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# Oklahoma Capacity Development Strategy

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Revised June 2009

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- 4 DEQ/ORWA Technical Assistance Contract
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## References

Title 27A - (<http://www.lsb.state.ok.us/osstatuestitle.html>)

DEQ Regulation OAC 252:626 PWS Construction Standards - (<http://www.deq.state.ok.us/rules/626.pdf>)

DEQ Regulation OAC 252:710 Waterworks and Wastewater Works Operator Certification - ([http://www.deq.state.ok.us/wqdnew/forms/form\\_710-001\\_operator\\_certification\\_exam\\_application\\_package\\_jan\\_2009.pdf](http://www.deq.state.ok.us/wqdnew/forms/form_710-001_operator_certification_exam_application_package_jan_2009.pdf))

OWRB Statute - (<http://www.oscn.net/applications/oscn/deliverdocument.asp?citeid=88570>)

OWRB Regulations (Chapter 50) - ([http://www.owrb.ok.gov/util/rules/pdf\\_rul/2008\\_adopted/Chap50\\_2008.pdf](http://www.owrb.ok.gov/util/rules/pdf_rul/2008_adopted/Chap50_2008.pdf))

OWRB Procedural Documents - (<http://www.owrb.ok.gov/financing/grant/reapgrants.php>)  
([http://www.owrb.ok.gov/financing/pdf\\_fin/REAP.pdf](http://www.owrb.ok.gov/financing/pdf_fin/REAP.pdf))  
([http://www.owrb.ok.gov/financing/grant/pdf\\_gra/REAPapplication.pdf](http://www.owrb.ok.gov/financing/grant/pdf_gra/REAPapplication.pdf))

DOC Statute - (<http://www.oscn.net/applications/oscn/deliverdocument.asp?lookup=Previous&listorder=261000&dbCode=STOKST74&year=>)

DOC Regulations - (<http://www.oar.state.ok.us/oar/codedoc02.nsf/frmMain?OpenFrameSet&Frame=Main&Src=75tnm2shfcdnm8pb4dthj0chedppmcbq8dtmmak31ctijurgcln50ob7ckj42tbkdt374obdcli00>)

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DOC Procedures (2008 Plan Year Manual) -

([http://staging.okcommerce.gov/test1/dmdocuments/2008\\_CDBG\\_State\\_Plan\\_1606082472.pdf](http://staging.okcommerce.gov/test1/dmdocuments/2008_CDBG_State_Plan_1606082472.pdf))

OCC Statute (Title 17) -

(<http://www.lsb.state.ok.us/osstatuestitle.html>)

OCC Regulations -

(<http://www.oar.state.ok.us/oar/codedoc02.nsf/frmMain?OpenFrameSet&Frame=Main&Src=75tnm2shfcdnm8pb4dthj0chedppmcbq8dtmmak31ctijujrgcln50ob7ckj42tbkdt374obdcli00> )

Waterworks and Wastewater Works Operator Certification Act -

(<http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=368911>)

Operator Certification Applications -

([http://www.deq.state.ok.us/wqdnew/forms/form\\_710-001\\_operator\\_certification\\_exam\\_application\\_package\\_jan\\_2009.pdf](http://www.deq.state.ok.us/wqdnew/forms/form_710-001_operator_certification_exam_application_package_jan_2009.pdf))

DEQ Engineering Report Check Sheet -

([http://www.owrb.ok.gov/financing/fact\\_forms.php](http://www.owrb.ok.gov/financing/fact_forms.php))

RD Procedures - (<http://www.rurdev.usda.gov/OK/utilities.htm#waterwaste>)

