

**APPENDIX G  
TWDB CWTAP/EDAP GUIDANCE**

**TABLE OF CONTENTS**

*Financial Assistance Application Procedures and Requirements (WRD-006F) ..... 1*

*DMA Resolution Example (WRD-210) ..... 6*

*Guidance for Utilization of Small, Minority and Women-Owned Businesses (SRF-52)..... 8*

*Guidelines for Inspector Qualifications (WRD-005) ..... 41*

*Inspector's Daily Report (WRD-019) ..... 43*

*Check Sheet for Adequacy of Force Account Work (SRF-250) ..... 45*

*Project Files and Construction Records (WRD-017) ..... 47*

*O&M Manual - Recommendations (ED-006) ..... 48*

*Finance-Related Legal and Contractual Requirements (WRD-018)..... 50*

*Guidelines For Determining Eligible Equipment (ED-020)..... 56*

*Final Engineering Design Report Checklist (WRD-024)..... 59*

*CWTAP/EDAP Review Checklist For Bid Documents and Executed Contract Documents  
(WRD-028) ..... 63*

*CWTAP/EDAP Checklist For Review of Change Order (WRD-027)..... 67*



**TEXAS WATER DEVELOPMENT BOARD  
ECONOMICALLY DISTRESSED AREAS PROGRAM (EDAP)  
COLONIA WASTEWATER TREATMENT ASSISTANCE PROGRAM (CWTAP)**

**FINANCIAL ASSISTANCE APPLICATION PROCEDURES AND  
REQUIREMENTS**

A complete application consists of: (1) general information; (2) fiscal information; (3) legal information; (4) Program Eligibility Documentation; (5) engineering facility planning information; (6) environmental information; (7) a water conservation and drought contingency plan (if required); (8) Small, Minority, and Women Owned Business utilization documentation; (CWTAP only) and (9) assurance forms.

Assistance on any of these items, and guidelines for items four through six are available on request (call 512-463-3119, or go to [http://www.twdb.state.tx.us/publications/forms\\_manuals/PGM\\_forms\\_main.htm](http://www.twdb.state.tx.us/publications/forms_manuals/PGM_forms_main.htm))

All applications should be sent to the following address:

Texas Water Development Board  
P.O. Box 13231  
Development Fund Manager  
1700 N. Congress Avenue  
Austin, Texas 78711-3231 (78701 for courier deliveries)

The EDAP program was created under Chapter 17, Subchapter K (as provided in Division 1), Texas Water Code and is implemented through 31 TAC Chapter 363 subchapters A and E. The CWTAP program was created by act of the Federal Congress. An applicant must submit an original and ten (10) copies of an application containing the following information (except as otherwise indicated) to the Texas Water Development Board. Two (2) additional unbound double-sided copies (no staples or permanent binding) will be requested following staff review and comment.

**I. GENERAL INFORMATION**

1. Name of applicant(s), names and titles of principal officers, and citation of law under which created for each participating political subdivision.
2. Name, title, address, phone and fax numbers, and e-mail address (if available) of official representative(s);
3. Name, address, phone and fax numbers, e-mail address (if available) and contact person of:
  - (a.) project engineer;
  - (b.) bond counsel (if applicable);
  - (c.) legal counsel [if other than bond counsel];
  - (d.) financial advisor (if applicable); and
  - (e.) any other consultant representing the applicant before the Board.
4. Brief comprehensive description of the project
5. Engineer's most current itemized project cost estimate (include all costs, specifically construction, engineering services, legal and fiscal costs, and funding sources for total project costs in a Sources and Uses Statement format).
6. Amount of financial assistance requested.
7. Information addressing the availability of grants through the county, TDHCA, USDA and any other agency providing grants for water and wastewater projects (include the monies that have been received for the previous two years and any future uses and needs for the next two years).

8. Information addressing whether the applicant will need to utilize the Colonia Plumbing Loan Program for hookup costs.
9. Authority under which debt is proposed to be issued and proposed plan for repayment, including authority to make proposed pledge of revenues.
10. If application is for wastewater facilities, the status of authorized agent designation process with Texas Natural Resource Conservation Commission or Texas Commission on Environmental Quality.
11. Provide a statement as to the status of any recently closed or currently outstanding with Texas Natural Resource Conservation Commission or Texas Commission on Environmental Quality deficiency notices, violations or enforcement actions relating to the applicants existing systems.

## **II. FISCAL INFORMATION**

Documentation and information from which the Board may determine whether the revenue available to the political subdivision from all sources will be sufficient to meet all the financial obligations assumed by the political subdivision over the anticipated life of the proposed loan, including:

1. Full legal name and a description of the security for the proposed debt issue(s).
2. Disclosure of all issues that may affect the applicant's ability to issue or repay debt.
3. Total outstanding debt, segregated by type (promissory note, G.O. or revenue bonds) with a consolidated schedule for each, showing total annual repayment requirements.
4. Circumstances surrounding prior default(s) on any debt.
5. Schedule of current water and sewer rates (including any surcharges) and rates proposed to finance the project; present average monthly residential water and wastewater usage, and corresponding average residential monthly bill.
6. The applicant's latest rate study for its utility system; if economically distressed area is outside the boundaries of the applicant, provide cost of service calculation for the economically distressed area.
7. Five-year comparative system operating statement, including audited prior years and an unaudited year-to-date statement reflecting the financial status for period no older than latest 6 months, with number of customers for each year.
8. A proforma detailing projected gross revenues from all sources, operating and maintenance expenditures, net revenues available for debt service showing coverage of current and proposed debt paid from revenues and a clear statement of the revenue pledge being offered.
9. Describe procedures for collecting monthly customer bills (include procedures for collection of delinquent accounts.)
10. List of top ten customers of the water and/or wastewater system.
11. One copy of an annual audit including management letter for latest preceding fiscal year prepared by a C.P.A. or firm of accountants, and if year-end is older than 6 months provide interim financial information no older than 6 months.
12. Maximum tax rate permitted by law per \$100 of property value and direct and overlapping tax rate table (if applicable). A proforma indicating the tax rate necessary to repay current and proposed debt paid from taxes. List the assumed collection rate and tax base used to prepare the schedule.

13. Current top ten taxpayers showing percentage of ownership to total assessed valuation; also, state if any are in bankruptcy and explain anticipated prospective impacts.
14. Statement regarding intent to use any credit enhancement (i.e., surety bonds), the authority for its use, and name of company to provide such enhancement.
15. Preceding five-year historical data regarding assessed valuation taxes including net ad valorem taxes levied and corresponding tax rate (detailing debt service and general purposes), and tax collection rate (if applicable).
16. Current outstanding bond ratings.
17. Statement regarding intent to provide bond insurance for the loan and to finance with loan proceeds (if applicable).

### **III. LEGAL INFORMATION**

1. One certified original and three copies of a resolution/ordinance requesting financial assistance from the Board, authorizing the submission of the application and designating the official representative(s) for submitting the application, executing any necessary documents and appearing before the Board. (see: *Application Filing and Authorized Representative Resolution*, WRD-201a, and *Certificate of Secretary*, WRD-201b.)
2. One certified original and three copies of an affidavit executed by the official representative verifying that the facts contained in the application are true and correct to the best of the representative's knowledge and belief and that the application was approved by the political subdivision in an open meeting. (See: *Application Affidavit* form WRD-201)
3. One certified original and three copies of a certificate of compliance executed by the official representative which warrants compliance by the participating political subdivision with all representations in the application, all federal, state and local laws, as applicable, and all rules and published policies of the Board. (See: *Application Affidavit* form WRD-201)
4. One certified original and three copies, executed by the Applicant's Designated Representative, of a statement of pending claims or litigation against the applicant that might affect the ability of the applicant to issue debt or that would affect the Board's ability to receive repayment or to recover its investment. (See: *Application Affidavit* form WRD-201)
5. Three copies of the following documents:
  - (a.) executed copies of any option, sales, or lease agreement(s) necessary for the project;
  - (b.) any executed or proposed service contracts for water supply or sewer service indicating adequate supply or capacity for the life of the proposed loan; and
  - (c.) any executed or proposed contracts between the applicant and any other entity which will generate revenues pledged to the repayment of the proposed debt.
  - (d.) If financing is for wastewater project, copy of the resolution/ordinance establishing a mandatory hookup policy.
6. Three copies of all executed contracts for consultant services included in the total project cost.
7. For a proposed revenue issue secured by a subordinate lien, or to be issued on parity, two copies of the resolution/ordinance issuing the prior lien or parity debt.
8. For Water Supply Corporations:
  - (a.) Articles of Incorporation;
  - (b.) By-laws, and any amendments; and

(c.) Certificate of Good Standing from the Texas Secretary of State.

#### **IV. PROGRAM ELIGIBILITY DOCUMENTATION**

1. Status of Certificate of Convenience and Necessity or documentation of Applicant's authority to provide service to the designated project area.
2. If some or all of applicant's service area is located within a retail public utility or a public utility that has a certificate of convenience and necessity under Chapter 13 of the Water Code, include an affidavit signed by the chief executive officer of the utility which shall state that the utility does not object to the construction and operation of the services and facilities in its service area.
3. Three plats most recently approved by the applicant (if a municipality) and/or the county, that should include supporting documentation such as the final engineering report, service agreements, construction agreements and financial guarantee to allow TWDB staff to assess the extent to which the Model Subdivision Rules are applied and enforced.
4. Describe policies and procedures for enforcing the Model Subdivision Rules, including: a description of the staff and resources dedicated to monitoring and enforcement, and the methodology used to identify potential violators; recent cases where violation have been identified and the outcomes of such cases; and the permitting procedures and other controls in place to ensure that developers and residents comply with applicable requirements for safe and sanitary water and wastewater services.
5. If an applicant is a district or nonprofit water supply corporation, the applicant must include with the application a resolution/ordinance of the appropriate governing body indicating that the appropriate county and/or municipalities have given their consent.
6. Provide evidence of coordination with the Applicable Council of Governments under the Texas Review and Comment System (TRACS). Explain how comments received through the TRACS process were accommodated.

#### **7. FMT.**

#### **V. ENGINEERING INFORMATION**

1. Facility Engineering Requirements. The application shall include all of the facility engineering data, studies, and analysis described in 31 TAC §355.73(a), relating to Scope of Facility Plan, and the relevant data and information described in §355.73(b).
2. A current Capital Improvements Plan, which addresses at least five (5) years of the applicant's future infrastructure construction needs.

#### **VI. ENVIRONMENTAL INFORMATION**

Environmental assessment prepared in accordance with 31 TAC §363.14, or if Federal Funding through the Colonia Wastewater Treatment Assistance Program, appropriate environmental documentation (normally a statement of finding from the Environmental Protection Agency) in accordance with 31 TAC §375.35. The provisions of §375.35 (relating to Required Environmental Review and Determinations) shall apply to applications for assistance under this subchapter that are funded in whole or in part directly from federal funds; except that the provisions relating to pre-design funding in §375.35(c) shall not apply.

#### **VII. WATER CONSERVATION PLAN**

Two copies of a Water Conservation Plan and Drought Contingency plan, meeting the requirements of 31 TAC §363.15, are to be submitted if the loan is for more than \$500,000. See TWDB Guidance *Water Conservation Plan Guidance Checklist*, WRD-022, and *Water Conservaton Utility Profile* (WRD-264) for specific content requirements. However, if the applicant will utilize the project financed by the board to furnish water services to another entity that in turn will furnish the water services to the ultimate

consumer, the requirements for the water conservation plan may be met either through contractual agreements between the applicant and the other entity providing for establishment of a water conservation plan. The provision requiring a WCP shall be included in the contract at the earliest of the original execution, renewal or substantial amendment of that contract, or by other appropriate measures. If required, a draft plan may be submitted with the application, but an approved plan must be adopted by the applicant and approved by TWDB before any funds can be released.

