



TEXAS WATER DEVELOPMENT BOARD

Drinking Water State Revolving Fund

PROGRAM GUIDANCE

MANUAL

—

DWSRF Loan Program

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GENERAL INFORMATION

TWDB's Mission

Texas Water Development Board's mission is to provide leadership, technical services and financial assistance to support planning, conservation and responsible development of water for Texas. The Drinking Water State Revolving Fund (DWSRF) program is one of the programs administered for the State of Texas by the Texas Water Development Board in fulfillment of its mission.

Purpose

The DWSRF provides low interest loans and subsidies to public drinking water systems. The purpose of the DWSRF is to assist communities in meeting national drinking water standards and to further the public health protection objectives of the federal Safe Drinking Water Act.

The purpose of this Program Guidance Manual is to provide the basic information, forms and guidance that an Applicant needs in order to complete an application for financial assistance and implement a successful project. The information in this manual covers the Application, Planning, Design, Bidding, Construction and Audit phases and provides guidance to the Applicant and his consultants in meeting the TWDB's DWSRF Program rules, found in *TWDB Chapter 371 Financial Assistance Programs*.

We hope that this manual will help all participants gain a better understanding of the roles and responsibilities of the TWDB, the Applicant and his Consultants and thus increase the efficiency of our coordinated efforts.

Key Elements of the Drinking Water State Revolving Fund Program

- finances purchase, construction of, and improvements to public drinking water facilities
- offered to political subdivisions, nonprofit water supply corporations, and privately-owned water systems
- includes subsidies and 30-year loans for qualified low-income communities
- requires Applicants to submit information for inclusion on the Priority List & Intended Use Plan
- requires compliance with federal environmental and small, minority and women's business enterprise procurement requirements
- an administrative cost recovery fee is assessed on all loans except for any portion receiving subsidies in the form of forgiveness of loan principal pursuant to §371.24 of the agency rules

Priority Rating Process and Preapplication Conference

Each year the State develops a Priority List of Drinking Water State Revolving Loan projects as a part of its Intended Use Plan to fulfill a requirement of the Environmental Protection Agency. Applicants must provide priority rating information (normally during January) in order for projects to be considered for funding. The forms change annually, and are available over the internet:

http://www.twdb.state.tx.us/publications/forms_manuals/PGM%20forms_main.htm. Once the projects are prioritized and sufficient funds are available, Applicants are invited to setup a Preapplication Conference and apply for a loan. At the Preapplication Conference TWDB staff explain the application completion process and answer Applicant and consultant questions.

GENERAL INFORMATION

Project Management Overview

Project Management increases the likelihood of successfully completing work efforts on time, within cost targets, with fewer claims and meeting performance criteria.

The key to good project management is to designate a project manager to represent the Applicant in taking charge of all project-related activities, to manage all elements and to lead a team of specialists.

Successfully managing a project requires the balancing of eight essential elements:

1. **Scope** - Define, perform and manage change in scope.
2. **Quality** - Plan, control, improve and chart quality.
3. **Cost** - Estimate, budget and control cost.
4. **Procurement** - Plan and administer procurement.
5. **Time** - Plan, estimate, define and control time schedule.
6. **Risk** - Identify, assess, develop solutions, and control risk.
7. **Human Resources** - Define roles and responsibilities, organize and build the management team.
8. **Communications** - Create and maintain an environment for open communications.

The project manager leads a team of specialists who provide the administrative, technical, financial and legal support for management of the project. Team members typically include: Applicant, Project Manager, Consulting Engineer, Construction Manager, Administrative Support, Technical Advisor, Resident Engineer, Inspector, Financial Advisor, Bond Counsel and Legal Advisor.

Procurement

Note that specific procurement requirements on services, consultants, construction equipment and supplies, must be met in order to qualify as eligible cost for loan assistance. Early attention to procurement requirements prior to loan application, especially the small, minority, and women business enterprise requirements, is necessary to maximize loan funding.

Correspondence

The TWDB will assign your project an identification number, which will be used in the processing and tracking of project information. Applicants and their consultants can promote prompt TWDB processing by including appropriate project identification on all correspondence and deliveries. In the subject line of all correspondence, please indicate your Project Name, TWDB Project Number, and any assigned TWDB Loan Identification or Grant Identification number.

GENERAL INFORMATION***TWDB / Organization and Key Personnel***

TWDB personnel are assigned to a project prior to the Preapplication Conference.

Project Team**Project Manager**

Contact:

Project Reviewer

Contact:

Administrative Technician

Contact:

Financial Analyst

Contact:

Closing Coordinator:

Contact:

Environmental Reviewer

Contact:

Attorney

Contact:

Grant Administration & Special Reporting

Contact:

Small, Minority and Women-Owned Business Enterprise

Contact:

Audit & Funds Management

Contact:

Inspection & Field Support Services

Contact:

Contact:

APPLICATION PHASE

Loan Application

Before applications are accepted, the agency must prepare a Priority List and Intended Use Plan in accordance with 31 TAC 371.21. After the funding line is drawn, the Executive Administrator shall notify in writing all potential Applicants above the funding line of the availability of funds and will invite the submittal of applications.

The loan application should be submitted to the TWDB for review by the date specified in the invitation to submit an application, or at least six weeks prior to the date the TWDB's Board members will meet to decide on an Applicant's commitment, which ever is earlier. The Board usually meets every third Wednesday of the month. The meeting schedule is available on the TWDB Web site at <http://www.twdb.state.tx.us>.

A complete application consists of these major parts:

1. Information about the Applicant and the project, including:
 - (a.) general information;
 - (b.) fiscal information; and
 - (c.) legal information.
2. Engineering information about the project.
3. Environmental information about the project.
4. Water Conservation Plan (if required.)
5. Documentation of Small, Minority, and Women Business Enterprise Utilization.
6. Assurance Forms related to federal funding.

For projects utilizing the Boards' Pre-design Funding (PDF) Option (31 TAC §371.38), some of the detailed engineering and environmental planning work are finalized after the Board takes action on the initial application. This option is for relatively uncomplicated projects that are without controversy, and have low potential for negative environmental impact. Preliminary engineering and environmental information must still be provided in the application under this option. However, completion of the detailed Engineering and Environmental requirements are a prerequisite to the release of funds for the design and construction phases.

, The **Financial Assistance Application Information** consists of an original and ten (10) copies of the **general, fiscal, and legal information**. (See **TWDB Guidance** *Financial Assistance Application Procedures and Requirements*, WRD-006g, for specific details.)