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## List of Acronyms

**ACO – Administrative Compliance Order**  
**ACPO – Administrative Compliance and Penalty Order**  
**CCR – Consumer Confidence Report**  
**CD – Capacity Development**  
**CDBG – Community Development Block Grant**  
**CDS – Capacity Development Strategy**  
**CO – Consent Order**  
**CRG – Community Resource Group**  
**CWS – Community Water System**  
**CWSRF – Clean Water State Revolving Fund**  
**DEQ – Oklahoma Department of Environmental Quality**  
**DOC – Oklahoma Department of Commerce**  
**DWSRF – Drinking Water State Revolving Fund**  
**EPA – United States Environmental Protection Agency**  
**EPDG – Engineering Planning and Design Grant**  
**FACT – Oklahoma Funding Agency Coordinating Team**  
**HUD – United States Housing and Urban Development**  
**IUP – Intended Use Plan**  
**NOV – Notice of Violation**  
**NTNCWS – Non-Transient Non-Community Water System**  
**OAC – Oklahoma Administrative Code**  
**OCC – Oklahoma Corporation Commission**  
**ORWA – Oklahoma Rural Water Association**  
**OWRB – Oklahoma Water Resources Board**  
**PWS – Public Water Supply**  
**RD – United States Department of Agriculture – Rural Development**  
**REAP – Rural Economic Action Plan of 1996**  
**SDWA – Safe Drinking Water Act – 1996 Amendments**  
**SNC – Significant Non-Compliance**  
**SRF – State Revolving Fund**  
**TMF – Technical, Managerial and Financial**  
**TNCWS – Transient Non-Community Water System**  
**UAS – Utility Assistance and Services, Incorporated**  
**WQD – Water Quality Division of the Oklahoma Department of Environmental Quality**

## SECTION 1 COMPLIANCE WITH SDWA REQUIREMENTS

**A. Introduction.** The 1996 Amendments to the SDWA included new drinking water regulations to address issues of Source Water Protection, CCRs, the DWSRF, CD and Operator Certification. These amendments also include requirements for states to obtain authority to:

1. Ensure that new systems have the TMF Capacity to provide safe and affordable drinking water for now and in the future;
2. Ensure that all DWSRF loan recipients have sufficient TMF Capacity prior to receiving loan funds, or an assurance that loan funds will help in achieving the required Capacity; and
3. Develop a strategy to address the capacity of existing systems.

**B. Definition of CD.** CD efforts encompass the TMF Capacity of a water system to achieve, maintain, and plan for compliance with National Primary Drinking Water Standards. The following is defined in the Draft EPA Guidance Document on CD:

1. *Technical Capacity* refers to the physical infrastructure of the water system, including but not limited to the source water adequacy, infrastructure adequacy (source, treatment, storage, and distribution), and the ability of system personnel to implement the requisite technical knowledge.
2. *Managerial Capacity* refers to the management structure of the water system, including but not limited to ownership accountability, staffing and organization, and effective linkages.
3. *Financial Capacity* refers to the financial resources of the water systems, including but not limited to the revenue sufficiency, creditworthiness, and fiscal management and controls.

This document addresses the SDWA requirements for CD and outlines the development of a comprehensive CDS for Oklahoma. DEQ will continue its coordination efforts with other state agencies to provide a comprehensive CD program that meets the requirements of the SDWA.

### **C. State and Federal Agencies Supporting the CDS.**

1. *DEQ* is the designated primacy drinking water agency in Oklahoma and has the responsibility of ensuring compliance with SDWA requirements. The WQD is the organizational unit responsible for public and private drinking water supplies, waterworks and wastewater works operator certification, surface water and ground water quality and protection, and water quality certifications. DEQ has the responsibility of reviewing and approving all planning and designing documents, applications to construct and operate a waterworks, and ensuring that the TMF requirements are met during the life of the plant. DEQ jurisdiction over the Construction Permit process is the main control point through which all public drinking water systems must be approved before construction is initiated and drinking water is supplied to the public.
2. *OWRB* has the following responsibilities relevant to drinking water:

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- a. State water and wastewater loans and grants revolving fund and other related financial aid programs;
- b. Administration of the federal State Revolving Fund Program including, but not limited to:
  - i. Making application for and receiving capitalization grant awards;
  - ii. Wastewater prioritization for funding;
  - iii. Technical and environmental project review; and
  - iv. Financial review and administration;
- c. Licensing of water well drillers and pump installers.