### **VIII. SMALL, MINORITY, AND WOMEN OWNED BUSINESS REQUIREMENTS. (CWTAP ONLY)**

The applicant must submit prior to or with the application one copy of documentation of "good faith efforts" and completed forms for the project and initial procurement of professional services.

1. *Applicant Affirmative Steps Certification and Goals*, WRD-215;
2. *Affirmative Steps Solicitation Report*, WRD-216;
3. *Prime Contractor Affirmative Steps Certification and Goals*, WRD-217;
4. *Loan./ Grant Participation Summary*, SRF-373; and
5. *SMWBE Self Certification* WRD-218, if applicable.

### **IX. ASSURANCE FORMS.**

1. **Nondiscrimination Certification.** Include the EPA form 4700-4: *Preaward Compliance Review Report*. ED-112; (CWTAP only)
2. **Assurances of Construction Programs.** Include the EPA form 424D: *Assurances-Construction Programs*, WRD-206; (CWTAP only)
3. **Debarment Certification.** The Applicant must submit an EPA form 5700-49: *Certification Regarding Debarment, Suspension, and other Responsibility Requirements*, SRF-404; (CWTAP only)
4. **Designated Management Agency (DMA) Status.** Loan recipients must be a designated management agency with the authority to construct and operate wastewater treatment systems in their area. This is required under the state Water Quality Management Plan under Section 604(b) of the Clean Water Act, which is administered by the Texas Commission on Environmental Quality (TCEQ), formerly the Texas Natural Resource Conservation Commission. (*See DMA Resolution Example*, WRD-210,
5. **Assurance of Operation and Maintenance of Treatment Works.** Applicants must complete this assurance. See *Assurance of Operation and Maintenance of Treatment Works*, CWT-103, as a part of your application for financial assistance.
6. **Certification Regarding Lobbying.** Include the executed form; *Certification Regarding Lobbying*, WRD-213, as part of your application for financial assistance; (CWTAP only), and
7. **Certification of Procurement System.** Include the completed form; *Certification of Procurement System*, CWT-102, as part of your application for financial assistance. (CWTAP only)

Texas Water Development Board Internet address is: [www.twdb.state.tx.us](http://www.twdb.state.tx.us)

## DMA RESOLUTION EXAMPLE

### RESOLUTION

WHEREAS, the \_\_\_\_\_ (City/District) \_\_\_\_\_  
has the authority to design, construct, operate, and maintain wastewater collection and  
treatment facilities; to raise revenues and assess appropriate charges to assure that each  
participating party pays its appropriate share of sewerage system costs; to accept or refuse to  
accept any wastes from any participating party; to accept and utilize grants or other funds  
from any source for wastewater management purposes; and, to carry out appropriate portions  
of an areawide water quality management plan;

NOW, THEREFORE BE IT RESOLVED by the \_\_\_\_\_ (City Council / Governing Body)  
of the \_\_\_\_\_ (City / District) \_\_\_\_\_;

That the \_\_\_\_\_ (City / District) \_\_\_\_\_ seeks designation as a management  
agency for wastewater collection and treatment within its \_\_\_\_\_ (city limits / district boundaries /  
\_\_\_\_\_ facilities planning area) \_\_\_\_\_, in accordance with the requirements of Section 208  
of the Federal Water Pollution Control Act, as amended.

\_\_\_\_\_  
Date  
Agent)

\_\_\_\_\_  
(Mayor / Authorized

\_\_\_\_\_  
(Councilman / Board Member)

ATTEST:

\_\_\_\_\_  
(Secretary)

*(Attach a 8 1/2" x 11" map of the planning area or city limits for which designation is requested.)*







**SMWBE  
STATE REVOLVING FUND  
PROGRAM GUIDANCE DOCUMENT**

**FOR THE UTILIZATION OF  
SMALL, MINORITY & WOMEN-OWNED  
BUSINESSES IN PROCUREMENT**

## TABLE OF CONTENTS

### I. GENERAL INFORMATION

- A. Background
- B. EPA Policy
- C. Applicability
- D. Guidance Document
- E. Benefits
- F. TWDB Role
- G. Flowchart of Procurement Process

### II. DEFINITIONS

### III. FAIR SHARE POLICY

- A. Fair Share Policy
- B. Fair Share Goals

### IV. GOOD FAITH EFFORT

- A. General
- B. Six Affirmative Steps
- C. Professional Service/Other Contracts
- D. Contractor Selection
- E. Documentation
  - Financial Application Phase
  - Subsequent Phases
  - SMWBE Forms
  - Tips for Achieving a Good Faith Effort in Procurement

### V. AFFIRMATIVE STEPS OUTREACH PROGRAM

- A. Affirmative Step One: Compile Solicitation Lists
- B. Affirmative Step Two: Solicit Contractors
- C. Affirmative Step Three: Reduce Contract Size
- D. Affirmative Step Four: Establish Delivery Schedules
- E. Affirmative Step Five: Use Government Sources to Identify
- F. Affirmative Step Six: Monitor Prime Contractor's GFE

### VI. AUTHORITY

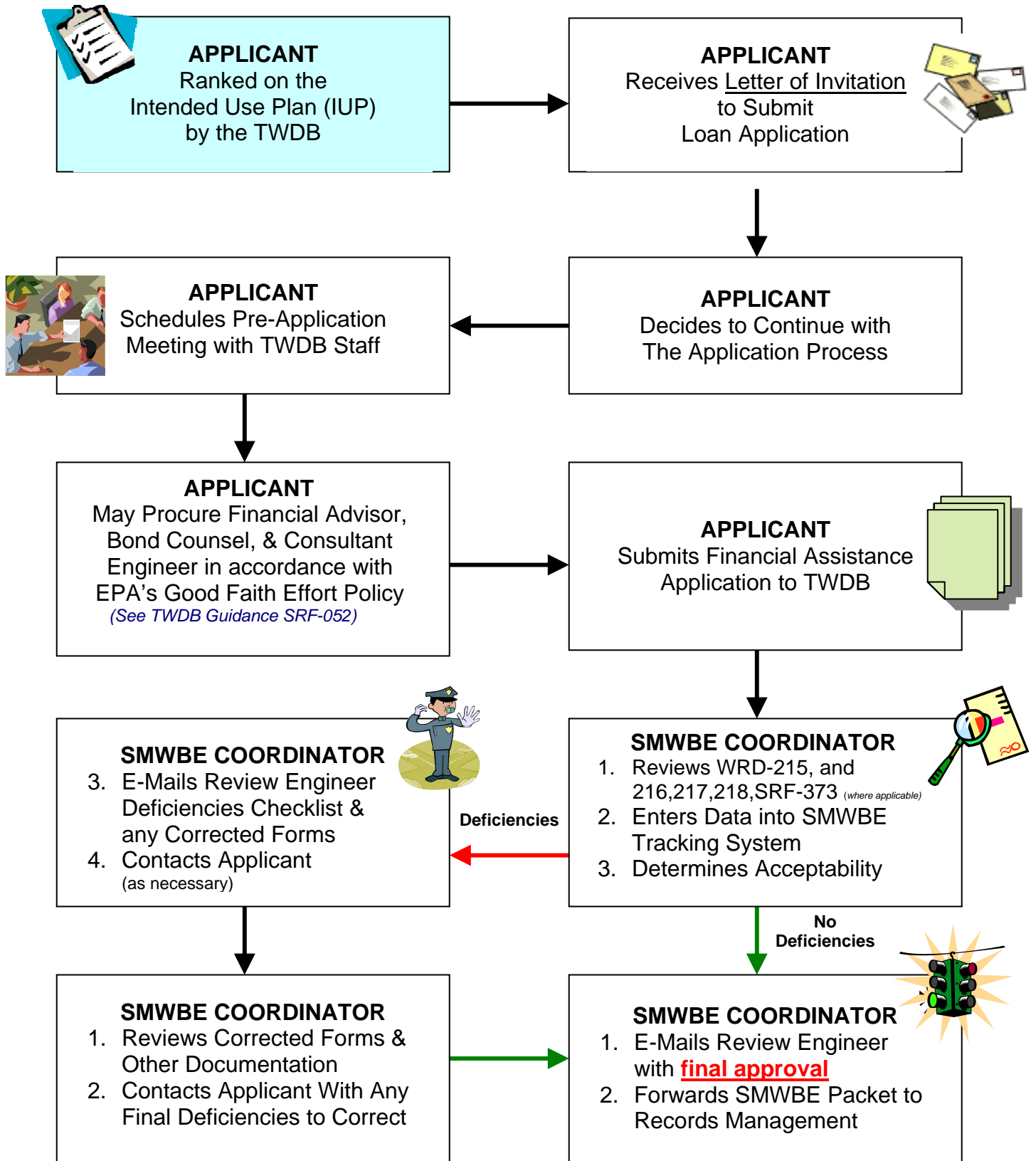
- A. Federal Laws, Executive Orders and Federal Regulations
- B. State Laws
- C. TWDB Rules

## I. GENERAL INFORMATION

- A. **Background** - The Texas Water Development Board (TWDB) receives grants from the Environmental Protection Agency (EPA) to provide low-interest loans to eligible political subdivisions. As a direct result of the United States Supreme Court's decision in *Adarand Constructors, Inc. v. Peña* 115 S. Ct. 2097 (1995), the EPA established new policies governing Small, Minority and Women-Owned Business Enterprises (SMWBE). These new policies are included in the Grants and Operating Agreements between the EPA and TWDB, and apply to all recipients of financial assistance.
- B. **EPA Policy** - EPA's policy (policy) requires recipients of its financial assistance to establish *Fair Share Goals* (goals) for awarding contracts and procuring goods and services from SMWBE's in the construction, supplies, equipment, and services procurement categories. The policy is meant to ensure that SMWBE's have the opportunity to participate in the procurement process, for all phases of the project. It is important to note that although the policy includes *small* (SBE) and *rural area* (SBRA) business enterprises, EPA is only statutorily required to collect data and enforce fair share goal objectives for Minority and Women-Owned business enterprises. TWDB will continue to collect information on SBE and SBRA participation, but those contract awards will not count towards the MBE and WBE goals.
- C. **Applicability** - EPA's policy applies to all procurements made after May 8, 1998, for the Texas Water Development Board (TWDB) Drinking Water State Revolving Fund program (DWSRF), Tier III Clean Water State Revolving Fund program (CWSRF) and Colonia Wastewater Treatment Assistance Program (CWTAP). TWDB programs not affected by this policy are: Water Quality Enhancement (WQE), Water Supply Account (WSA), State Participation, Agricultural Loans and Grants, Tier II Clean Water State Revolving Fund program (CWSRF) and Economically Distressed Areas Program (EDAP).
- D. **Guidance Document** - The intent of the SMWBE guidance document is to assist *applicants* and *contractors* comply with EPA's policy regarding SMWBE's. It is based, in part, on publications, training manuals and other guidance documents developed by EPA to implement their policies published in 40 CFR Parts 30, 31, and 35. The guide also ensures consistency with the Supreme Court's decision in *Adarand Constructors, Inc. v. Peña* 115 S. Ct. 2097 (1995).
- E. **Benefits** - The Affirmative Steps Outreach Program is designed to benefit both recipients of EPA funds and the business community. Applicants can receive lower interest rates on loans in comparison to those available on the open-market, as well as having access to a greater pool of potential contractors to bid on their projects. This increased competition could have the affect of lowering overall project costs, thus, lessening the repayment burden on the Applicant.
- F. **TWDB Role** - The TWDB strives to provide all the necessary technical assistance needed to both applicants and prime contractors throughout all phases of the project. This can include reviewing draft newspaper advertisements, Request for Qualifications (RFQ), and Information for Bids (IFB) to ensure SMWBE components are included; and scheduling pre-application, project management, pre-bid and pre-construction conferences upon request.