, The **Engineering Information** consists of an Engineering Feasibility Report or if qualifying and applying for the PDF option, a Preliminary Engineering Feasibility Report. The report must be sealed by a professional engineer. Five copies are to be submitted to TWDB. (See **TWDB Guidance**: *Guidelines for the Preparation of Water Supply Engineering Feasibility Reports*, DW-004, for specific details.) The guidance describes engineering information needed for both conventional and PDF applications. Some of the Engineering data is put into the form *Water Project Data*, WRD-253d, (See **TWDB Forms**) and submitted with the application. Note: Under the PDF option, further study and resolution of issues will need to be addressed in the Engineering Feasibility Report prepared during the detailed Planning Phase. Copies of **consultant contracts** for planning, design, construction and post-construction phase services must be submitted. If qualifying for pre-design funding, then the executed contract for the planning phase service must be provided as a minimum.

APPLICATION PHASE

◆ **Environmental Information** is provided in an Environmental Information Document (EID), unless the proposed project qualifies for a categorical exclusion (for projects involving only minor rehabilitation or functional replacement of existing equipment consistent with 371.35(a)(1)(A)). An EID must be prepared containing the information described in *Instructions for Preparing an Environmental Information Document*, DW-001 (See **TWDB Guidance**) and submitted to the TWDB's Environmental Reviewer. Two copies must be submitted to TWDB. Note: When approval of the PDF Option is sought from the Board, the Applicant must provide a discussion of any known permitting, social, or environmental issues that may affect the evaluation of project alternatives or implementation of the proposed project. Following approval of the PDF Option, the Applicant will prepare and coordinate an Environmental Information Document as the planning phase of the project is completed. The environmental assessment process leads to an environmental finding which must be made by the TWDB's Executive Administrator prior to release of funds for design and construction of the proposed project. This finding will specify any environmental mitigative measures applicable to the design, construction and/or operation and maintenance of the proposed facilities.

◆ **Water Conservation Plan.** Two copies of a **Water Conservation Plan (WCP)** are to be submitted if the loan is for more than \$500,000. (See **TWDB Guidance: Water Conservation Plan Guidance Checklist**, WRD-022, for specific details.) 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. An approved plan must be adopted by the Applicant and approved by TWDB before any funds can be released. NOTE: Recipients are required to report annually on the implementation and status of the required water conservation program for a minimum of three years after the date of loan closing.

◆ **Utilizing Small, Minority & Women-Owned Businesses.** In the procurement process for all prime contracts for services, equipment, supplies and construction, the Applicant is required to demonstrate a "good faith effort" towards affording opportunity for Small Business Enterprises, Minority Business Enterprise, Women Business Enterprise, and Small Business in a Rural Area. participation. Applicants typically enter into prime contracts for services such as, but not limited to: Financial Advisors, Bond Counselors, Consulting Engineers, and Construction Contractors. Applicants may also enter into prime contracts for cultural resource investigations, testing, surveying and inspection firms as well as for direct purchases of equipment or supplies. The Applicant should procure in accordance with TWDB's *Guidance for Utilization of Small, Minority & Women-Owned Businesses in Procurement*, SRF-052v3. The Applicant must submit prior to or with the application documentation of "good faith efforts" and completed forms: *Applicant Affirmative Steps Certification and Goals*, WRD-215; *Affirmative Steps Solicitation Report*, WRD-216; *Prime Contractor Affirmative Steps Certification and Goals*, WRD-217; *Loan Grant Participation Summary*, SRF-373; and *SMWBE Self Certification*, WRD-218 (if applicable) for the project and initial procurement of professional services.

◆ If the Applicant has already made procurements prior to applying for TWDB funding, they may finance the costs of these prior procurements by some other means. (See **TWDB Forms & Guidance**).

APPLICATION PHASE

- ◆ **Additional information** as may be required by the Executive Administrator.
- ◆ **Federal Assurance Forms**
 - ◆ **Nondiscrimination Certification.** The TWDB's DWSRF Program is, in part, financed by an EPA capitalization grant. EPA has mandated that Applicants for DWSRF funds complete and submit to the TWDB an EPA 4700-4 (ED-112), *Preaward Compliance Review Report*. This information enables EPA to determine whether Applicants and prospective recipients are developing projects, programs and activities on a nondiscriminatory basis as required by specific statutes. (See **TWDB Forms**).
 - ◆ **Assurances of Construction Programs.** Although the requirements listed on EPA form 424D (*Assurances-Construction Programs*, WRD-206) are met through the normal process of applying for DWSRF assistance and carrying out the project, EPA requires the Applicant to sign this statement of "Assurances" to indicate awareness of and agreement to comply with the Federal requirements of the program. (See **TWDB Forms**).
 - ◆ **Debarment Certification.** The Applicant must submit a *Certification Regarding Debarment, Suspension, and other Responsibility Requirements*, EPA 5700-49, (SRF-404). This certification will also be required of the Contractor in the Construction Phase. (See **TWDB Forms**).

Commitment

If the application is recommended for approval by the TWDB staff, it is typically placed on the TWDB Board meeting agenda no later than three weeks before a Board meeting. Board meetings are normally held every third Wednesday of each month. Applicant representatives are welcome to attend the Board meeting at which the request for funding will be considered; however, attendance is not mandatory.

If the Board approves a financial assistance commitment, the TWDB will send a letter to the Applicant confirming commitment of funds for the project, including the amount of assistance and conditions of the commitment.

Special Requirements for Non-Profit Water Supply (or Sewer Service) Corporations: See Closing Requirements in the PLANNING PHASE section.

Project Management Conference

The Texas Water Development Board strives to ensure that public funds are utilized to build quality projects. Managing a successful public water supply project is no small undertaking. We recommend the use of a project manager, a management team and the development of a management plan. The TWDB will conduct a Project Management Conference (PMC) with the Applicant and Engineer as soon after commitment as possible.

INSTALLMENT CLOSING AND RELEASE OF FUNDS

The DWSRF is a reimbursement program; which means the expenses must have been actually incurred and all costs must be documented by invoices or other acceptable proof of expenditure. Before any installment closing of the loan can be scheduled and funds released certain documentation is required. The term “closing” refers to the time when there is an actual exchanging of bonds for cash.

Note: Prior to final environmental determination and Engineering Feasibility Report approval, only financing and planning phase funds can be released at the closing. Upon full environmental determination and Board action to affirm such determination, reimbursement of design and construction phase funds may be requested. After design approvals and executed contingent construction contract reviews are completed, reimbursement of construction phase costs may be requested.

The Applicant’s Financial Advisor provides the projected closing date with the debt service schedule that is prepared to support the application for financial assistance. If the planned loan closing date changes, then the Applicant’s Financial Advisor should contact the TWDB Closing Coordinator as soon as possible with the new projected closing date. Otherwise the TWDB Closing Coordinator will contact the Applicant, if the closing is not accomplished by the targeted date.