The State of Oklahoma has established four programs by which the OWRB can provide funding for proposed construction of public water systems: REAP; Statewide Water Development Revolving Fund (bond fund); Water Resources Fund (established to fund emergency situations); and DWSRF.

3. *DOC* was designated in 1982 as the state agency for administering the CDBG Program. Funded by HUD, the CDBG program allows cities, towns, and counties to apply for funds that may be used to construct, improve, or expand municipal water and/or wastewater infrastructure systems to benefit low-to-moderate income households. Additionally, *DOC* encourages the consolidation of water and wastewater systems through a special set-aside for communities willing to participate in consolidation projects.



*OCC* has general supervision over all public utilities, and the authority to fix and establish rates. The *OCC* also authors the rules, regulations, and requirements that affect public utility services, and defines their operation, management, and business conduct.



*RD* Water and Waste Disposal Programs, the Rural Business-Cooperative Service, and the Rural Housing Service comprise the United States Department of Agriculture's Rural Development mission area. These three programs are designed to meet the needs of people who live in rural areas, including infrastructure, housing, health and medical, education, and employment. The *RD* provides financial and technical assistance for the development and operation of safe and affordable water supply systems, and for sewage or other waste disposal facilities.

**D. System Demographics.** The CD provisions of the SDWA apply to several types of public water systems, including CWSs, NTNCWSs, and TNCWSs [40 CFR §141.2 ([http://edocket.access.gpo.gov/cfr\\_2004/julqtr/40cfr141.2.htm](http://edocket.access.gpo.gov/cfr_2004/julqtr/40cfr141.2.htm))]. A CWS is defined as a system for the provision of piped potable water to the public, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. A NTNCWS is a public water system that is not a community water system and that regularly serves at least 25 of the same persons for more than 6 months in a year. A TNCWS is a non-community water system that does not regularly serve at least 25 of the same persons for more than six months in a year.

Of the 1,596 active PWSs in Oklahoma, 202 systems use surface water as the primary water source, 733 use groundwater as the primary water source, 10 systems use groundwater under the influence of surface water as the primary water source, and 649 are purchase water systems. 1,125 are classified as CWS, 110 are classified as NTNC, and 361 are classified as TNCWS. These water supplies serve approximately 3.6 million customers, with 80 percent of the population being served by surface water

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systems or by systems that purchase from surface water systems [data source: *2008 State of Oklahoma Public Water Supply Program Annual Compliance Report*].

Community systems are classified as:

- Large (serving greater than 50,000 population);
- Medium (serving less than 50,000 but greater than 3,300 population); and
- Small (less than 3,300 population).

Within the Small system category, subdivisions can be made in differentiating systems serving populations of 25-100, 101-500, and 501 - 3,300. The Medium systems can also be divided into populations of 3,301-10,000, and 10,001 - 50,000. A CWS can also be classified as either publicly- or privately-owned.

**E. CDS Implementation.** Sections 2 through 6 following address all requirements of the SDWA and CD guidelines, and discuss what is currently being developed and implemented by various Oklahoma agencies.

## SECTION 2 CD FOR NEW WATER SYSTEMS

**A. SDWA Requirements and EPA Guidance Requirements.** The 1996 Amendments to the SDWA, Section 1420(a)

([http://bulk.resource.org/gpo.gov/register/1998/1998\\_6019.pdf](http://bulk.resource.org/gpo.gov/register/1998/1998_6019.pdf)), cites: A State shall receive only 80 percent of the allotment that the State is otherwise entitled to receive under Section 1452 (relating to State loan funds) unless the State has obtained the legal authority or other means to ensure that all new community water systems and new NTNCWS (commencing operation after October 1, 1999) demonstrate TMF Capacity with respect to each national primary drinking water regulation in effect, or likely to be in effect, on the date of commencement of operation.