**G. Flowchart of SMWBE Document Review**

(Note: CWTAP funding does not have IUP, but must comply with EPA's Fair Share Policy)



## II. DEFINITIONS

For the purpose of this guide, the following definitions shall apply:

- ◆ **Applicant** - Eligible political subdivision or privately-owned water system applying for financial assistance from the TWDB.
- ◆ **Construction** - Any contract or agreement to provide the building, erection, alteration, remodeling, improvement or extension of a TWDB-funded project.
- ◆ **Equipment** - Tangible, nonexpendable personal property having a useful life of more than one year, and an acquisition cost of \$5,000 or more per unit.
- ◆ **Grantee** - Direct recipients of EPA funds through cooperative grant.
- ◆ **Minority Business Enterprise (MBE)** - A business concern which, 1) is certified as socially and economically disadvantaged by the Small Business Administration (SBA), or; 2) is certified as a minority business enterprise by a State or Federal agency, or; 3) is independent and at least 51 percent-owned and controlled by minority group member(s), or; 4) is a Historically Black College or University (HBCU's).  
*(Minority individuals include Black Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, or other groups whose members have been determined to be disadvantaged by the Small Business Act or by the Secretary of Commerce under Executive Order 11625, §5.)*
- ◆ **Prime Contractors** - A business concern that enters into written agreements directly with the Applicant for construction, supplies, equipment and services.
- ◆ **Recipients** - Eligible political subdivisions or privately-owned water systems, who receive financial assistance from the TWDB, and/or prime contractors procured by political subdivisions or privately-owned water systems receiving financial assistance from the TWDB.
- ◆ **Services** - A contractor's time and effort (incl. consultants), which do not involve the delivery of a specific end-item, other than documents (i.e. reports, design drawings, specifications, etc.).
- ◆ **Small Business Enterprise (SBE)** - A small business concern, including any affiliate that is independently owned and operated, but not dominant in the field in which they operate. Must also be officially qualified as an SBE by the Small Business Administration (SBA), which uses a numerical definition called "Size Standard" that is almost always stated in either number of employees or average annual receipts. (See Table 1)
- ◆ **Small Business in a Rural Area (SBRA)** - A small business concern that is located and conducts its principal operations in a rural area/non-metropolitan county (as defined by the SBA).
- ◆ **Subcontractors** - A business concern that enters into written agreements directly with the Prime Contractor for construction, supplies, equipment and services.
- ◆ **Supplies** - All tangible personal property other than equipment.
- ◆ **Women Business Enterprise (WBE)** - A business concern which, 1) is certified as economically and socially disadvantaged by the SBA, and; (2) (a) is at least 51 percent owned by one or more women, or in the case of a publicly-owned businesses, at least 51 percent of the stock is owned by one or more women, and; (b) whose daily business operations are managed and directed by one or more of the women owners.

### III. FAIR SHARE POLICY

- A. **Fair Share Policy** - It is EPA's policy that recipients of EPA financial assistance through grants, cooperative agreements and loans put forth a good faith effort to identify, solicit and if possible, award a fair share of contracts/procurements to small, minority and women-owned businesses. This policy applies to all contracts/procurements for construction, supplies, equipment and services. In accordance with these guidelines, the TWDB has established and presently administers the SMWBE program, to promote SMWBE participation for all applicable program projects.
- B. **Fair Share Goals** - The goals shown below were developed using data from the 1997 United States Economic Census, which determined the availability of small, minority and women-owned businesses throughout the State. The goals are applied to individual project contracts and procurements, which then determines the *maximum potential* procurement opportunities (in dollars) that are available to be awarded to MBE's and WBE's in each of the applicable procurement categories. It is important to note that the goals are not *achievement standards* or *quotas*, nor is achieving the goals mandatory. However, applicants and prime contractors (including minority and women-owned businesses) are required to adequately demonstrate that a good faith effort was made to achieve the goals using EPA's six affirmative steps. The fair share goals are negotiated by individual states, and are then presented to EPA for approval.

**The current EPA-approved fair share goals for the State of Texas are as follows:**

Procurement Category	MBE Goal Percentage (%)	WBE Goal Percentage (%)
Construction	34%	8%
Supplies	18%	29%
Equipment	13%	13%
Services	22%	26%

## IV. GOOD FAITH EFFORT

- A. **General** - To ensure compliance with the EPA's Good Faith Effort Policy and Affirmative Steps Outreach Program, the TWDB recommends that all applicants review their own procurement policies and procedures to see if/how SMWBE's are addressed. For applicants that may have *outdated* or *unwritten* procurement procedures, the six affirmative steps outlined below, provide an excellent starting point for updating and/or developing written procurement procedures to address SMWBE's.
- B. **Six Affirmative Steps**
- (1) *Include* qualified SMWBE's on solicitation lists;
  - (2) *Solicit* potential SMWBE's, whenever they are potential sources;
  - (3) *Reduce* contract size/quantities, when economically feasible, to permit maximum participation of SBE's SMWBE's;
  - (4) *Establish* delivery schedules to encourage participation by SMWBE's;
  - (5) *Use* the services and assistance of the SBA, the Minority Business Development Agency, the U.S. Department of Commerce, as appropriate;
  - (6) *Require* Prime Contractor's to follow steps 1-5 when awarding subcontracts or sub-agreements.
- C. **Professional Service/Other Contracts** - As part of the *application* phase, applicants typically enter into prime contracts for professional services such as Financial Advisor, Bond Counsel, and Consultant Engineer. In addition to following the Six Affirmative Steps, the Applicant must also procure professional services in accordance with *Title 10, Chapter 2254 of the Texas Government Code (Professional Services Procurement Act)* and *Title 40 Code of Federal Regulations, Part 31 (Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments)*.
- D. **Contractor Selection** - Recipients are responsible for establishing their own criteria for awarding contracts and for reviewing RFQ's, IFB's, and other bid documents to determine their validity and acceptability. Although the TWDB does not oversee this aspect of the process, it does recommend that adequate documentation be maintained to show the openness of the selection process and the method used to select the proposal/bid to ensure compliance with EPA's policy.
- E. **Documentation**
- ◆ **Financial Application Phase** - As part of the financial application package, *applicants* must submit documentation certifying an understanding of EPA's good faith effort policy, including the fair share goals and six affirmative steps. This information is documented on TWDB form **WRD-215, APPLICANT AFFIRMATIVE STEPS CERTIFICATION and GOALS**.
 

**Note:** It is not uncommon for applicants to procure the services of *Financial Advisor, Bond Counsel, and Consultant Engineer* during the financial application phase. However, they must have been procured in accordance with EPA's good faith effort policy to be funded with federal loan proceeds.
  - ◆ **Subsequent Project Phases** - Once the TWDB approves the loan commitment, applicants may proceed with the planning, design, and construction phases of the project, as directed by the TWDB review/project engineer. For each new procurement or contract award, the applicant (in the procurements of prime contractors) and the prime contractors (in the procurement of subcontractors) must demonstrate their understanding and adherence to EPA's good faith effort policy for all project costs to be funded with federal loan proceeds.



**Texas Water Development Board**  
**Small, Minority, Women-Owned Business Enterprise Program**  
**Tips for Achieving a Good Faith Effort in Procurement**

To assist entities **identify, include, and utilize** qualified Small, Minority, and Women-Owned Business Enterprises (SMWBE), applicants and prime contractors are encouraged to refer to the following list of resources made available on a local, statewide, and national level.

**Resources for identifying SMWBE's:**

- ◆ **Texas Building and Procurement Commission's (TBPC) Centralized Master Bidders List (CMBL) & Historically Underutilized Business (HUB) Search** - The CMBL & HUB Search is a statewide database managed by the TBPC. This database contains contact information on all vendors registered to do business with the State, including TBPC-certified HUB vendors. The CMBL & HUB search is an online system available to the public free of charge.  
<http://www.tbpc.state.tx.us/cmb/cmbhub.html>
- ◆ **Texas Department of Transportation - Disadvantaged Business Enterprise Directory**  
<http://www.dot.state.tx.us/business/tucpinfo.htm>
- ◆ **The City of Houston - Minority, Women-Owned, and Disadvantaged Business Directory**  
[http://houston.mwdb.com/FrontEnd/VendorSearchPublic.asp?TN=Houston\\_Diversity](http://houston.mwdb.com/FrontEnd/VendorSearchPublic.asp?TN=Houston_Diversity)
- ◆ **The City of Austin - Minority Vendor List**  
[http://www.ci.austin.tx.us/purchase/pu\\_vendor\\_intro.htm](http://www.ci.austin.tx.us/purchase/pu_vendor_intro.htm)
- ◆ **Small Business Administration's-Dynamic Small Business Search** - SBA-DSBA is an Internet-based system that allows applicants and prime contractors to search for small, minority and women-owned businesses in their area.  
[http://dsbs.sba.gov/dsbs/dsp\\_dsbs.cfm](http://dsbs.sba.gov/dsbs/dsp_dsbs.cfm)
- ◆ **Other Minority & Women Business Organizations that you can contact directly to obtain a list of qualified vendors for your procurement opportunity:**

<b>American Indian Chamber of Commerce of Texas</b>	<b>Texas Association of Historically Underutilized Businesses</b>
<p><a href="http://www.aicct.com">Website: www.aicct.com</a>  <b>Contact:</b> Diana Woodward  <b>Email:</b> <a href="mailto:dwoodward@aicct.com">dwoodward@aicct.com</a>  <b>Phone:</b> 817-429-2323  <b>Fax:</b> 817-451-3575</p>	<p><a href="http://www.texashubs.org">Website: www.texashubs.org</a>  <b>Contact:</b> Roy Mata  <b>Email:</b> <a href="mailto:rmata@tgsaustin.com">rmata@tgsaustin.com</a>,  <a href="mailto:info@texashubs.org">info@texashubs.org</a>  <b>Phone:</b> 512-220-4293  <b>Fax:</b> 512-288-9121</p>
<b>Central &amp; South Texas Minority Business Council</b>	<b>Women's Business Council – Southwest</b>
<p><a href="http://www.cstmdbc.org">Website: www.cstmdbc.org</a>  <b>Contact:</b> Name: Jennifer Mort  <b>Email:</b> <a href="mailto:jennifer@sdtmbc.com">jennifer@sdtmbc.com</a>, <a href="mailto:eva@cstmdbc.com">eva@cstmdbc.com</a>  <b>Phone:</b> 210-525-7925, 512-386-8766</p>	<p><a href="http://www.wbcsouthwest.org">Website: www.wbcsouthwest.org</a>  <b>Contact:</b> Emilia Menthe, Erica Williams  <b>Email:</b> <a href="mailto:ementhe@wbcsouthwest.org">ementhe@wbcsouthwest.org</a>,  <a href="mailto:ewilliams@wbcsouthwest.org">ewilliams@wbcsouthwest.org</a>  <b>Phone:</b> 817-299-0566</p>
<b>Dallas/Fort Worth Minority Business Development Council</b>	<b>Women Contractors Association</b>
<p><a href="http://www.dfwmbdc.com">Website: www.dfwmbdc.com</a>  <b>Contact:</b> Andrew Nash  <b>Email:</b> <a href="mailto:business@dfwmbdc.com">business@dfwmbdc.com</a>  <b>Phone:</b> 214-630-0747  <b>Fax:</b> 214-637-2241</p>	<p><a href="http://www.womencontractors.org/">Website: http://www.womencontractors.org/</a>  <b>Contact:</b> Josena Arquieta  <b>Email:</b> <a href="mailto:jarquieta@womencontractors.org">jarquieta@womencontractors.org</a>  <b>Phone:</b> 713-807-9977  <b>Fax:</b> 713-807-9917</p>

**Options for announcing your solicitation:**

◆ **Direct Communication** - Contacting potential bidders by direct communication can include but are not limited to correspondence by letter, facsimile, telephone, or email. Applicants and prime contractors are required to provide copies of outreach letters, mailing lists, telephone, fax, and email tracking logs.

