shall evaluate the current statements of qualifications and performance data on file, together with those statements that may be submitted by other firms, regarding the proposed project and other information developed and available to the state building advisory commission, and shall prepare a list of at least three and not more than five firms which, in the opinion of the state building advisory commission, are qualified to furnish the engineering or land surveying services for the proposed project. Each such list shall be submitted to the agency head without any recommendation of preference or other recommendation. The agency head shall conduct discussions with the firms listed and shall select the firm to perform the engineering or land surveying services, all in the manner provided in subsection (b). If the agency head is unable to enter into a contract for the necessary engineering or land surveying services with any firm so listed, the agency head shall request the state building advisory commission to prepare and submit another list of firms qualified to provide such engineering or land surveying services and shall proceed in accordance with this subsection. The secretary of administration shall provide to the agency head such information, advice and assistance as may be requested by the agency head regarding the selection of a firm to provide engineering or land surveying services for such projects, including all information and evaluations regarding the listed firms gathered and developed under K.S.A. 75-3783, and amendments thereto.

**History:** L. 1977, ch. 287, ' ' 3; L. 1978, ch. 337, ' ' 31; L. 1984, ch. 336, ' ' 1; L. 1996, ch. 48, ' ' 2; Mar. 28.

**75-5804. Negotiating committee convened; list of qualified firms for projects; list prepared by state building advisory commission in certain cases; procedure.** (a) Whenever it becomes necessary in the judgment of the agency head of a state agency for which a project is proposed and, in any case where the total cost of such a proposed project is expected to exceed \$250,000, the agency head shall convene a negotiating committee. Except as otherwise provided in subsection (b), the agency head shall submit the list of at least three and not more than five of the most highly qualified firms to the negotiating committee so convened, without any recommendation of preference or other recommendation.

(b) Whenever a negotiating committee is convened under this section for a proposed project requiring engineering or land surveying services which concerns the construction of any building or facility or any major repairs or improvements to any building or facility, including but not limited, to any heating, cooling or power facility, for a state agency, the agency head for the state agency shall notify the state building advisory commission of the project and shall request a list of firms qualified to provide the engineering or land surveying services for the proposed project. Upon receipt of any such request the state building advisory commission shall evaluate the current statements of qualifications and performance data on file, together with those statements that may be submitted by other firms regarding the proposed project and other information developed and available to the state building advisory commission. The commission shall prepare a list of at least three and not more than five firms which, in the opinion of the state building advisory commission, are qualified to furnish the engineering or land surveying services for the proposed project. Each such list shall be submitted to the negotiating committee so convened without any recommendation of preference or other recommendation.

**History:** L. 1977, ch. 287, ' ' 4; L. 1978, ch. 337, ' ' 32; L. 1979, ch. 280, ' ' 19; L. 1996, ch. 48, ' ' 3; L. 1996, ch. 238, ' ' 1; July 1.

**75-5805. Written project description; no alteration without approval.** The negotiating committee shall cause a written description of the scope or program of the proposed project to be prepared. Such description shall be used in the negotiations between the negotiating committee and qualified firms. The proposed project description shall be the basis for the project development and such description shall not be altered without the prior approval of the negotiating committee.

**History:** L. 1977, ch. 287, ' ' 5; April 21.

**75-5806. Negotiating committee access to data on firms; selection of firms.** The negotiating committee for each proposed project shall have access to the current statements of qualifications and performance data on file with the agency head for the firms listed by the agency head. In the case of firms listed by the state building advisory commission, the negotiating committee shall have access to the current statements of qualifications and performance data on file with the state building advisory commission and to all information and evaluations regarding the listed firms gathered and developed under K.S.A. 75-3783, and amendments thereto.

The negotiating committee shall conduct discussions with each of the firms so listed regarding the proposed project and then shall select a single firm from such listing to provide engineering or land surveying services in accordance with this act.

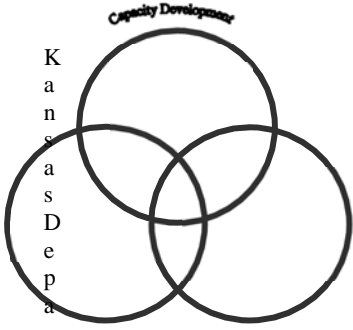
**History:** L. 1977, ch. 287, ' ' 6; L. 1978, ch. 337, ' ' 33; L. 1996, ch. 48, ' ' 4; Mar. 28.

**75-5807. Negotiation of contract with selected firm; duties of committee; failure of negotiations with selected firms; additional list of nominees.** (a) Each negotiating committee shall determine which engineering or land surveying services are necessary and shall negotiate a contract for each proposed project with the selected firm for the necessary engineering or land surveying services. In such negotiations, the negotiating committee shall always consider demonstrated competence and qualifications and shall take into account the estimated value of the engineering or land surveying services to be rendered and the scope, complexity and professional nature thereof.