Initial Installment Closing

After a loan commitment is obtained from the Texas Water Development Board, you will need to ensure that loan conditions met and that certain information is submitted to the TWDB Closing Coordinator (see TWDB Organizational and Key Personnel List in previous section.) The initial closing (release of funds) occurs in two phases, the first being the submittal of evidence of compliance with board requirements and preparing draft documents that will support the closing. TWDB will review the Phase One information and resolve any issues with the Applicant that might arise. During Phase One the TWDB will provide a partially completed Outlay Report (SRF-071a) to the applicant which is to be finalized by the Applicant during Phase Two.

The Phase Two includes local adoption of the bond ordinance or resolution, the submittal of the finalized legal documents to TWDB, and the Outlay Report. It is culminated with the actual closing (transfer of funds to the Applicant’s bank account.) The Applicant, will submit all the Phase Two documentation to the TWDB closing Coordinator unless advised otherwise.

Phase One Submittals:

Evidence of compliance with all loan closing requirements set forth in the Board's commitment resolution; all forms and documentation to satisfy the TWDB's evidence of compliance with all loan closing requirements set forth in the Board's commitment resolution;

Confirmation of the date when the local adoption of the bond ordinance/resolution is to occur. The Closing Coordinator should be notified between 45 and 30 days before the planned bond ordinance/resolution adoption date by the Applicant.

INSTALLMENT CLOSING AND RELEASE OF FUNDS

Legal and fiscal information (See items below). Prior to adoption of the bond ordinance or resolution by the Applicant's governing body, the Applicant's bond counsel should submit the following items to the TWDB for approval: (See : *Resolution Standard Conditions for Tax Exempt Loans*, WRD-267, **TWDB Forms**)

- A draft of the Bond Counsel's legal opinion;
 - A copy of the No-Arbitrage Certificate relating to this bond issue;
 - A copy of the No-Litigation Certificate relating to this bond issue (see *No-Litigation Certificate*, WRD238; **TWDB Forms**); and
 - A draft of the proposed bond ordinance or resolution;
- ◆ An approved Water Conservation plan and adopting ordinance or resolution (2 copies), if the loan is for more than \$500,000; NOTE: Recipients are required to report annually on the implementation and status of required water conservation program for a minimum of three years after date of loan closing;
 - ◆ Any remaining executed engineering contracts and other services contracts (including Minority and Women Owned Business Enterprise documentation: *Affirmative Steps Solicitation Report*, WRD-216; *Prime Contractor Affirmative Steps Certification and Goals*, WRD-217; and *Loan Grant Participation Summary*, SRF-373) which have not previously been submitted;
 - ◆ Any contracts by which the Applicant purchases or sells water or sewage services. Prior to executing new contracts, the Applicant should submit such contracts in draft form to the TWDB for approval;
 - ◆ A Sufficiency of Funds Statement. The Sufficiency of Funds Statement is a letter requesting loan closing, release of funds for bond issuance costs and planning phase funds and states that the Applicant has "sufficient" funds to construct the project. A current budget of costs and sources of funds should also be included with the statement;
- If applicable, documentation pertinent to Design Phase Costs. (See DESIGN PHASE - Release of Funds for Design);
- If applicable, documentation pertinent to Construction Phase Costs. (See CONSTRUCTION PHASE - Release of Funds for Construction); **and**

Texas Application for Payee Identification Number form AP-152. (See: **TWDB Forms**); Federal Regulations require that the Applicant furnish the TWDB with both its Federal Tax ID number and bank wire-transfer instructions before any request for funds can be paid. To avoid delays in processing, the Applicant should send this information to its TWDB contact as soon as possible. The requirement for Federal Tax ID number is satisfied by a completed *Texas Application for Payee Identification Number* form AP-152 available from the Texas State Comptrollers web site at: <http://www.window.state.tx.us/taxinfo/taxforms/ap-152.pdf> . To change or correct information after an

INSTALLMENT CLOSING AND RELEASE OF FUNDS

application for the payee identification number has been processed, complete Payee Change Request form 74-157 available at the Texas State Comptroller's web site at:

<http://www.window.state.tx.us/taxinfo/taxforms/74-157.pdf>.

After the above information has been approved by the TWDB Regional Project Manager, the Applicant's governing body must adopt the bond ordinance or resolution, obtain Attorney General approval of the debt instruments, and submit Phase Two information to TWDB.

Phase Two Submissions

- , A certified copy of the bond ordinance or resolution;
- , A certified copy of the Bond Counsel's Legal Opinion, No-Arbitrage Certificate, and No-Litigation Certificate;
- , Unqualified approving opinion of the Attorney General of Texas;
- , Certification from the Comptroller of Public Accounts that such debt has been registered in its office;
- , IRS form 8038, if Tax Exempt debt (**see: TWDB Forms**);; (<http://www.irs.gov/formspubs/lists/0,,id=97817,00.html>); and,
- ◆ A completed form *DWSRF Outlay Report*, SRF-071a. (**See TWDB Forms** and guidance on Completion of DWSRF Outlay Report in this section.) Outlay reports must be accompanied by documentation supporting all project expenditures, other uses of bond proceeds, and related investment earnings derived from the sale of bonds to TWDB.

After the Phase Two information is received, the Audit and Funds Management Staff will schedule a bond closing date and notify the Applicant or designated representative (typically the Financial Advisor). Typically, the closing is within a week of receiving the Phase Two information.

Second and Subsequent Installment Closings

After the initial installment is made, the following items must be submitted to the TWDB's Grant Administration and Special Reporting Section with each subsequent request for reimbursement (installment closing):

1. A completed form SRF-071a, DWSRF Outlay Report. (See TWDB Forms Appendix F, and Guidance on Completion of DWSRF Outlay Report in this section.) Outlay reports must be accompanied by documentation supporting all project expenditures, other uses of bond proceeds, and related investment earnings derived from the sale of bonds to TWDB.
2. A No-Arbitrage certificate is required for each bond issuance. However, once the bond issuances total \$50,000 or 5% of the total amount of the bond, no further No-Arbitrage certificates will be required.