◆ **Small Business Administration's (SBA) Sub-Net** - *Sub-Net* is an Internet-based system that allows applicants and prime contractors to post their procurement opportunities online. Access to the database is free to government agencies and contractors, and is an excellent resource for soliciting SMWBE's for your project.

The Sub-Net database can be accessed at: <http://web.sba.gov/subnet>

◆ **Newspaper Advertisements** - The posting of applicable project procurement opportunities should be done in accordance with the notice requirements of state law on competitive bidding, where applicable. There are specific laws governing each type of entity. For example, two important provisions of state law governing **municipalities** require:

1. The notice should be published once a week for two consecutive weeks in a newspaper published in the municipality. If no newspaper is published in the municipality, the notice must be posted at the city hall for 14 days before the date set to publicly open the bids and read them aloud;
2. The date of the first publication should be BEFORE the 14<sup>th</sup> day of the date set to publicly open the bids.

**\*\*\* Please consult your legal counsel for specific laws governing your entity. \*\*\***

**Pertinent language that needs to appear within the text of the solicitation includes:**

A. This contract is contingent upon release of funds from the Texas Water Development Board (TWDB).

B. Any contract or contracts awarded under this Invitation for Bid (IFB) or Request for Qualifications (RFQ) are expected to be funded in part by a loan from the TWDB. Neither the State of Texas nor any of its departments, agencies, or employees are or will be a party to this IFB, RFQ, or any resulting contract.

C. This contract is subject to the Environmental Protection Agency's (EPA) "fair share policy", which includes EPA-approved "fair share goals" for Minority Business Enterprise (MBE) & Women Business Enterprise (WBE) firms in the Construction, Supplies, Equipment, and Services procurement categories. EPA's policy requires that applicants and prime contractors make a good faith effort to award a fair share of contracts, subcontracts, and procurements to SMWBE's. Although EPA's policy does not mandate that the fair share goals be achieved, it does require applicants and prime contractors to demonstrate us of the six affirmative steps. The current fair share goals for the State of Texas are as follows:

CATEGORY	MBE	WBE
CONSTRUCTION	34.0%	8.0%
SUPPLIES	18.0%	29.0%
EQUIPMENT	13.0%	13.0%
SERVICES	22.0%	26.0%

D. Equal Opportunity in Employment - All qualified Applicants will receive consideration for employment without regard to race, color, religion, sex, age, handicap or national origin. Bidders on this work will be required to comply with the President's Executive Order No. 11246, as amended by Executive Order 11375, and as supplemented in Department of Labor regulations 41 CFR Part 60. Small, minority, and women-owned business enterprises are encouraged to respond.

A complete version of TWDB document, "SMWBE State Revolving Fund Program Guidance Document for the Utilization of Small, Minority, and Women-Owned Business Enterprises in Procurement" is available online at: [http://www.twdb.state.tx.us/publications/forms\\_manuals/SRF052.rf](http://www.twdb.state.tx.us/publications/forms_manuals/SRF052.rf)

## V. AFFIRMATIVE STEPS OUTREACH PROGRAM

- A. Affirmative Step **One**: Include qualified SMWBE's on solicitation lists  
See "*Tips for Achieving a Good Faith Effort in Procurement*" on previous page.
- B. Affirmative Step **Two**: Solicit potential SMWBE's, whenever they are potential sources
- ◆ **DIRECT COMMUNICATION** - Use of *direct communication* as a means to solicit potential contractors can include contact by certified letter, facsimile, e-mail and by telephone. Direct communication implies that a contractor solicitation list has been established; this list must be provided as backup documentation to the WRD-216 form when submitted.
  - ◆ **INDIRECT COMMUNICATION** - Use of indirect communication as a means to solicit potential contractors can include advertising in one or more local, regional or statewide newspapers, trade association publications, minority media outlets, Internet or other website listings, and/or by notifying women and minority business organizations and chambers of commerce of these procurement opportunities. Newspaper advertisements must run in accordance with applicable purchasing guidelines and must include a statement encouraging the participation of minorities, women and small businesses submitting an RFQ and/or bid.
- C. Affirmative Step **Three**: Reduce contract size/quantities, when economically feasible, to permit maximum participation of SBE's SMWBE's
- Reducing contract size increases the opportunity for SMWBE participation by dividing the work into smaller increments that may be more favorable to smaller businesses. An optimum time to consider reducing contract size is during the *project design phase*. Methods for reducing contract size could include, but are not limited to: reviewing the project for opportunities to stage work; dividing multiple-site work; dividing work by task; limiting "brand name requirements"; and soliciting multiple bid items.
- D. Affirmative Step **Four**: Establish Delivery Schedules to Encourage Participation
- Delivery schedules can sometimes determine whether a firm will be able to participate in the procurement process. Short delivery schedules often favor larger firms that have more staff and more available resources to complete big projects in a short period of time. Advanced planning and adequate project management can allow for reasonable delivery schedules, lengthening response time to receive bids and/or proposals, and can even increase competition, which can lead to reduced cost to the applicant.
- E. Affirmative Step **Five**: Use the services and assistance of the SBA, the Minority Business Development Agency, and the U.S. Department of Commerce, as appropriate
- The SBA and the Department of Commerce (DOC) Minority Business Development Agency (MBDA) both manage outreach programs to assist SMWBE's business increase their procurement opportunities. The SBA assists small businesses in the development of business plans, financing, and education; applicants are encouraged to educate contractors on the services available to them through these government organizations. See Affirmative Step One for web links to those agencies.
- F. Affirmative Step **Six**: Require all Prime contractors to follow steps 1-5 when awarding subcontracts/sub-agreements
- Prime Contractors are required to follow steps 1-5 when awarding subcontracts/sub-agreements. They are also required to include the applicable "fair share objectives" in all project bid documents when soliciting for subcontracting opportunities. Including this information in the bid document/RFP ensures the potential bidder's awareness of the requirement and notification to comply. Any contract or subcontract awarded without regard to the "fair share objectives" can be considered ineligible for loan funding by the TWDB.

## VI. Authority

- A. Federal Laws, Executive Orders and Federal Regulations
1. Public Law 95-507 - The Amendments to the Small Business Act.
    - a.) Establishes the Office of Small and Disadvantaged Business Utilization in every Agency having procurement powers.
    - b.) Establishes the 8(a) program.
    - c.) Establishes Preferential Procurement Goals for participation by small businesses, small disadvantaged firms, 8(a) and small women- owned concerns in Federal contracting programs. The goals are forwarded to the Small Business Administration on an annual fiscal year basis for approval or negotiation.
  2. Public Law 100-533 - Women's Business Ownership Act of 1988. Increases the advocacy Role of Federal Agencies to further promote and advance WBE utilization in Federal contracting and subcontracting activities.
  3. Public Law 100-590 - Small Business Administration Reauthorization and Amendment Act of 1988. Enacted on November 3, 1988. It requires Federal agencies with substantial procurement or grant-making authority to establish rural area business enterprise development plans. The Administrator of the Small Business Administration has identified EPA as a Federal agency having substantial procurement and grant-making authority. EPA has established a Rural Area Business Enterprise Development (RABED) Plan covering both financial assistance and direct procurement.
  4. Public Law 101-507 - EPA Appropriation of Act of 1991. The 1991 Appropriations Act signed into law on November 5, 1990. "The Administrator of the Environmental Protection Agency shall, to the fullest extent possible, ensure that at least 8 per centum of Federal funding for prime and subcontracts awarded in support of authorized programs, including grants, loans and contracts for wastewater treatment and leaking underground storage tanks grants, be made available to business concerns or other organizations owned or controlled by socially and economically disadvantaged individuals (within the meaning of Section 8(a)(5) and (6) of the Small Business Act (15 U.S.C. 637(a)(5) and (6)), including historically black colleges and universities. For purpose of this section, economically and socially disadvantaged individuals shall be deemed to include women..."
  5. Public Law 102-389 - The 1993 Appropriations Act. Enacted on October 6, 1992 changes the language in the Administrative Provisions of PL. 101-507 by adding the word 'hereafter' to the first sentence of the provision which states, "The Administrator of the Environmental Protection Agency shall, hereafter..." The addition of the word "hereafter" makes the language permanent.
  6. OMB Circular A-102. Standards to be used by Federal agencies in establishing procedures for the procurement of supplies, services and construction with Federal assistance funds.
  7. Executive Order 11625. Issued on October 13, 1971. The Order clarified the authority of the Secretary of Commerce to implement policy and to assist minority business enterprises. One of the factors was, "...to coordinate the participation of Federal departments and agencies in an increased minority enterprise effort." As a result of this, the Order required the Secretary of Commerce to, "...Promote the mobilization of activities and resources of State and local governments, businesses and trade associations, universities, foundations, professional organizations and volunteer groups toward the growth of minority business enterprises, and facilitate the coordination efforts of these groups with those of Federal departments and agencies." The Order further requires that

the Secretary, with the participation of other Federal departments and agencies, as appropriate, to develop comprehensive plans and specific program goals; establish regular program monitoring and reporting systems; and evaluate the impact of Federal support in achieving the objectives established by this Order. The Order requires the head of each Federal department or agency to furnish information and reports in a manner prescribed by the Secretary of Commerce. It further stipulates that within the constraints of law and appropriations, Federal departments and agencies shall foster and promote minority business enterprise.