**B. Basis of Authority.** Section 1420(a) of the SDWA requires Oklahoma to obtain the legal authority to ensure that all new CWSs and new NTNCWSs demonstrate TMF Capacity with respect to each national primary drinking water regulation in effect on the date of commencement of operations. This provision marks the first time that the federal government has explicitly required states to take actions to ensure that new water systems have the required resources to provide safe and reliable water service to the public.

Title 27A of the Oklahoma Statutes specifies the jurisdictional areas for each state environmental agency [27A O.S. §1-3-101

(<http://www.lsb.state.ok.us/osstatuestitle.html>)]. DEQ has jurisdiction for public and private water supplies, waterworks operator certification, surface water and groundwater quality and protection, and water quality certifications [27A §1-3-101(B)].

The Oklahoma Water Supply Systems Act [27A O.S. §§ 2-6-301 et seq.] sets forth the environmental responsibility and jurisdiction of DEQ in respect to water supply systems.

The following summary includes the scope of the legal authority of Oklahoma state agencies in their management and regulation of water supply systems, and is based on a detailed review of the statutes, regulations, and procedures that are currently in effect.

**C. Requirements for All New PWS Systems.** In Oklahoma, all proposed new PWS systems must meet certain statutory and regulatory requirements and receive a Construction Permit.

1. DEQ. DEQ has the statutory authority to ensure that all water supply systems demonstrate adequate TMF Capacity prior to construction; this is accomplished by the application of two directives. Firstly, any PWS system must receive a Permit-to-Construct from DEQ prior to initiating construction. Secondly, PWS systems must demonstrate adequate TMF Capacity, and operators of PWS systems must obtain proper licensure from DEQ. The statutes, regulations, and procedures for the Permit-to-Construct authorities are cited below in parts a, b, and c. The statutes, regulations, and procedures for the Operator Certification authorities are cited below in parts d, e, and f.

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a. DEQ Statute (construction of waterworks). DEQ has broad legal authority to adopt and enforce regulations that are necessary to ensure continued compliance with the requirements of SDWA. Section 304 of the Oklahoma Water Supply Systems Act requires that a Construction Permit be issued by DEQ prior to any construction of water supply systems [27A O.S. § 2-6-304]. This provision requires DEQ to review or reject the planning and design documents for all water supply systems. DEQ regulations, which were promulgated to effect compliance with this statute, ensure TMF Capacity for all water supply systems. The statutory and rule-making process to ensure all new public water systems have TMF Capacity, as related to the CD guidance document criteria, is as follows:

*27A O.S. §2-6-304(A)(1): No person shall supply water, or do any construction work of any nature for supplying water, to the public from or by a public water supply system by means of any waterworks without a written permit issued by the Executive Director.*

*27A O.S. §2-6-304(B): An application for such permit shall be accompanied by maps, plans and specifications, and prepared by a professional engineer registered in the State of Oklahoma. Such application shall include but not be limited to:*

- 1. A description of the design of the system;*
- 2. Identification of the system's source;*
- 3. A description of the manner of storage and distribution and purification of the water proposed for the supply previous to its delivery to consumers; and*
- 4. Any other data and information required by the Department.*

*27A O.S. §2-6-305: Every person supplying or authorized to supply water to the public shall file with the Department a certified copy of the plans and surveys of the waterworks, with a description of the source from which the water supply is derived. No additional source of supply or well shall thereafter be used without a written permit from the Department.*

Note: For the purposes of this statute: "Board" is defined as the Environmental Quality Board; "Department" is defined to mean DEQ; and "Executive Director" is defined as the Executive Director of DEQ.

b. DEQ Regulations (construction of waterworks). Existing DEQ regulations are designed to ensure that new water systems are properly designed and that the physical facilities can be operated in a safe and technically appropriate manner. OAC 252:626 requires a DEQ-issued Construction Permit or modification of a PWS system or an extension of the distribution system. The applicable sections of the rule are as follows:

### *OAC 252:626-3-2. Applications*

- (a) Submit legible applications on forms provided by the DEQ and include:*
- (1) the type of entity that is applying,*
  - (2) the legal description,*