INSTALLMENT CLOSING AND RELEASE OF FUNDS

3. An up-to-date executed No-Litigation Certificate is required for each installment closing. (See TWDB Forms for example)
4. If applicable and not previously submitted, documentation applicable to Design Phase Costs. (See DESIGN PHASE - Release of Funds for Design); and,
5. If applicable and not previously submitted, documentation applicable to Construction Phase Costs. (See CONSTRUCTION PHASE - Release of Funds for Construction)

Guidance on Completion of DWSRF Outlay Reports (SRF-071a)

The Applicant should submit to the TWDB form SRF-071a, DWSRF Outlay Report, each month. (See TWDB Forms). Outlay reports serve as the Applicant's official declaration of costs incurred in accomplishing this specific project. Outlay reports must be accompanied by documentation supporting all project expenditures, other uses of bond proceeds, and related investment earnings derived from the sale of bonds to TWDB. The key policies and procedures may be summarized as follows:

1. The Outlay Report for the first Installment Closing shall list the TWDB origination fee as a reimbursable cost. (If the loan includes a "loan forgiveness" component, then contact your Closing Coordinator for instructions on how to calculate the origination fee.)
2. Appropriate documentation for the Outlay Report generally consists of invoices, though receipts or copies of canceled checks may sometimes be used. The recipient must provide documentation for each reimbursable cost, except the origination fee.
3. Since the DWSRF can only disburse funds in amounts divisible by \$5,000, please note that--under some conditions--requests for less than \$10,000 may not be payable at all (or payable in full) until they are combined with later Outlay Reports. (Note: Small loans may be closed in \$1,000 increments, only when so specified in the bond ordinance.)
4. The No-Arbitrage certificate, also known as the "Certificate as to Tax Exemption", must be signed by an authorized representative of the Applicant and submitted to the TWDB with the first Outlay Report. Additional No-Arbitrage Certificates must be submitted until the bond issuances total \$50,000 or 5% of the total amount of the bond expected to be closed by installments. Additional Note: the No-Arbitrage certification will not be required on Outlay Reports which request no funds from the TWDB.
5. Where an invoice includes both work done for this project and work for other projects not funded by the TWDB, the invoice shall have information showing how much of the invoice applies to this DWSRF project. A handwritten figure of the percentage and amount attributed to DWSRF on the invoice is usually sufficient, though the Applicant may be required to furnish further documentation later if state or Federal auditors request it.
6. Each construction invoice shall be signed and dated by an authorized representative of the construction company, the engineering firm, and the Applicant.

INSTALLMENT CLOSING AND RELEASE OF FUNDS

7. To speed up processing the Outlay Report, please attach a spreadsheet or schedule (either handwritten or created by computer) showing how all the invoices in a single budget category (such as engineering) add up to the total of that category claimed on the Outlay Report.
8. Important note: within each budget category (engineering, construction, etc.) the TWDB can only reimburse the Applicant up to the TWDB-approved amount of that category. Expenditures in that category, which exceed that amount, cannot be reimbursed. If the Applicant wishes to cover higher-than-expected expenses in one category by moving funds from one category to another, the Applicant must contact the TWDB engineer to request a budget amendment prior to submission of such costs.
9. The instructions for the Outlay Report refer to a "*No-Litigation Certificate*" which will be required with each Outlay Report (**See TWDB Forms; WRD-238**). We recommend you consult with legal counsel in order to comply with this requirement. It is not necessary to hire outside legal counsel; the Applicant's in-house counsel can attest to any pending litigation. (If the Applicant is a municipality, this can be done by the City/County Attorney).
10. Regulations require that the Applicant furnish the TWDB with both its Federal Tax ID number and bank wire-transfer instructions before any request for funds can be paid. To avoid delays in processing, the Applicant should send this information to its TWDB contact as soon as possible.

If the project is funded under the Pre-Design Funding Option, then the Planning Phase consists of preparation of the Engineering Feasibility Report (EFR), (If a preliminary EFR was submitted at Application), Environmental Information Document (EID), and initial work required to obtain the project site, easements and necessary permits. In the conventional Loan option, these reports and work are accomplished prior to the application being acted upon by the Board.

Also required is an attorney's opinion letter regarding the legal validity and enforceability of the debt incurred by the political subdivision and evidenced by its bond or promissory note and the related security instruments. This item must be submitted after a loan commitment is made. See **TWDB Forms** for samples of these documents. Note that they may need to be modified for individual projects.

INSTALLMENT CLOSING AND RELEASE OF FUNDS

NOTES:

PLANNING PHASE

Release of Funds for Planning

See **INSTALLMENT LOAN CLOSING AND RELEASE OF FUNDS** - Initial Installment, for what documents must be provided to obtain funds for Planning.

Engineering Feasibility Report (EFR)

The loan from the TWDB to the Applicant is based on the scope of work as outlined in the EFR. The EFR should include the information as outlined in *Guidelines for the Preparation of Engineering Feasibility Reports*, WRD-004 (**See TWDB Guidance**), and be sent to the TWDB Project Reviewer. The EFR must be bound and sealed by a professional engineer registered in Texas. This report contains the design calculations and other information necessary to evaluate compliance with *Chapter 290 Rules, Water Hygiene*. The EFR should include the following basic information:

- ◆ Description and purpose of the project;
- ◆ Entities to be served and future population;
- ◆ Cost of the project;
- ◆ A description of innovative and conventional alternatives considered and reasons for the selection of the project proposed;
- ◆ Sufficient information to evaluate the project's engineering feasibility;
- ◆ Maps and drawings as necessary to locate and describe the project area;
- ◆ Water Rights Permits;
- ◆ Water Supply Contracts; and
- ◆ Additional information as necessary.

Environmental Information Document (EID)

An Environmental Information Document (EID) must be prepared containing the information described in *Instructions for the Preparation of an Environmental Information Document*, DW-001 (**See TWDB Guidance**) and submitted to the TWDB's Environmental Reviewer. However, if the proposed project qualifies for a categorical exclusion (for projects involving only minor rehabilitation or functional replacement of existing equipment consistent with 371.35(a)(1)(A).) Note: The EFR cannot be approved and no funds for design or construction can be released until the TWDB environmental review process for the DWSRF program has been completed.

PLANNING PHASE

Permits

The Applicant or Consulting Engineer should apply early for all permits required for the project. If the Applicant or Consulting Engineer anticipate or are advised that permits may be required for the project, actions should be taken to secure such permits as soon as practicable prior to completion of plans and specifications and advertising for construction bids. Permits typically include the following:

- < Railroad crossing permits. Both overhead and underground permits usually take a long time to secure;
- < Highway crossings and right-of-way permits. If these are to be obtained by the contractor then the contract documents should address this;
- < Corp of Engineers Wetlands/Waters of the United States (Clean Water Act Section 404) permits may take a long time to obtain;
- < Drainage/Flood permits;
- < Permits and reviews required by local building and utility departments;
- < Electric Permits. If required, make sure a new or upgraded power supply to the facility is provided in time to avoid delaying the contractor; and
- < Certificate of Convenience and Necessity, if required.