8. Executive Order 12138. Issued on May 18, 1979. The Order directed all Federal agencies to: (1) facilitate, preserve and strengthen women's business enterprise and to ensure full participation by women in the free enterprise system; (2) take affirmative action in support of women's business enterprises; and (3) extend Federal financial assistance to any program or activity...each department or agency empowered to, shall issue regulations requiring the recipient of such assistance to take appropriate affirmative action in support of women's business enterprise and to prohibit actions or policies which discriminate against women's business enterprise. Pursuant to Executive Order 12138, the regulation implemented by the agencies shall prescribe sanctions for noncompliance. Sanctions by EPA were set forth in 40 CFR Part 30, Subpart I. In the case of assistance awards to recipients other than State and local governments they are still set forth there. In the case of assistance awards to State and local governments they are set forth in 40 CFR Part 31.43.
9. Executive Order 12432 - Minority Business Development. Issued July 14, 1983. The Order directed all Federal agencies to: (1) develop an MBE plan on an annual basis; (2) establish MBE objectives; (3) identify methods for encouraging prime contractors and grantees to utilize MBEs; (4) build upon programs administered by the Small Business Administration and Minority Business Development Agency; (5) furnish an annual report regarding the accomplishments of their MBE programs; and (6) establish programs to deliver management and technical assistance to MBEs.
10. 40 CFR Part 30. EPA implements its small business, minority business and women-owned business programs for institutions of higher education, hospitals, and other non-profit organizations in 40 CFR Part 30.44(b).
11. 40 CFR Part 31. EPA implements its small business, minority business and women-owned business programs for States, local governments and Indian Tribes through its "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and local Governments", 40 CFR Part 31, in 40 CFR 31.36(b) Procurement standards and Sec. 31.36 (e) Contracting with small and minority firms, women's business enterprise and labor surplus area firms ensuring use of six affirmative steps.
12. 40 CFR Part 35, Subpart K. Under the State Revolving Fund Program requirements for the participation of minority and women-owned businesses apply to assistance in an amount equaling the grant. To attain compliance with MBE/WBE requirements, the Regional Administrator or designee will negotiate an annual "fair share" objective with the State for MBE/WBE participation on these SRF-funded activities. A fair share objective should be based on the amount of the capitalization grant award or other State established goals. See 40 CFR 35.3145(d). Ref: [www.epa.gov/authority.htm](http://www.epa.gov/authority.htm)

## B. State Laws

1. Texas Water Code - Chapter 15, Subchapter J. SUBCHAPTER J. FINANCIAL ASSISTANCE FOR WATER POLLUTION CONTROL establishes the state water pollution control revolving fund to be administered by the board under this subchapter and rules adopted by the board

2. PROFESSIONAL SERVICES PROCUREMENT ACT (CHAPTER 2254. SUBCHAPTER A.)

Added by Acts 1993, 73rd Leg., Chi. 268, Sec. 1, eff. Sept. 1, 1993.

Sec. 2254.002. Definitions.

In this subchapter:

- (1) "Governmental entity" means:

- (A) a state agency or department;
- (B) a district, authority, county, municipality, or other political subdivision of the state; or
- (C) a publicly owned utility.

- (2) "Professional services" means services:

- (A) within the scope of the practice, as defined by state law, of:

- (i) accounting;
- (ii) architecture;
- (iii) land surveying;
- (iv) medicine;
- (v) optometry;
- (vi) professional engineering; or
- (vii) real estate appraising; or

- (B) provided in connection with the professional employment or practice of a person who is licensed as:

- (i) a certified public accountant;
- (ii) an architect;
- (iii) a land surveyor;
- (iv) a physician, including a surgeon;
- (v) an optometrist;
- (vi) a professional engineer; or
- (vii) a state certified or state licensed real estate appraiser.

Added by Acts 1993, 73rd Leg., ch. 268, Sec. 1, eff. Sept. 1, 1993. Amended by Acts 1997, 75th Leg., ch. 244, Sec. 1, eff. Sept. 1, 1997.

Sec. 2254.003. Selection of Provider; Fees.

- (a) A governmental entity may not select a provider of professional services or a group or association of providers or award a contract for the services on the basis of competitive bids submitted for the contract or for the services, but shall make the selection and award:

- (1) on the basis of demonstrated competence and qualifications to perform the services; and
- (2) for a fair and reasonable price.

- (b) The professional fees under the contract:

- (1) must be consistent with and not higher than the recommended practices and fees published by the applicable professional associations; and
- (2) may not exceed any maximum provided by law.

Added by Acts 1993, 73rd Leg., ch. 268, Sec. 1, eff. Sept. 1, 1993.

Sec. 2254.004. Contract for Professional Services of Architect, Engineer, or Surveyor.

- (a) In procuring architectural, engineering, or land surveying services, a governmental entity shall:

- (1) first select the most highly qualified provider of those services on the basis of demonstrated competence and qualifications; and
- (2) then attempt to negotiate with that provider a contract at a fair &

reasonable price.

(b) If a satisfactory contract cannot be negotiated with the most highly qualified provider of architectural, engineering, or land surveying services, the entity shall:

- (1) formally end negotiations with that provider;
- (2) select the next most highly qualified provider; and
- (3) attempt to negotiate a contract with that provider at a fair & reasonable price.

(c) The entity shall continue the process described in Subsection (b) to select and negotiate with providers until a contract is entered into.

Added by Acts 1993, 73rd Leg., ch. 268, Sec. 1, eff. Sept. 1, 1993. Amended by Acts 1997, 75th Leg., ch. 119, Sec. 1, eff. Sept. 1, 1997.

Sec. 2254.005. Void Contract. A contract entered into or an arrangement made in violation of this subchapter is void as against public policy.

Added by Acts 1993, 73rd Leg., ch. 268, Sec. 1, eff. Sept. 1, 1993.

3. Local Government Code

- A. CHAPTER 252. PURCHASING AND CONTRACTING AUTHORITY OF MUNICIPALITIES
- B. CHAPTER 2051. GOVERNMENT DOCUMENTS, PUBLICATIONS, AND NOTICES
- C. CHAPTER 2251. PAYMENT FOR GOODS AND SERVICES
- D. CHAPTER 262. PURCHASING AND CONTRACTING AUTHORITY OF COUNTIES

C. TWDB Rules

1. Chapter 363, Financial Assistance Programs
2. Chapter 371, Drinking Water State Revolving Fund
3. Chapter 375, State Water Pollution Control Fund

**REPORTING FORMS -  
SEE TWDB FORMS APPENDIX F**

- 1. WRD-215 APPLICANT AFFIRMATIVE STEPS CERTIFICATION and GOALS**
- 2. WRD-216 AFFIRMATIVE STEPS SOLICITATION REPORT**
- 3. WRD-217 PRIME CONTRACTOR AFFIRMATIVE STEPS CERTIFICATION and GOALS**
- 4. WRD-218 SMWBE SELF-CERTIFICATION**
- 5. SRF-373 LOAN/GRANT PARTICIPATION SUMMARY**

**NOTE:** Applicant/Entity may either complete these forms or submit information in a self-designed manner as long as the information requested on the form is submitted and all documents are signed by the Applicant/Entity's Authorized Representative. Contact SMWBE Coordinator for additional information.





## **GUIDELINES FOR INSPECTOR QUALIFICATIONS**

### **GENERAL:**

The qualifications and organization of the inspection team provided by the owner or consultant are vital to the success of the construction project.

Competent and adequate inspection is in the best interest of the owner to ensure that construction is in accordance with the contract documents as well as to avoid disputes over payments to the contractor. Good documentation and communication will also aid in prevention and resolution of contractor claims.

### **TIME:**

The amount of time and number of inspectors required on a project depends on the scope of work, number of contracts and the pace of construction. Consideration should be given to the number and nature of contracts that will be active at the same time. An inspector should observe all significant construction events.

### **QUALIFICATIONS:**

As a minimum, inspectors should possess experience and knowledge comparable to the size, scope and complexity of the project they will be assigned to inspect. In general, inspectors should also have a thorough understanding of soils, concrete, survey, pipe laying, testing, mechanical and electrical. For relatively large or complex projects (e.g. treatment plants greater than \$5-\$10 million) it may be beneficial to have a resident engineer assigned to the project.

### **RESPONSIBILITIES:**

The inspector, resident engineer or resident project representative's duties, responsibilities and limitations should be included in the contract documents.

### **TWDB GUIDANCE:**

The Board's Inspection and Field Support Section staff will be glad to discuss the inspection effort required or the inspector's qualifications for each contract.



## **INSPECTOR'S DAILY REPORT**

The Inspector's report should include the items mentioned below for each contract associated with the project. Many of the items can be included in a checklist or fill-in-the-blank type form. The primary purpose of the log is to have an accurate, detailed daily report of the day's activities. If more than one inspector is on site, each should make and sign an entry concerning their observations.

Each day's entry should include:

- 1) Conditions - Weather: temperature, moisture, site conditions, etc.
- 2) Personnel - Number of inspectors, number of workers, type of trades, list of subcontractors and number of hours worked by inspectors and workers.
- 3) Equipment - Number and type.
- 4) Activities - General description and location of work accomplished each day of the week.
- 5) Quantities - Length and size of the pipe laid, amount and type of embedment and select backfill material used, concrete, etc.
- 6) Materials - a list of all materials received for that day and whether checked and acceptable and where stored.
- 7) Difficulties - Any problems encountered due to unusual or differing site conditions, equipment or techniques. Notations may be used in case of change order for time extension.
- 8) Deficiencies - List of all deficiencies including construction, safety, labor, etc. for that day and if possible the resolution or proposed resolution to these problems. If resolution is not made immediately, it should be included on a future daily report when it is made with reference to the day it was encountered.
- 9) Disputes - Between contractor, engineer, owner, etc. and outcome of same.
- 10) Contractor's Comments - As to whether they agree with the engineer or inspector's comments.
- 11) Instructions - Record of any verbal instruction from the engineer to the inspector or inspector to the contractor.
- 12) Visitors - List of all visitors to job site.
- 13) Dated and signed - Diary should also contain the number of days used in the contract.

The daily reports should be checked, as a minimum, at each TWDB scheduled inspection. When checked during unscheduled inspections, it can be a useful tool to keep current of the construction progress and problems. If these reports appear insufficient, the inspector will be informed of what further information is needed.



## Check Sheet for Adequacy of Force Account Work

Name of Project: \_\_\_\_\_

Project No.: \_\_\_\_\_

Work to be Performed by Force Account: \_\_\_\_\_

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1. Loan recipient has demonstrated that:

- a. he possesses the necessary competence required to accomplish such work in a timely manner;
- b. the work can be accomplished more economically by use of such method;
- c. emergency circumstances dictate its use;
- d. adequate cost accounting records will be maintained;
- e. satisfactory controls will be established and used to assure that all material, supplies, equipment, labor cost, etc., charged to the project are actually used in connection with the project;
- f. Adequate insurance will be maintained. This insurance should be the same as such construction insurance as is customary and appropriate including fire and extended coverage, workmen's compensation, public liability and property damage and "all risk" as required by local or state law.

2. Has the loan recipient:

- a. anticipated all force account costs, including salaries of administrative employees, travel expenses, etc., in order to document cost effectiveness and allow an eligibility determination of the costs;
- b. proposed methods of timekeeping and time-checking, methods for establishment of wage scales for laborers and mechanics and methods for establishment of salaries of supervisory employees (sample time sheets,

proposed wage rates and an explanation of the methods for determining those rates and other necessary information);

- ( ) c. justify any indirect cost figure that is going to be used as part of the costs billed to the project;
- ( ) d. allowed for use, repair and overhaul of loan recipient equipment and rental rates for rental equipment, including when rental rates begin, apply and end, and the extent of allow ability of repairs and overhaul (precise usage records for such equipment must be maintained);
- ( ) e. include an accounting of any write-off or depreciation of small tools and other expendable items or equipment;
- ( ) f. include an accounting of salvage value and adjustment of costs in connection with unused material and tools left over on completion of the work.

Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

## **PROJECT FILES & CONSTRUCTION RECORDS**

1. Index
2. General Correspondence
3. Loan Assistance Documents and Assurances
4. TWDB Approved Plans & Specifications
5. Engineering contracts (design, construction management, project certification)
6. Project Certification (workplan, schedule, monthly report, capability report )
7. Discharge Permit & Self - Reporting Data
8. Land, Right-of-Way, Easements, Permits
9. Planning Documents (Engineering reports, I/I, EA, EID)
10. Sewer Use Ordinance, User Charge Ordinance
11. Plan of Operation
12. Operation & Maintenance Manual
13. Property Management System (inventory of capital equipment over \$200)
14. Force Account Records (time sheets, direct purchases invoices, equipment use logs)
15. TWDB Outlay Reports
16. Fiscal Records & Account Ledgers
17. Engineering & Test Lab Invoices (itemized)
18. TWDB Inspection Reports

**A separate set of the files below should be kept on each contract, e.g. 20-a, 20-b, etc.**

19. Shop Drawings, Parts Manuals, Equipment Brochures
20. Daily Inspection Reports & Inspector Logs
21. Construction Schedules & Related Correspondence
22. Monthly Construction Estimate & Material Invoices
23. Certified Payrolls, Labor Interviews (including subcontracts)
24. Contract Files (contract, bonds, work order, current certificate of insurance)
25. Change Orders (request for changes with cost & pricing analysis, approval & eligibility by TWDB, executed change orders)
26. Concrete Test Results (batch design, compressive strength)
27. Soil Test Results (curves & densities)
28. Collection System Test Results (I/E, deflection, pressure)
29. Miscellaneous Test Results (paint, equipment and other)
30. Equipment & Material Certifications
31. As-Built Drawings
32. Start-Up Activities, Operator Training
33. Certificates of Completion/Acceptance
34. Warranty Information



## O&M MANUAL - RECOMMENDATIONS

The Operation and Maintenance (O&M) Manual for Wastewater Treatment Facilities should, as a minimum, include the following:

1. A table of contents showing the page number for each section.
2. A descriptive guide to using the manual, indicating the type of information to be found in each section.
3. A brief description of the treatment process and a discussion of the capacity of the facility, including the flow and loading assumptions used as a basis for the sizing of the plant.
4. Regulatory requirements including permits and stream standards and requirements for reporting effluent quality information, non-compliant events, spills, etc.
5. Recommended staffing and staff responsibilities including plant supervisor and other management staff.
6. Description, operation and control of each unit of the facility (include offsite lift stations, if appropriate):
  - a. Description, function, flow routing and design capacity for each unit.
  - b. Listing of major components and mechanical equipment.
  - c. Process control:
    1. Normal operating procedures and parameters including such things as valve positions, sludge depths, etc.
    2. Discussion of laboratory and field tests and expected operational ranges.
    3. Discussion of common operating problems and solutions.
    4. Alternate operational modes.
  - d. Hazards and safety concerns.
  - e. Recommended maintenance of mechanical equipment including lubrication schedules, recommended lubricants, etc.
7. Sludge management program:
  - a. Permit requirements and other limitations.
  - b. Method of disposal.
  - c. Method of tracking.
8. Recommended recordkeeping procedures for plant operating parameters, compliance reporting, sludge tracking and maintenance.
9. General safety information, procedures and accident reporting
10. Emergency operating procedures for such things as power loss, flood, freeze, etc.

11. Recommended maintenance program and schedule for any equipment or parts of the facility not covered in section 6 above, including painting, ground upkeep, tractors, mowers, portable pumps, etc.
12. Laboratory procedures and/or sample handling.
13. Collection system maintenance procedures.
14. Appendices:
  - a. Schematic and flow diagram for the facility.
  - b. List of process chemicals and their source.
  - c. List of utilities and contacts.
  - d. List of equipment suppliers.
  - e. List of sources of service and parts.
  - f. Protective coatings list for equipment and structures subject to corrosion.
  - g. Recommended spare parts inventory.
  - h. Warranties and bonds.
  - i. Sample forms for operating parameters, compliance reporting equipment maintenance, etc.
  - j. Map of the collection system including location and size of lines, manholes and lift stations, if available.

## FINANCE-RELATED LEGAL AND CONTRACTUAL REQUIREMENTS

### APPLICABLE TO LOANED INDEBTEDNESS WITH THE TEXAS WATER DEVELOPMENT BOARD

This document presents the primary finance-related legal and contractual requirements associated with the financing of a project through a loan contract or the sale of bonds to the Texas Water Development Board (TWDB). This document does not necessarily include all applicable finance-related legal or contractual requirements. **For further assistance in this regard, please contact the Audit & Funds Management Staff (512) 463-8415.**

#### I. PRIMARY CONTRACTUAL AND LEGAL AUTHORITIES

- A. Contract - The contractual loan agreement between the TWDB and political subdivision is the bond indenture or loan agreement. This ordinance, resolution or order is the transcript of legal proceedings authorizing the bond issuance. The TWDB provides to the political subdivision a written summary of selected provisions of this document.
- B. Laws and Regulations - All loan programs of the TWDB are subject to the following laws and regulations:
1. Chapters 15, 16 & 17 of Texas Water Code
  2. State Loan Procedures Act of 1981
  3. U.S. Treasury Federal Arbitrage Regulations
  4. Chapter 363 of TWDB Rules - Financial Assistance Programs
  5. Chapter 384 of TWDB Rules – Rural Water Assistance Fund

In addition, State Revolving Fund (SRF) program loans are subject to:

1. EPA SRF Regulations 40 CFR 35 Subpart K

The State Uniform Grant & Contract Management Standards Act of 1981 and its related regulations do not apply to financial loan assistance provided by the TWDB.

#### II. USE OF LOAN PROCEEDS

- A. Construction Fund - The loan proceeds should be deposited to a construction fund established with the political subdivision's official depository bank and be secured and collateralized in accordance with State law.
- B. Investment Earnings - All investment earnings on loan proceeds accrue to the construction fund. Investments of tax exempt loan proceeds should be in accordance with applicable Federal arbitrage rebate and yield restriction regulations. Generally, the yield restriction on the investment of loan proceeds is the interest rate on the political subdivision's debt and/or the TWDB's source bonds.
- C. Project Budgeting - The political subdivision is responsible for managing its construction and project budget and ensuring that there are sufficient funds to complete the project. TWDB approval is not required for budget revisions that have no affect on the total amount of TWDB assistance.

- D. Expenditure/Reimbursement Criteria - In order to be funded by the gross proceeds or related investment earnings, an expenditure or interfund reimbursement should be an element of cost that is allocable to the project scope of work approved for funding by the TWDB in its loan commitment and is a lawful obligation of the political subdivision.
- E. Land Acquisition - Loan proceeds may not be used to fund the cost of acquiring land, rights-of-way or easements that are not an integral part of the treatment process.
- F. Arbitrage Reimbursement Limitations - In accordance with Federal arbitrage reimbursement regulations (26 CFR 1.103.18):
1. Tax exempt loan proceeds may not be used to reimburse the costs of acquiring land, rights-of-way or easements paid before the date of loan issuance unless the political subdivision has declared an "official intent" to reimburse the expenditure on or before the date the expenditure is paid.
  2. A reimbursement allocation of tax exempt loan proceeds to an expenditure must generally occur on or before the latter of either the date one year after the expenditure was paid or the date one year after the property was placed in service.
- G. Interest, Operation and Maintenance (O&M) Costs and Interfund Transfers - In accordance with the State Bond Procedures Act, proceeds of loans which, in whole or in part, are payable from and secured by the revenues of the system may be used to:
1. pay interest on the loans during the period of construction and one year thereafter;
  2. pay system operation and maintenance during the estimated period of construction and one year thereafter; and
  3. fund debt service, reserve, contingency and other funds relating to the loans.
- Political subdivisions should consult TWDB before using loan proceeds in the above manner.
- H. Contractors' Retainage - Retainage should be withheld from construction contractors' periodic payments in accordance with State law. Under certain circumstances, interest earnings on contractors' retainage accrue to the benefit of the contractor. Regardless of the source of funds, final release of construction retainage to the contractor shall not be made until the political subdivision has requested and received a contract "Certificate of Approval" from the TWDB.
- I. Final Accounting - At the time the project is complete or when all loan proceeds and investment earnings are expended, a final accounting review will be completed to determine the total sources and authorized uses of project funds. Any unexpended (surplus) loan proceeds or related investment earnings are generally used to redeem loan maturities held by the TWDB.
- J. Colonia Wastewater Treatment Assistance Program (CWTAP) – If the political subdivision is receiving CWTAP Federal assistance from the TWDB and the bond

proceeds provided to the political subdivision by the TWDB represent the State match for the CWTAP assistance, the authorized uses of the bond proceeds are subject to the allowability criteria of U.S. Office of Management and Budget Circular A-87.

### **III. ANNUAL INDEPENDENT AUDITS**

- A. Standards and Auditor's Qualifications - Annual audits required by law and the loan documents should be conducted:
1. in accordance with generally accepted auditing standards (GAAS); and
  2. by a certified public accountant or public accountant licensed to practice in the state by the State Board of Public Accountancy.
- B. Audited Annual Financial Statements - Annual audits required by state law and the loan documents must, as a minimum:
1. include the political subdivision's fiscal year general purpose financial statements;
  2. include the auditor's report and opinion on the general purpose financial statements;
  3. be completed and made available for public inspection within 120 days (135 days for districts and authorities) of the close of the fiscal year; and
  4. be promptly submitted to the TWDB upon completion.

### **IV. MONTHLY AND QUARTERLY OPERATING STATEMENTS**

Monthly operating statements may be required by the loan documents and/or the Development Fund Director. Forms are available for submission of the required information or for guidance in the submission of copies of financial statements presented at the political subdivision's monthly council or board meeting.

This policy has proven to be especially beneficial to borrowers issuing first-time debt, new system debt, systems with 500 or fewer customers, and others designated during staff review.

### **V. ACCOUNTING AND BUDGETING**

- A. Accounting Standards - The political subdivision's accounting systems, records and reports related to the loan with the TWDB should:
1. comply with generally accepted accounting principles (GAAP);
  2. demonstrate compliance with finance-related legal and contractual provisions; and
  3. contain current, accurate and complete accounts and records.

- B. Loan Funds and Accounts - The funds and accounts commonly required by loan documents include:
1. Debt Service Fund - This fund is for paying principal maturities and interest coupons on the loan as they come due. Other common names for this fund include certificate fund, interest & sinking fund and bond fund.
  2. Reserve Fund - This fund is for paying principal and interest payments on the loan when no other funds are available for debt service. This fund is generally required only with loans secured by system revenues. Documents generally require equal monthly deposits to the reserve fund over a five-year period until the fund's balance reaches the loan's average annual debt service requirement.
  3. Construction Fund - This fund is for the deposit, investment and expenditure of the loan proceeds and other project funding sources.
  4. Other Funds and Accounts - Loan documents commonly have specific requirements for the accounting of revenues pledged for repayments. This is often referred to as the "flow-of-funds." These funds are commonly referred to as system fund, revenue fund, surplus revenue fund, etc.
- C. Records Retention and Access - All construction-related records should be retained for no less than three years from completion of final accounting. For as long as the loan is outstanding, all other loan-related records should be retained for no less than three years from the close of each fiscal year. The staff of the TWDB or its authorized representative shall have access to any records of the political subdivision related to the loans.
- D. Annual Operating Budgets - Political subdivisions are required by state law to prepare and adopt fiscal year operating budgets. Annual budgets should reflect sufficient revenues to adequately operate and maintain the system and to meet both general obligation and revenue debt of the system. The TWDB requests selected political subdivisions to submit annual operating budgets for review.

## VI PLEDGED REVENUES

- A. System Revenue Pledge - This type of pledge requires that system revenues be sufficient to pay system operation and maintenance expenses and system revenue debt. Revenue Bond Coverage is a measure of whether system revenues remaining after the payment of system O&M costs (net revenues) are sufficient to pay debt service requirements on revenue loans. The coverage factor is computed by dividing annual net revenues by the annual debt service requirement. The coverage factor can be computed on the current (next year's) debt service requirement or the average annual debt service requirement. Most loan documents require a 1.00 coverage factor on the average annual or current debt service requirement.
- B. Tax Pledge - This pledge requires the political subdivision to levy and collect an ad valorem interest and sinking (I&S) fund tax sufficient to pay system general obligation debt service requirements on the loans.
- C. Combination Tax and System Revenue Pledge - This pledge requires the political subdivision to levy and collect an ad valorem I&S tax and/or generate system net

revenues that are in combination sufficient to pay system general obligation and revenue debt service requirements.