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- (3) *a minimum of 2 sets of plans and specifications,*
- (4) *a final design analysis,*
- (5) *all appropriate fees, and*
- (6) *engineering report approved by the DEQ for major waterworks projects, or smaller projects utilizing non-conventional processes.*
- (b) *Public entities other than municipalities must provide certified copies of the results of the last election or appointment of the members of the governing body. Public entities must provide a citation of legal authority to own and operate the proposed facility.*
- (c) *Applicants other than public entities must provide copies of documents that created them and provide a citation to their statutory authority.*

### OAC 252:626-3-3. *Financial assurance*

- (a) *All applicants must demonstrate they have adequate financial, technical, and managerial capacity to comply with national primary drinking water regulations and continuously maintain the facility.*
    - (1) *If the applicant is not a city, town or other public entity, the applicant must submit the following to the DEQ:*
      - (A) *expected costs for operation and maintenance, replacement and closure,*
      - (B) *continued existence and financial accountability, and*
      - (C) *assurance that provisions have been made for continued existence of the operating entity for the expected life of the facility.*
    - (2) *Continued existence may be demonstrated in one of the following fashions:*
      - (A) *the applicant may be a property owners' association or a nonprofit corporation established under the laws of the State of Oklahoma. The association must have the legal authority to own and manage the PWS system including the authority to set and collect fees from users for operation and maintenance of the system. The bylaws of the entity must contain a provision that dissolution cannot occur until the system is either closed in accordance with applicable DEQ rules or transferred to another viable operating entity. The instrument creating the association must be filed in the office of the county clerk where the property is located, or*
      - (B) *the applicant must provide proof of a sufficient amount on deposit to the credit of a trust, the powers of which are to operate and maintain the PWS system for the expected life of the facility, or*
      - (C) *other proof of financial viability, such as the issuance of a bond or insurance contract covering the operation and maintenance of the PWS system for the life of the system may be submitted to the DEQ for approval.*
    - (3) *Costs for closure of the PWS system as required by law must be included in any funding plan.*
    - (4) *If the information fails to demonstrate the on-going viability of the operation, the application will be denied.*
- (b) *Applications and un-expired permits may be transferred upon showing*

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*the transferee has legal authority and financial accountability, and that both parties agree to the transfer.*

OAC 252:626-1-1 requires PWS systems, including privately owned (for profit) water systems, to comply with other applicable local, State, and Federal requirements. Therefore, privately owned water systems are also required to meet the financial and managerial capacities requirements of the OCC [OAC 252:626-1(b)], which applies to any person or entity that constructs or modifies a PWS distribution system or treatment works and sets the permit and construction standards for all PWS systems. Other rules govern PWS systems, including OAC 252:606, 624, 633, 641, 710, and other appropriate local, state and federal regulations.

DEQ regulations governing the construction of waterworks are found in OAC 252:626 *Public Water Supply Construction Standards*. These regulations provide the requirements for all systems to meet the technical capacity for operation by constructing acceptable infrastructure, including construction standards. These regulations require systems proposing construction to meet requirements for technical capability. The applicable section of this rule is as follows:

## *OAC 252:626-3-7. Plans and specifications*

*(a) Plans and specifications must address the entire project. If the applicant plans to phase construction, the permit will contain the sequence of construction to ensure continuity of the system and that adequate capacity will be available for each phase.*

*(b) All detailed plans must be legible and drawn to a suitable scale. Plans for modifications or extensions to existing systems or plants must indicate clearly the connections or relation. Include the following:*

*(1) A general layout sheet that includes:*

*(A) title and date;*

*(B) name of municipality, rural water district, or other entity or person who owns the system;*

*(C) area or institution to be served;*

*(D) scale, in feet;*

*(E) north point;*

*(F) data used;*

*(G) boundaries of the municipality, rural water district, or are to be served;*

*(H) name, telephone number, and address of the designing engineer;*

*(I) the engineer's seal and signature;*

*(J) location and size of existing water mains; and*

*(K) location and nature of existing waterworks structures and appurtenances affecting the proposed improvements.*