Land Acquisition, Right-of-Way, and Easements

Land and easements acquisition needs should be addressed early in the planning phase. Note that any site or land acquisitions **must** meet all requirements of the Uniform Relocation and Real Property Acquisition Policies Act of 1970, PL 912-646 in order to be potentially eligible for DWSRF funding. The Applicant should submit to the TWDB Project Reviewer appropriate appraisals / appraisal reviews, proposed offers, executed contracts, deed recordation, site / survey boundary maps, etc. necessary to clear the acquisitions for loan funding. Subsequently, the Applicant should submit a *Site Certificate*, ED-101 (**See TWDB Forms**), or evidence of authority to acquire the site before advertising for bids.

- ◆ Land - Acquisition should be completed in advance of design or as soon as possible to avoid redesign of the project. Before committing to purchase land, the Applicant should perform an initial site assessment to verify that hazardous waste contamination of the site has not occurred. (**See TWDB Guidance: Outline for DWSRF Environmental Information Document, DW-001**)
- ◆ Right-of-Way - Easements are often required for the installation of new water lines.
- ◆ Easements - TNRCC regulations require Sanitary Control Easements around all new water wells. Generally, a deed-recorded restrictive easement for pollution abatement is required. This issue should be addressed in the Preliminary Engineering Feasibility Report. The deed-recorded easement should be submitted during the TWDB's design phase review of plans and specifications.

PLANNING PHASE

Water Rights

Section 17.123 of the Texas Water Code requires that before the TWDB can deliver construction funds to an Applicant proposing water development, the Applicant must supply information from which the Executive Administrator can make a written finding that the Applicant will have sufficient water rights to appropriate and use water the project will provide.

Underground Water Rights

If utilizing ground-water well(s), the Applicant should submit to the TWDB Attorney a *Groundwater Rights Questionnaire*, WRD-208a, and a *Groundwater Rights Affidavit*, WRD-208b. (See **TWDB Forms**).

- ◆ *Groundwater Rights Questionnaire* (WRD-208a) - The Applicant should complete the Questionnaire.
- ◆ *Groundwater Rights Affidavit* (WRD-208b) - An officer of a local title company should complete the Affidavit.

After review and approval of these two documents, the Executive Administrator will issue a certification that the Applicant will have sufficient water rights.

Surface Water Rights

If the project includes development of surface water, then the Applicant is to provide evidence to the TWDB Attorney that it has the necessary water rights to appropriate and use the water the project will provide, or that it has a supply contract with the water rights Holder for an adequate water supply over the life of the loan.

DESIGN PHASE

The Design Phase consists of final modifications (if necessary) to the EFR, and preparation of the Plans & Specifications. Acquisition of the sites and easements and issuance of all permits should also be completed by the end of the design phase.

Release of Funds for Design

See Installment Closing and Release of Funds section for additional details. The following items must be submitted to the TWDB's Project Reviewer (or actions taken) prior to including the costs within a reimbursement request (installment closing):

- , Engineering Feasibility Report (Approved by the TWDB);
- , An approved environmental determination. If the environmental determination was not issued and final determination made by the TWDB Executive Administrator prior to the TWDB's commitment, then TWDB Board action must be taken to affirm the determination and finding prior to release of funds for design;
- , An executed engineering contract for design phase services including Minority and Women Owned Business Enterprise documentation;
- , A description of force account work planned, if any design work is to be done by the Applicant;
- , A proposed budget for the design work, if it differs from the project budget submitted previously for the loan commitment and a *Sufficiency of Funds Statement*;
- , A proposed schedule for completion of the design work, if it differs from the schedule completed for the loan commitment; and
- , Depending on the project, obtaining applicable permits may be required before design funds are released.

After the above information is complete, the Project Reviewer will issue a memo to the TWDB's Audit & Funds Management office authorizing the release of funds for design. The actual release of funds is arranged by the TWDB's Audit & Funds Management office and the Applicant's Financial Advisor.

Note: Design work previously completed can be reimbursed as long as it is within the scope of the project approved in the loan commitment and meets environmental and engineering approvals.

DESIGN PHASE

Design Phase Submittals

The Applicant or Consulting Engineer should submit the following items to the TWDB Project Reviewer:

- ◆ Site map showing Sanitary Control Easements, if applicable (1 copy);
- ◆ Purchase or lease agreements for land required for the project (1 copy);
- ◆ Complete **Plans & Specifications** (3 copies of draft for review, 4 copies of final version for approval). [More information found in succeeding paragraphs];
- ◆ Geotechnical Report, if available (2 copies); and
- ◆ *Site Certificate*, ED-101 (**See TWDB Forms**), signed by the Applicant's representative. (1 copy).

Water Hygiene Rules

TNRCC Water Hygiene Rules should be followed in the design of all work affecting water supply systems in the state. The TWDB has been delegated the responsibility of performing the Water Hygiene Rule review usually performed by TNRCC for distribution systems and coordinates the review of water treatment plants and wells with TNRCC. A requirement of this review is for the Applicant's Consulting Engineer to prepare and submit Plans & Specifications for review.

DESIGN PHASE

Plans and Specifications

The Applicant should submit three (3) copies of the plans and specifications for initial review. Ultimately four (4) copies of the final plans and specifications will be needed for the TWDB approval. The plans and specifications must be bound and sealed by a professional engineer registered in Texas. All engineering reports and plans & specifications will be compared to the EFR. The Applicant should immediately bring to the attention of the TWDB Project Reviewer all major changes, revisions and amendments to the EFR reflected in the plans and specifications. These amendments to the EFR may require revisions to the Environmental Information Document (EID). Significant changes to the project scope that occur after a loan commitment is made, may require Board approval.

In addition to compliance with the TNRCC's *Chapter 290 Rules, Water Hygiene*, the plans and specifications will be checked for completeness, consistency, biddability and constructability.

Plans and Specifications should include the following:

- ◆ *Supplemental Contract Conditions ED-004e (See TWDB Forms)*. This document is distributed to all Applicants and Consulting Engineers to assist the Applicant with complying with certain statutes and regulations which specifically relate to construction contracts receiving TWDB's loan programs (i.e. Emergency discovery conditions for Archeological and Endangered Species). These conditions along with any necessary supersede provisions, should be incorporated into the other General and Special Conditions that are normally in the construction contract documents.
- ◆ SMWBE Requirements (SRF-052v3) which are also included within the Supplemental Contract Conditions, ED-004e (**See Bidding Phase, and TWDB Forms**). This includes *Affirmative Steps Solicitation Report*, WRD-216; *Prime Contractor Affirmative Steps Certification and Goals*, WRD-217; *Loan Grant Participation Summary*, SRF-373; and *SMWBE Self Certification*, WRD-218.
- ◆ *Contractor's Act of Assurance*, ED-103 (**See TWDB Forms**);
- ◆ *Contractor's Resolution on Authorized Representative*, ED-104. (**See TWDB Forms**);
- ◆ *Certification Regarding Debarment, Suspension and Other Responsibility Matters*, (EPA 5700-49), SRF-404 (**See TWDB Forms**);
- ◆ Current local prevailing Wage Rates;
- ◆ TWDB-provided language for the Invitation to Bid (**See Bidding Phase**); and
- ◆ Any special conditions resulting from the environmental assessment process.