(b) If the negotiating committee is unable to negotiate a satisfactory contract with the firm considered to be the most qualified, negotiations with that firm shall be terminated. The negotiating committee shall then undertake negotiations with the second most qualified firm. If there is a failing of accord with the second most qualified firm, negotiations with such firm shall be terminated. The negotiating committee shall then undertake negotiations with the third, fourth and fifth most qualified firms in turn.

(c) If the negotiating committee is unable to negotiate a satisfactory contract with any of the selected firms, the negotiating committee shall reevaluate the necessary engineering or land surveying services and fee requirements and reopen negotiations with any of the firms on the list submitted by the agency head. If the negotiating committee is still unable to enter into a contract for the necessary engineering or land surveying services, the negotiating committee shall request the agency head or, in the case of a proposed project under subsection (b) of K.S.A. 75-5804, and amendments thereto, the state building advisory commission to provide another list of firms to be negotiated with by the negotiating committee and, upon receipt of such list, the negotiating committee shall proceed in accordance with the provisions of this act.

**History:** L. 1977, ch. 287, ' ' 7; L. 1978, ch. 337, ' ' 34; L. 1996, ch. 48, ' ' 5; Mar. 28.



Department of Health and Environment Public Water  
Supply Section  
Capacity Development Program

# Small PWS System Corrosion Control Study Grant Application

Date Received by KDHE _____	KDHE Project Number _____
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Application does not guarantee funding by KDHE. Funding to approved applicants shall not exceed 50% of the costs for a corrosion control study report, and in any case, shall not exceed \$3,000. If approved, the water system and KDHE shall enter into an agreement as described in Section IV, page 2 (Project Timelines) of the Instructions.

Name of PWS System: \_\_\_\_\_

Population: \_\_\_\_\_

Name and Title of Contact Person: \_\_\_\_\_

Street Address or P.O. Box \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_ Tax ID No. \_\_\_\_\_

Telephone \_\_\_\_\_ FAX \_\_\_\_\_

E-mail \_\_\_\_\_

**1. Provide a brief narrative regarding the need for the corrosion control study (attach KDHE Notice if available) :**

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I certify that I am authorized to sign this application on behalf of the small public water supply system. To the best of my knowledge and belief, the information provided in this application is true and accurate.

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Signature and Title of Authorized Official

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Print or Type Name and Title

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Witness Name and Title

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Print Name and Title

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Date

**Return this application to: KDHE, Attn: Capacity Development Program, 1000 SW Jackson: Suite 420: Topeka, KS 66612-1367. Questions? Contact: KDHE at (785) 296-0735 or email [william.j.carr@ks.gov](mailto:william.j.carr@ks.gov)**

# **Attachment B**

## **Small Public Water Supply System Planning Grant Application**

# **Attachment C**

## **Corrosion Control Study Criteria**

**§ 141.82 Description of corrosion control treatment requirements.**

(c) Performance of corrosion control studies. (1) Any public water system performing corrosion control studies shall evaluate the effectiveness of each of the following treatments, and, if appropriate, combinations of the following treatments to identify the optimal corrosion control treatment for that system:

- (i) Alkalinity and pH adjustment;
- (ii) Calcium hardness adjustment; and
- (iii) The addition of a phosphate or silicate based corrosion inhibitor at a concentration sufficient to maintain an effective residual concentration in all test tap samples.

(2) The water system shall evaluate each of the corrosion control treatments using either pipe rig/loop tests, metal coupon tests, partial-system tests, or analyses based on documented analogous treatments with other systems of similar size, water chemistry and distribution system configuration.

(3) The water system shall measure the following water quality parameters in any tests conducted under this paragraph before and after evaluating the corrosion control treatments listed above:

- (i) Lead;
- (ii) Copper;
- (iii) pH;
- (iv) Alkalinity;
- (v) Calcium;
- (vi) Conductivity;
- (vii) Orthophosphate (when an inhibitor containing a phosphate compound is used);
- (viii) Silicate (when an inhibitor containing a silicate compound is used);
- (ix) Water temperature.

(4) The water system shall identify all chemical or physical constraints that limit or prohibit the use of a particular corrosion control treatment and document such constraints with at least one of the following:

- (i) Data and documentation showing that a particular corrosion control treatment has adversely affected other water treatment processes when used by another water system with comparable water quality characteristics; and/or

(ii) Data and documentation demonstrating that the water system has previously attempted to evaluate a particular corrosion control treatment and has found that the treatment is ineffective or adversely affects other water quality treatment processes.

(5) The water system shall evaluate the effect of the chemicals used for corrosion control treatment on other water quality treatment processes.

(6) On the basis of an analysis of the data generated during each evaluation, the water system shall recommend to the State in writing the treatment option that the corrosion control studies indicate constitutes optimal corrosion control treatment for that system. The water system shall provide a rationale for its recommendation along with all supporting documentation specified in paragraphs (c) (1) through (5) of this section.