- D. System Rates and Charges - Loan documents generally provide that rates and charges for services provided by the system be sufficient to pay at all times the operating expenses and debt of the system. Rates should be examined at least once a year as a part of the annual budget process and should be based on sound system operating and customer records.

## **VII SYSTEM OPERATIONS AND INSURANCE COVERAGE**

TWDB Financial Interests - In order to protect the economic viability and financial solvency of the system and the State's investment, the political subdivision shall provide adequate operation and maintenance and insurance coverage on the system for as long as the loan is outstanding. Insurance coverage on the system's operations and facilities shall be sufficient to protect it against damages or losses.

## **VIII. FINANCIAL MONITORING AND MANAGEMENT ASSISTANCE**

- A. Financial Monitoring - The TWDB monitors political subdivisions' financial stability and loan document compliance through the review of:

1. audited annual financial reports
2. monthly and quarterly operating statements as appropriate
3. annual operating budgets as appropriate
4. reports issued by the Municipal Advisory Council
5. other sources of financial data as appropriate and
6. on-site financial reviews when necessary

In cases where there is evidence of financial instability or material noncompliance with the loan documents, the TWDB requests and monitors corrective action by the political subdivision.

- B. Financial Management Assistance - The TWDB's audit staff will provide whatever assistance is necessary or requested in matters of financial stability and loan document compliance.





## **GUIDELINES FOR DETERMINING ELIGIBLE EQUIPMENT AND CAPITAL EXPENDITURES FOR EDAP AND CWTAP PROGRAMS**

The following information is designed to assist loan/grant recipients and their consultants in determining allowable equipment and capital expenditure costs for the Economically Distressed Area Program (EDAP) and the Colonias Wastewater Treatment Assistance Program (CWTAP). It is important that significant expenditures for equipment be identified in the Facilities Plan phase of each project and included in the budget for funding assistance. This does not preclude consideration and need for equipment during the design and construction phases of the project, but the recipient should be aware that such purchases are controlled by the contingency funds in the budget.

### A. TWDB Approval Required

**Since the TWDB establishes budgets by commitment and contract with recipients, all capital expenditures and equipment cost requests should be reviewed and approved by the Board prior to purchase.**

Circular No. A-87, federal circular for principles and standards for determining costs applicable to CWTAP projects, further defines capital expenditures as the cost of the asset including the cost to put it in place. Equipment is defined as a subset of capital expenditures and includes articles of non-expendable, tangible personal property having a useful life of more than one year and an acquisition cost which equals the lesser of (a) the capitalization level established by the recipient for financial statement purposes or (b) \$5,000. Items of equipment with an acquisition of less than \$5,000 are considered to be supplies and allowable as direct costs of awards without specific agency approval assuming the budget allows for these costs.

### B. Allowable Costs

**The allowable and unallowable equipment and capital expenditure costs provided below are provided as guidance and are not meant to be all encompassing. Specific circumstances may dictate reasonable interpretations and judgment.**

1. The cost of a reasonable inventory of laboratory chemicals and supplies necessary to initiate plant operations and laboratory items necessary to conduct tests required for plant operation.
2. The cost of purchase and/or transportation of biological seeding materials required for expeditiously initiating the treatment process operation.
3. Cost of shop equipment installed at the treatment works necessary to the operation of the works. The need will depend on the specific item, its frequency of expected use, and the size and complexity of the treatment works.

4. The cost of necessary safety equipment, provided the equipment meets applicable federal, state or local or industry safety requirements.
5. All or a portion of the cost of collection system maintenance equipment. If the equipment will be used on work outside the scope of the funded project, a frequency and proration of need will have to be demonstrated. For example, the applicant may intend to use a portable winch for both the collection system and water distribution or treatment system. Any equipment needed to preclude the discharge or bypassing of untreated wastewater would also be eligible.
6. The cost of mobile equipment necessary for the operation of the overall wastewater treatment facility, transmission of wastewater or sludge, or for the maintenance of equipment such as:
  - (1) portable stand-by generators,
  - (2) large portable emergency pumps to provide pump-around capability in the event of pump station failure or pipe line breaks,
  - (3) sludge or septage tankers, trailers and other vehicles having as their sole purpose the transportation of liquid or dewatered wastes from the collector point (**including individual or onsite systems**) to the treatment facility or disposal site, and
  - (4) tractors, shredders, disc plows, front-end loaders, backhoes, smoke testing equipment, and sewer cleaners.
7. Replacement parts identified as necessary to assure uninterrupted operation of the facility. Parts that are not easily or rapidly obtainable would be considered eligible.
8. The cost of constructing or installing sewage flow metering devices used for billing intermunicipal flow are eligible costs. Meters constructed or installed for the primary purpose of billing commercial or industrial users are not eligible.

#### C. Unallowable Costs

1. The cost of furnishings including draperies, furniture, computers and software, and other office equipment. Such items as pictures, televisions, indoor plants, lamps, food preparation equipment, postage meters, and coffee tables are included. Desks, chairs and file cabinets associated with the operation of the laboratory or office building have in the past been determined to be eligible.
2. The cost of ordinary site and building maintenance equipment including items as rakes, shovels, hedge trimmers, lawnmowers, hand tools other than those which are specified by the equipment supplier and other transportable equipment used for routine maintenance. Judgment must be used since such equipment may be necessary in the day-to-day operation of the collection and/or treatment systems.

3. The cost of vehicles for the transportation of employees.
4. Items of routine programmed maintenance such as air filters, couplings, hose, bolts, etc.

## FINAL ENGINEERING DESIGN REPORT CHECKLIST

### GENERAL

The Design Criteria for Sewerage Systems, Chapter 317, section 317.1(c) requires that a final engineering design report be submitted with the plans and specifications. This report should describe the plant in detail and provide calculations or descriptions for all items covered by the design criteria. The design criteria and Texas Commission on Environmental Quality, TCEQ (formerly the Texas Natural Resource Conservation Commission or TNRCC) discharge permit should be consulted for further details on what type of information is needed. Information presented previously in the preliminary engineering report or responses to comment letters can be copied and included in the final engineering report if it covers the same items mentioned below. The report should be bound and sealed by a professional engineer registered in Texas.

### WASTEWATER TREATMENT PLANTS

The following items should be included in the Final Engineering Design Report. Contact the TWDB review engineer for more information on unconventional designs. More detailed checklists of items reviewed by the TWDB engineers can be provided if requested (see list of publications in "Additional Resources" section)

#### A. General Information.

- \_\_\_ 1. Copy of new permit or draft permit and status.
- \_\_\_ 2. Flows, capacities, and loading rates for the plant: average, maximum 30-day average, and peak flows.
- \_\_\_ 3. Siting of the plant: provide a scale drawing showing the buffer zone boundaries as required by section 309.13 .
- \_\_\_ 4. Hydraulic profile through the plant, including sludge processing, and flow diagram.
- \_\_\_ 5. Safety features included such as stairways, railing, lighting, insulation mats, and walkway mats.
- \_\_\_ 6. Any other information as required by 30 TAC 317.1

#### B. Lift Stations

(including external and internal plant wastewater and return pumping).

- \_\_\_ 1. Description of pump types, capacities, lift station structure, force main type and diameter.
- \_\_\_ 2. Describe the operating characteristics of the stations at minimum, maximum, and design flows (both present and future);
- \_\_\_ 3. Explain safety considerations, such as ventilation, entrances, working areas, and prevention of explosions
- \_\_\_ 4. Discuss means of preventing overflow of raw sewage, emergency power provisions of section 317.3 of the design criteria, including ventilation and alarms.

**Note:** Emergency power provisions should be addressed. Records of outages from the utilities providing power should be obtained and presented, along with a discussion of what alternatives are being considered for back-up during emergencies.

- \_\_\_ 5. Provide pump and system curves showing the operating point of all pumps in the lift station. Provide pump curves from the manufacturer and include information on pump efficiency at the operating point.
- \_\_\_ 6. Discuss provisions of section 317.2(d)(2-4) on requirements for force mains, such as:
  - \_\_\_ a. Force main velocities
  - \_\_\_ b. Provision of air relief valves and cleanouts
  - \_\_\_ c. Pipe pressure rating
  - \_\_\_ d. Leakage testing
- \_\_\_ 7. Any other information as required by 30 TAC 317.3

### **C. Preliminary Treatment**

- \_\_\_ Describe preliminary treatment units and how they meet the requirements of section 317. 4(b) for bar screens, grit removal, fine screens, and disposal of screenings and grit.

### **D. Sludge Disposal**

A sludge mass balance and sludge flow diagram is not required but is very useful in demonstrating that sludge generation and treatment has been adequately accounted for.

- \_\_\_ 1. Calculate anticipated sludge generation.
- \_\_\_ 2. Description of sludge handling and disposal, including storage of sludge while awaiting transport, and location of final sludge disposal site.

### **E. Closure of Existing Plant (if applicable)**

- \_\_\_ Discuss the closure of the existing plant, including removal and disposal of sludge.

### **F. Mechanical Conventional Aeration Plant:**

- \_\_\_ 1. **Aeration Unit** -Complete description and calculations showing how the aeration units, blowers, compressors, and piping will meet the provisions of section 317.4(g) with regards to:
  - \_\_\_ a. Number of basins
  - \_\_\_ b. Basin design and freeboard requirements
  - \_\_\_ c. Organic loading
  - \_\_\_ d. Detention time
  - \_\_\_ e. Mixing requirements
  - \_\_\_ f. Return sludge flow
  - \_\_\_ g. Ability of system to remove ammonia nitrogen, if applicable
  - \_\_\_ h. Oxygen requirements and capabilities of aeration equipment

**Note:** If there is any deviation from the transfer efficiencies allowed in the regulations for aeration devices, manufacturer's test data should be presented showing the actual efficiency of the aerators.

- \_\_\_ 2. **Clarifiers.** Explain how clarifier design will meet the requirements of section 317. 4( d) of the design criteria with regards to:
  - \_\_\_ a. Surface loading
  - \_\_\_ b. Solids loading
  - \_\_\_ c. Detention time

- \_\_\_ d. Weir loading
- \_\_\_ e. Inlet velocity
- \_\_\_ f. Scum removal

\_\_\_ 3. **Aerobic Digesters.** Description of the aerobic digester operation, as outlined in section 317.5(b), including:

- \_\_\_ a. Solids loading
- \_\_\_ b. Aeration provided
- \_\_\_ c. Sludge thickening capabilities
- \_\_\_ d. Sludge retention time

**Note:** 503 regulations should also be addressed if the digesters will meet the requirements for sludge processing under these rules.

\_\_\_ 4. **Chlorination.** Description of chlorination equipment provided, including items required in section 317.6(b) of the design criteria such as:

- \_\_\_ a. Number of units and capacity
- \_\_\_ b. Type of control
- \_\_\_ c. Safety equipment provided
- \_\_\_ d. Housing design, including heating

### **G. Non-mechanical Pond System:**

\_\_\_ 1. **Lagoons.** Complete description and calculations showing how the proposed system will meet the size requirements and other provisions of:

- \_\_\_ a. The final discharge permit.
- \_\_\_ b. The requirements of section 317.4(j), Wastewater Stabilization Ponds, and 317.4(k), Facultative Lagoons.