BIDDING PHASE

Competitive bidding is a widely used method of obtaining and selecting contractors for construction projects. Typically, the use of competitive bidding is mandated by law or regulation. This mandate recognizes that competitive bidding provides value to the taxpayers and fairness in the placement of major sums of taxpayer-funded work.

Legal Requirements

The Applicant and Consulting Engineer must comply with *Vernon's Local Government Code on Competitive Bidding Requirements, Chapter 252, Subchapter B*, or other applicable statutes. We recommend that you consult your legal counsel if you have any uncertainty regarding specific bidding laws. Water Supply Corporations are generally expected to competitively bid construction work in the same manner as municipalities.

Invitation to Bid

The Invitation to Bid (or Instructions to Bidders) is typically a short document summarizing key information about the project. Its purpose is to attract bidders, announce the bidding schedule for the project and give sufficient information for prospective bidders to determine whether they should obtain copies of the bidding documents.

On projects receiving TWDB financial assistance the following statements or equivalents should be included in the Contract Documents under the appropriate sections:

- ◆ “This contract is contingent upon release of funds from the Texas Water Development Board.”
- ◆ "Any contract or contracts awarded under this Invitation for Bids are expected to be funded in part by a loan from the Texas Water Development Board. Neither the State of Texas nor any of its departments, agencies, or employees are or will be a party to this Invitation for Bids or any resulting contract."
- ◆ “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.”
- ◆ This contract is subject to the EPA established Minority Business Enterprise (MBE) / Women’s Business Enterprise (WBE) “fair share” goals. TWDB document *Guidance for Utilization of Small, Minority and Women Owned Businesses*, SRF-52v3 describes the requirements of this program
MBE: CONSTRUCTION 10.3%; SUPPLIES 5%; SERVICES 11.5%; EQUIPMENT 5%.
WBE: CONSTRUCTION 5.9%; SUPPLIES 7.6%; SERVICES 14.5%; EQUIPMENT 7.6%.

BIDDING PHASE

Advertising

Authorization from TWDB's Project Reviewer should be obtained prior to advertising bids.

Before advertising, the Applicant or Engineering Consultant should have obtained the following:

- , TWDB approval of Plans & Specifications;
- , Acquisition of all needed project sites certified to TWDB on *Site Certificate*; ED-101 (see **TWDB Forms**);
- , A resident inspection proposal clearance from TWDB including contract, inspector's name, relevant inspection experience, and organizational reporting structure. For more specific details refer to *Guidelines for Inspector Qualifications*, ED-005 (**See TWDB Guidance**).
- , Water Rights permits from TNRCC, if required; and
- , All other permits and authorizations required by federal, state & local agencies.

The Applicant must give special consideration to the notice requirements of state law on competitive bidding. The following are two important provisions of this law.

- , The notice should be published once a week for two consecutive weeks in a newspaper published in the municipality. (**See TWDB Guidance**, *Guidance for Utilization of Small, Minority, and Women Owned Businesses*, SRF-052v3 for additional guidance on SMWBE requirements)
- , The date of the first publication should be before the 14th day before the date set to open the bids; however, we recommend a longer advertising period of 30 days to allow contractors sufficient time to assemble their bid.

Addenda

Addenda are written or graphic documents intended to clarify, revise, add to or delete from the original documents. It is important that the bidding documents require bidders to acknowledge receipt of all addenda with their bids. The acknowledgment ensures that all bidders are bidding on the same effort.

Four copies of the addenda should be submitted to TWDB concurrent with issuance to Bidders. The TWDB Project Reviewer will review and approve addenda prior to authorization to award.

To ensure that all bidders are bidding on the same effort, addenda should be issued in an expeditious manner to all document holders of record. If addenda cannot be issued to bidders 4 days in advance of bid opening, a brief postponement of the bid opening may be justified.

BIDDING PHASE

Prebid Conference

Prebid conferences are useful to familiarize prospective bidders with the site and scope of the work on projects.

TWDB's Field Office staff should be notified concurrent with Bidders of the time, date and place of the prebid conference. Procedures to follow at the prebid conference should be established ahead of time.

- ◆ It is advisable that no oral statements be made at the conference that cannot be appropriately reduced to written form in subsequent addenda.
- ◆ Special provisions, such as the contractor's SMWBE requirements, should be covered in detail. Bidders should be made aware that even if the SMWBE goal is achieved, documentation is required showing that a good faith effort was made. Contact the TWDB SMWBE Coordinator for more information on documentation requirements. The SMWBE Coordinator is available to attend Prebid Conferences.

Bid Opening

Procedures to follow at the bid opening should be established ahead of time and be coordinated with the Instructions to Bidders. The TWDB Project Reviewer should be notified concurrent with Bidders of the time, date and place of the bid opening.

Bid and Bidder Evaluation

After the bids have been opened and tabulated, the Applicant and Consulting Engineer should evaluate the bids and bidders to make certain decisions with respect to award of the contract to the low, responsive, responsible bidder.

- ◆ Bidder evaluation is generally based on responsibility. Responsibility criteria typically consists of the following:
 - < Financial resources;
 - < Experience, organization and equipment;
 - < Ability to comply with required performance schedule, taking into account all existing commitments; and
 - < Satisfactory record of performance, integrity, judgement and skills.
- ◆ Bid evaluation is generally based on responsiveness. Responsiveness is the conformity with all material conditions of the invitation. The underlying purpose for the insistence on responsive bids is that all bidders should stand on an equal footing, so that the integrity of the competitive bidding system may be maintained.

BIDDING PHASE

Bidding Documents

Bid Documents Submittals - The TWDB Project Reviewer should receive the following information and documents as soon as possible after bid opening and before execution of the construction contract.

- , Tabulation of bids;
- , Proposal of the lowest responsive, responsible bidder with proof of Bid Bond or other Bid Security;
- , Certified copy of advertisement for bids;
- , Consulting Engineer's recommendation to Applicant for award;
- , Explanation for any rejected bids or otherwise disqualified bidders; and
- , SMWBE documentation *Affirmative Steps Solicitation Report*, WRD 216, completed by the Applicant describing its procurement efforts, *Prime Contractor Affirmative Steps Certification and Goals*, WRD-217 provided by the Contractor. If the Contractor will subcontract work also include *Affirmative Steps Solicitation Report*, WRD-216 and *Loan/Grant Participation Summary*, SRF-373 (See **TWDB Forms**) certified by the Applicant
- , *Certification Regarding Debarment, Suspension and Other Responsibility Matters*, (EPA 5700-49), SRF-404 (See **TWDB Forms**);
- , TWDB form *Site Certificate*, ED-101, or evidence of authority to acquire the site, if not previously submitted. (See **TWDB Forms**); and
- , A resident inspection proposal including contract, inspector's name, relevant inspection experience, and organizational reporting structure, if not previously submitted;
- , Groundwater Right *Questionnaire* and *Affidavit*, WRD-208a and WRD-208b, if not already submitted. (See **TWDB Forms**).

Contingent Award

After receiving and reviewing the information identified as bid document submittals, the TWDB Project Reviewer will authorize the Applicant (by phone) to contingently award the construction contract.

Contract Award Document Submittals - The TWDB Project Reviewer should receive the following information and documents as soon as possible after contract award and prior to sending the Applicant a letter concurring in the award of the contract and authorizing the issuance of the Notice to Proceed.

- , Fully executed and bound construction contract documents copy (1), including but not limited to the following:

BIDDING PHASE

- Specifications as approved by TWDB with executed bid proposal;
- Executed Bid, Payment, Performance, and other Bonds with Power of Attorney;
- Contingently executed Contract Agreement;
- Proof of Insurance Certificate;
- Executed *Contractor's Act of Assurance*, ED-103 (**See TWDB Forms**);
- Executed *Contractor's Resolution on Authorized Representative*, ED-104 (**See TWDB Forms**);
- Executed *Certification Regarding Debarment, Suspension and Other Responsibility Matters*, (EPA 5700-49), SRF-404 (**See TWDB Forms**);and
- SMWBE Documentation: Applicant's *Loan Grant Participation Summary*, SRF-373 if any change has occurred from what was submitted with the bid documents.

Sufficiency of Funds Statement (a letter) describing the revised/current budget and all sources and uses of funds.

CONSTRUCTION PHASE

It is in the best interest of the Applicant to ensure that all prerequisites are in place prior to initiating construction and that construction is performed in accordance with the approved contract documents. The goals are to avoid disputes over loan eligibility or contractor payments and to get the facility that the Applicant paid to have designed and constructed.

Release of Funds for Construction

See Installment Closing and Release of Funds section for additional details.

If the environmental determination was not issued and final determination not made by the TWDB Executive Administrator prior to the TWDB's commitment, then TWDB Board action must be taken to affirm the subsequent environmental determination and finding prior to the initiation of construction.

Prior to initiation of construction it is essential to receive TWDB clearance on bid documents and bound contingently executed construction contract documents resident inspection proposal, sufficiency of funds letter, water rights certification, permits, site certificate and any other necessary items. If during construction additional procurements or subcontracting occurs, the Contract and/or Applicant, as applicable, must prepare an updated *Affirmative Steps Solicitation Report*, WRD 216, and *SMWBE Loan/Grant Participation Summary* SRF-373 (See **TWDB Forms**)

Preconstruction Conference

A preconstruction conference should be conducted for each significant construction contract. TWDB field office staff should be invited and notified of the time, date, and place.

Notice to Proceed

After approval of contingently executed contract documents, TWDB will authorize the issuance of a Notice to Proceed and the TWDB Field Representative and Project Reviewer should receive a copy of the notice.

TWDB Access and Inspection

Access to the project and any records related to it should be provided to TWDB personnel. The Applicant's bond resolution/ordinance or loan agreement is contingent on constructing the facility in accordance with the contract documents approved by the TWDB.

, Inspections - The TWDB will make monthly scheduled and unscheduled inspections. The primary purpose of our inspections is to keep the TWDB informed of the construction phase activities and progress of each contract.

, Reports - TWDB inspection reports will be made available to the Applicant and the Consulting Engineer. The report and inspections are not intended to relieve the Applicant of the responsibility to provide adequate on-site inspection and engineering review to determine acceptability of the work and compliance with the contract documents.

CONSTRUCTION PHASE

Applicant Inspection

The Applicant should provide adequate inspection of the project under the supervision of a registered professional engineer and require the Engineer's assurance that the work is being performed in a satisfactory manner in accordance with the plans and specifications.

- ◆ Adequate inspection of construction work should be provided by qualified inspectors. (See **TWDB Guidance**) for *Guidelines for Inspector Qualifications*, ED-005.
- ◆ Give consideration to the number and nature of contracts which will be active at the same time when planning the inspection schedule
- ◆ Require a thorough daily log of activities. The Applicant should receive copies of the daily log to review construction progress and problems and to protect your interests should disputes arise. (See **TWDB Guidance**) *Inspector's Daily Report*, WRD-019.
- ◆ Make sure that all required testing is conducted, observed and documented. Be familiar with the testing and payment provisions in the specifications. If possible, it is a good idea to withhold payment for all or a portion of a pay item until all testing has been completed and is acceptable. Testing is a protection of the Applicant's investment, and the cost is relatively small. Do not hesitate to test any item you question.
- ◆ Require the contractor to submit a schedule and update it as necessary. To avoid claims, accept, but don't approve, construction schedules, especially if they indicate completion prior to the approved contract completion date.
- ◆ Verify pay requests and invoices before making payment to the Contractor.
- ◆ Verify Contractor compliance with OSHA regulations for excavation safety. In addition, State Law requires that the contract documents include safety provisions with excavation protection in accordance with OSHA standards as a pay item. As with any bid item, performance of work in accordance with the contract documents should be verified before payment. Reference *OSHA Safety and Health Standards (29 CFR 1926/1910)*.

CONSTRUCTION PHASE

Contractor Claims

Awareness, documentation & communication will aid in prevention & resolution of contractor claims. Loan money may not be eligible for increased costs due to claims.

◆ Common causes of claims:

- , Defects in the contract documents.
- , Differing site conditions.
- , Inadequate construction inspection and/or direction from multiple sources.
- , Failure to promptly and fairly address contractor claims, grievances, requests for time extensions, or other problems.
- , Warranty problems.