**Note:** The discharge permit takes precedence over the rules if there is a conflict).

\_\_\_ c. Some important items on Lagoons to include in the report:

- \_\_\_ (1) BOD Loading (lb./day)
- \_\_\_ (2) Volumetric loading (lb. BOD/1000 cu. ft.)
- \_\_\_ (3) Detention time
- \_\_\_ (4) How requirements for pond liner materials and embankment walls will be met.

\_\_\_ 2. **Irrigation System.**

- \_\_\_ a. Provide maps showing all properties to be used in the irrigation scheme.
- \_\_\_ b. Provide final water balance calculations and application rates for the system and describe how it will meet provisions of:
  - \_\_\_ (1) The final discharge permit.
  - \_\_\_ (2) Section 309.20 of Subchapter C (Land Disposal of Sewage Effluent) .
- \_\_\_ c. Describe and provide calculations for the sizing of irrigation equipment provided, such as pumps, piping, and nozzles, and demonstrate that the equipment is capable of providing the application rates specified in the permit.
- \_\_\_ d. Describe and provide calculations for sizing of tailwater return structures, if required.

### **WASTEWATER COLLECTION SYSTEMS**

The following items should be included in the Final Engineering Design Report. Contact the TWDB project reviewer for more information on unconventional designs.

## **A. Pump Station Renovations**

\_\_\_\_ Describe proposed improvements to the lift stations.

\_\_\_\_ Provide the information and calculations described in "Lift Stations" above, where applicable.

## **B. Sewer Line and Appurtenances**

\_\_\_\_ 1. Provide calculations showing that the proposed sewer lines will be able to take the design peak flow.

\_\_\_\_ 2. Show that the sewer line and manholes meet the requirements of section 317.2 (Sewage Collection Systems).

\_\_\_\_ 3. minimum and maximum grades proposed for each size and type of pipe;

\_\_\_\_ 4. capability of existing trunk and interceptor sewers and lift stations to handle the peak flow under anticipated conditions and capability of existing treatment facilities to receive and adequately treat the anticipated peak flows;

\_\_\_\_ 5. type of pipe proposed and its anticipated performance under the conditions imposed by the particular wastewater quality and loading conditions;

\_\_\_\_ 6. the manhole spacing proposed;

\_\_\_\_ 7. areas not served by the present proposed project, and the projected means of providing service to these areas, including special provisions incorporated in the present plans for future expansion;

\_\_\_\_ 8. amount of infiltration/inflow existing and anticipated, its hydraulic effect on the proposed and existing system, and an abatement plan if applicable, including a:

\_\_\_\_ a. description of infiltration allowances and test procedures in the specifications governing design of new sanitary sewer lines; and

\_\_\_\_ b. description of control program to reduce infiltration/inflow occurring in the existing sewer system;

\_\_\_\_ 9. soil conditions, such as quicksand, that will not support collection system development, and measures to be taken to overcome the anticipated difficulties.

## **Cost Estimates**

\_\_\_\_ If the design has changed significantly from the Engineering Feasibility Report, a revised cost estimate should be submitted to TWDB Project Reviewer.

**CWTAP/EDAP Review Checklist For Bid Documents and Executed Contract Documents**

Authority Name: \_\_\_\_\_ Grant #: \_\_\_\_\_  
Contract Description: \_\_\_\_\_  
\_\_\_\_\_  
Contractor Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State/ZIP \_\_\_\_\_ Telephone: \_\_\_\_\_  
Bid Opening Date: \_\_\_\_\_ Bids Expires: \_\_\_\_\_  
Liquidating Damages: \_\_\_\_\_ Duration,;: \_\_\_\_\_ (work) (calendar) days  
Cost Estimate: \_\_\_\_\_ As-Bid Costs: \_\_\_\_\_  
SRF Share of Costs: \_\_\_\_\_ SRF Ineligible Costs: \_\_\_\_\_

**CHECK IF OK:**

- ( ) 1. Plans & Specs are approved by TWDB.
- ( ) 2. Certified advertisement for bids received.
  - a. Newspaper copy. ( )
  - b. Notice published two consecutive weeks. ( )
  - c. First notice 14 days before opening. ( )
  - d. Contains standard language on contingent award, &TWDB is not party to contract. ( )
- ( ) 3. Tabulation of bids showing all bids received.
  - a. Any errors or qualifications are noted. ( )
  - b. Bid opening agrees with advertisement. ( )
- ( ) 4. All addenda approved.
- ( ) 5. Bid proposal of lowest bidder submitted.
  - a. Addenda acknowledged on proposal. ( )
  - b. Signed and dated. ( )
  - c. Bid is complete and math correct or errors explained. ( )
  - d. Bid does not contain qualifications. ( )
- ( ) 6. Bid bond, 5% or cashier's check, included from low bidder. ( )
- ( ) 7. MWBE documentation included.
  - a. SRF-373, Authority's certifications. ( )
  - b. WRD-217, Prime Contractor Affirmative Steps Certification and Goals
  - c. WRD-215, Affirmative Steps Solicitation Report
  - b. Sent to TWDB's MWBE Coordinator: \_\_\_\_\_



c. Approval obtained: \_\_\_\_\_

- 8. SRF-16, Site Certificate, without exception.
- 9. Engineer's recommendation to award letter included.
  - a. Recommendation is for low bidder.
  - b. Justification for any bid rejection included.
  - c. Low Bidder is determined to be responsive.
  - d. Low Bidder is determined to be responsible.

- 10. Resolve any bidding irregularities or protest.

Explanation: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- 11. Construction inspection proposal reviewed and approved by TWDB.

- 12. Bid Documents provided to TWDB: \_\_\_\_\_

NOTE: The above items are normally resolved before TWDB concurs in the contingent award of the contract by advising the applicant to proceed with execution of the contract documents. Deviations should be discussed with the appropriate Project Engineer or Project Reviewer. All appropriate items, above and below, need to be resolved before the loan can be closed or before authorization to issue a work order in the case of contracts awarded after the initial closing.

- 13. TWDB concurs in award to identified low bidder.

- 14. Governing Body awards contract: \_\_\_\_\_

- 15. Contract Agreement properly executed.
  - a. Date signed: \_\_\_\_\_.
  - b. Dollar amount agrees with approved bid documents.
  - c. Appropriate parties have signed.
  - d. Signed contingent statement included.
  - e. Properly notarized; with seal.

- 16. ED-103, Contractor's Act of Assurance completed.
  - a. Compliance with board rules and relevant statutes.
  - b. Acknowledge Board funding.
  - c. Properly signed and notarized.

- ( ) 17. ED-104 , Contractor's Act of Assurance Resolution completed.  
(Resolution giving contractor's agent authority to execute all documents \_\_\_\_\_).
- ( ) 18. Performance Bond.
- a. Includes without limitation that the guarantee work done under contract will be completed and performed according to approved plans & specs and in accordance with sound construction principles and practices. ( )
  - b. In a sum of not less than 100% of contract price. ( )
  - c. Remain in effect for one year beyond the date of approval by the engineer. ( )
  - d. Dated on/after the date of the contract. ( )
  - e. Name of contractor consistent. ( )
  - f. Political subdivision is beneficiary of the bond. ( )
  - g. Amount of bond matches amount of bid and contract. ( )
  - h. Bond includes a power of attorney of the surety company assigning a specified agent the authority to bind the company. Same agent must sign bond. ( )
  - I. Amount of bond doesn't exceed dollar limits (if any) that appear on bond. ( )
- ( ) 19. Payment Bond.
- a. In a sum of not less than 100% of contract price. ( )
  - b. Remain in effect for one year beyond the date of approval by the engineer. ( )
  - c. Dated on/after the date of the contract. ( )
  - d. Name of contractor consistent. ( )
  - e. Political subdivision is beneficiary of the bond. ( )
  - f. Amount of bond matches amount of bid and contract. ( )
  - g. Bond includes a power of attorney of the surety company assigning a specified agent the authority to bind the company. Same agent must sign bond. ( )
  - h. Amount of bond doesn't exceed dollar limits (if any) that appear on bond. ( )
- ( ) 20. Insurance carrier \_\_\_\_\_ is authorized to do business in Texas and is authorized to issue surety bonds (463-6169).
- ( ) 21. The contract includes certificate of insurance for Workman's Compensation, liability (public and automobile) and other appropriate coverage (builder's risk, and property) with appropriate dollar amount coverage to protect the board's interests.
- ( ) 22. Executed contract documents are identical to approved Plans & Specifications and addenda.
- ( ) 23. Other appropriate bonds or guarantees.
- ( ) 24. Itemized cost breakdown included, if lump sum.
- ( ) 25. Sufficiency of Funds (budget update with source of funds). letter provided to TWDB.
- ( ) 26. All TNRCC permits and approvals obtained.
- ( ) 27. SRF-404, *Certification Regarding Debarment, Suspension, . . .* is executed and submitted.

- a. Prime contractor is not debarred. ( )
- b. Known subcontractors are not debarred. ( )

- ( ) 28. WRD-255, *Bidders Equal Employment Opportunity/Non Segregated Facilities Certification* is executed and submitted to TWDB
- ( ) 29. Other required forms are properly executed and provided.
- ( ) 30. Executed Contract Documents sent to TWDB:\_\_\_\_\_.
- ( ) 31. TWDB concurs with notice to proceed.
- ( ) 32. Funds are sufficient for contract.
- ( ) 33. Notice to Proceed issued to Contractor: \_\_\_\_\_

**Comments:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Reviewer:\_\_\_\_\_ Date:\_\_\_\_\_

### CWTAP/EDAP Checklist For Review of Change Order

Name of Project: \_\_\_\_\_ Grant Number: \_\_\_\_\_

Construction Contract identification: \_\_\_\_\_ Change Order Number: \_\_\_\_\_

Check if Okay:

- 1. Sequence of Change Order number is correct.
- 2. Change Order is dated.
- 3. Agreement date is shown.
- 4. Contains appropriate signatures of loan/grant recipient, consultant, and contractor.
- 5. Change Order is within the scope of the work approved by TWDB.
- 6. Appropriate specification and plans have been prepared.
- 7. Change is necessary and justified and consistent with Design Criteria.
- 8. Applicant prepared independent cost estimate.
- 8-a Change Order costs appear reasonable and necessary.
- 8-b Costs are supported by cost and pricing information; if CWTAP project form CWTAP-101 is completed.
- 9. Change in contract amount.

	EDAP Eligible	CWTAP Eligible	Other	Total
(a) Current contract price adjusted by previous Change Orders	\$ _____	\$ _____	\$ _____	\$ _____
(b) Change in contract (+/-) price by this change order	_____	_____	_____	_____
(c) New Contract Price	\$ _____	\$ _____	\$ _____	\$ _____
(d) Original total contract price = \$ _____			x 110% = \$ _____	
			- OR -	
			x 125% = \$ _____	
(i) Cities: \$252.048, Is New Total Contract Price < 125% of Original Contract Price? YES ( ) NO ( )				
(ii) Districts: \$49.273, Is New Contract Price < 110% of Original Contract Price? YES ( ) NO ( )				

- 10. Contract time is:
  - (a.)  Increased  Decreased  Unchanged
  - (b.) By \_\_\_\_\_ (calendar) (work) days
  - (c.) Increased A/E fees for additional time  are  are not eligible for CWTAP/EDAP
  - (d.) Date for completion of work will now be \_\_\_\_\_.
- 11. Change Order sent to TWDB including plans and specifications, and cost documentation.  
Date sent: \_\_\_\_\_
- 12. TWDB approved Change Order on date: \_\_\_\_\_ .
- 13. Contractor authorized to proceed on date: \_\_\_\_\_ .

Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_