◆ Tips on claims prevention:

- , Conduct or attend monthly meetings with the contractor and Consulting Engineer; discuss any unresolved disputes and document the discussions.
- , Discuss the project with your consultant and review daily logs or monthly summaries of progress.
- , Maintain fully documented records of all aspects of work, including pay requests, requests for change orders, disputes, inspector logs, test results and correspondence from the contractor and Consulting Engineer.
- , Provide a timely response to contractor requests for direction, clarification and changes in work
- , Review specifications for arbitration requirements and be aware of what rights each party has in disputes.
- , Review how the warranty is addressed in the specifications.
- , If warranty provisions are not clear in the specifications, discuss them at the preconstruction conference and clarify them in writing at the beginning of the job. Agree to a warranty start date for individual pieces of equipment for phased startup, or for the entire job.
- , Put acceptance of the project or of each segment of the project in writing and address the warranty in that document.

CONSTRUCTION PHASE

Retainage

Generally a minimum of 5% retainage is required by law on all state-loan-funded projects.

- ◆ The amount, deposit and investment requirements for retainage are unique to each construction project. If there is any uncertainty regarding specific situations, the Applicant's legal counsel should be consulted.
- ◆ Retainage must not be released or reduced below 5% without the consent of the TWDB. A Certificate of Approval will be issued by TWDB after each contract is finalized and close out materials have been provided to the TWDB Project Reviewer. This Certificate of Approval authorizes the Applicant to release the retainage to the contractor.

Change Orders

The construction contract is between the Applicant and the Contractor, and any change orders signed by these two parties become part of that contract, regardless of TWDB funding eligibility or participation. The TWDB needs to review and approve all change orders.

- ◆ The TWDB reviews and approves change orders for the following:
 - , Eligibility of funding;
 - , Compliance with Water Hygiene Rules; and
 - , Environmental Determination.
- ◆ A change order resulting in a change of scope of the project may require action by the TWDB.
- ◆ A change order requiring a variance from Chapter 290, Water Hygiene Rules, may require action by TNRCC.
- ◆ The following are conditions that may warrant a change order:
 - , Changes in project scope;
 - , Changes in contract costs or amounts;
 - , Errors and omissions in the contract documents;
 - , Changes instituted by regulatory agencies;
 - , Design changes; and
 - , Factors affecting time of completion.

CONSTRUCTION PHASE

- , The following are recommendations on handling and expediting change orders:
 - , Determine if a change is necessary.
 - , Document the reason for the change.
 - , Respond promptly to the Contractor's requests for changes, or initiate your changes as soon as possible to avoid claims for delays.
 - , Obtain independent estimates of the cost of the change (plus or minus) at least from the Contractor and the Consulting Engineer and negotiate a fair price. Keep records of the estimates and negotiations.
 - , Address time adjustments (or lack thereof) for each item of work.
- ◆ TWDB assistance -- The TWDB field inspector will track change orders at each inspection and should be informed of potential changes.
 - , Call the TWDB Project Reviewer at any stage to obtain a preliminary determination of eligibility and availability of funds. However, final determination cannot be made until the signed change order and documentation have been received by the TWDB.
 - , Submit the change order (3 copies) with all supporting data to the TWDB's Review Engineer for a TWDB eligibility determination, as soon as it has been enacted.
- ◆ Form of Submittal -- The TWDB will review fully executed change orders. Change orders should address the following:
 - , Scope of change with identified adjustments to plans and specifications;
 - , Justification for the change;
 - , Effect the change has on cost of the project; and
 - , Effect the change has on the time schedule.

Project Records

It is in the Applicant's interest to keep an organized system of documentation for the project. (See **TWDB Guidance *Project Files & Construction Records***, WRD-017.)

CONSTRUCTION PHASE

Operations

Hire and train operating personnel. The people who will run the facility should be available during the later stages of construction and start-up, and if possible, should have some input into the O&M manual.

- , Personnel for new facilities should be hired and trained during the construction phase.
- , Operating personnel should visit the project during construction, but should be warned to give no direction to the Contractor. However, their comments and suggestions should be forwarded to the Consulting Engineer for consideration.
- , Training prior to acceptance of the facility should include review of the O&M manual and, if possible, on-site training by supplier's representatives during start-up.
- , Staffing should be in accordance with the Operation and Maintenance manual.

Operation & Maintenance (O&M) Manuals

Preparation of an O&M manual is encouraged and is an eligible use of TWDB funds. The TWDB staff will make a cursory review of any manual prepared in order to assist the Applicant in receiving a quality O&M manual.

CONSTRUCTION PHASE

TWDB Closeout Submittals

The following information and documents should be submitted to the TWDB Project Reviewer prior to TWDB issuance of a Certificate of Approval and authorization of release of final retainage:

- , A copy of the Contractor's final payment estimate and three (3) copies of any outstanding Change Orders not approved by TWDB to date;
- , An affidavit by the contractor that all bills have been paid;
- , Notice of Completion, commencing the one year warranty period;
- , Consulting Engineer's certification to the Applicant that the project has been completed and that the work was constructed in accordance with the plans and specifications;
- , Acceptance of the work under this contract by the Applicant in the form of a written resolution or other formal action; and
- , Notification of the status of As-built or Record Drawings for the Applicant.

Post Construction

The TWDB has an interest in the continuing performance of the facility for the life of the loan.

- ◆ TWDB representatives may make a visit to the facility during the one-year warranty period to assist the Applicant in reviewing performance, operations and maintenance.
- ◆ If requested by the Applicant, TWDB will conduct First Year Operations Assistance visits to assist the Applicant in evaluating the facility.
- ◆ TWDB's Audit Staff will monitor the Applicant for the life of the loan to ensure compliance with the bond indenture.
- ◆ The water conservation plan required by the loan should remain in effect for the life of the loan. Recipients of financial assistance of greater than \$500,000 are required to report annually on the implementation and status of the required water conservation program for a minimum of three years after the date of loan closing.
- ◆ TWDB staff will monitor compliance with any special environmental mitigative measures, as appropriate.

AUDIT PHASE

The Audit Staff of TWDB is responsible for monitoring the Applicant's financial stability and compliance from the first receipt of funds until final bond interest payment. The Audit staff is available to come to the Applicant's location to assist in financial compliance matters. (See **TWDB Guidance**, for *Finance-Related Legal and Contractual Requirements*, WRD-018.)

Major Goal

The Audit staffs goal is to provide the TWDB with reasonable assurances that all grant and loan recipients use their assistance funds in accordance with applicable laws, regulations, and contractual provisions.

Loan Monitoring

The Audit Staff monitors loan activities, including annual financial stability reviews of every entity in the TWDB's portfolio. In addition, the audit staff makes monthly or quarterly stability reviews of selected borrowers and provides on-site assistance and monitoring visits.

Project Monitoring

Project monitoring activities include financial compliance reviews, final accounting examinations and the review and resolution of federal single audits.