*(2) Detailed sheets that include:*

*(A) Stream crossings with profiles...*

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## *OAC 252:626-3-2. Applications*

- (a) Submit legible applications on forms provided by the DEQ and include:*
- (1) the type of entity that is applying,*
  - (2) the legal description,*
  - (3) a minimum of 2 sets of plans and specifications,*
  - (4) a final design analysis,*
  - (5) all appropriate fees, and*
  - (6) engineering report approved by the DEQ for major waterworks projects, or smaller projects utilizing non-conventional processes.*

OAC 252:626-3-3 prohibits DEQ from issuing a permit if DEQ determines that the applicant of a new system cannot meet the managerial and technical capacities of supplying water to services or providing proper operation and maintenance. The applicable section of the rule is as follows:

## *OAC 252:626-3-3. Financial assurance*

- (a)(4) If the information fails to demonstrate the on-going viability of the operation, the application will be denied*

OAC 252:626-1-2 defines a PWS as publicly- or privately-owned, thereby requiring that all publicly or privately owned systems meet the financial and managerial capacity requirements of the SDWA.

The DEQ regulations which govern the construction of water works are OAC 252:626-3, OAC 252:626-7, OAC 252:626-9, OAC 252:626-11, OAC 252:626-15, OAC 252:626-17, and OAC 252:626-19. These regulations provide the requirements for all systems to meet the technical capacity for operation by constructing acceptable infrastructure, including construction standards. These regulations require systems proposing construction to meet requirements for technical capability. The applicable section of this rule is as follows:

## *OAC 252:626-3-7. Plans and specifications*

- (a) Plans and specifications must address the entire project pursuant to the approved engineering report as required in OAC 252:626-3-2.*

- c. Procedures (construction of waterworks).
- i. The applicant applies for a Construction Permit from DEQ. The procedures to obtain a Construction Permit are defined in OAC 252:626 Public Water Supply Construction Standards.
  - ii. A professional engineer assists the system complete the required information under the Plan Review Checklist, WQD of DEQ.
  - iii. Plan documents are submitted for review by DEQ.
    - All reports, as well as final plans and specifications, shall be submitted to DEQ at least 30 days prior to the date on which action by the reviewing authority is desired.
    - Plan documents shall be prepared by and bear the seal and signature of a professional engineer registered to practice in Oklahoma, and

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shall be signed by the responsible official (e.g., Mayor, Chairman of the Board, or the owner of the system, if privately owned).

- Preliminary plans and the engineer's report should be submitted for review prior to the preparation of final plans.

No approval for construction can be issued until final, complete, detailed plans and specifications and all required information have been submitted to the reviewing authority and found to be satisfactory. Control points are shown for meeting TMF Capacity criteria are in the Public Water Supply Engineering Report Checklist.

#### iv. Common review procedures and time lines

- Receipt of applications. Upon the receipt of an application for filing and the proper fee, the WQD shall:
  - File-stamp the application with the date of receipt, the Division and/or Program name and an identification number;
  - Assign the application, The unit supervisor will distribute the application to one of the four plan review engineers who will complete the review utilizing the appropriate check sheet; and
  - Timely logging of this information
- Administrative completeness review. The reviewer shall have 14 calendar days from the logged date of filing in which to determine whether the application is administratively complete and that the applicant has the TMF Capacity in accordance with DEQ regulations.
  - Not complete.
    - Upon determining that the application is not complete, the reviewer shall immediately notify the applicant by mail, describing with reasonable specificity the inadequacies and measures necessary to complete the application.
    - This notice shall not require or preclude further review of the application and further requests for specific information.
    - If the reviewer does not notify the applicant of inadequacies, the period for technical review shall begin at the close of the administrative completeness review period.
  - Examples for rejecting an application:
    - If the project is funded through Rural Development or the OWRB and it is determined by the lending agency staff that the required TMF Capacity is not in place, the project will be rejected and the applicant will be notified.
    - If the project is not funded through Rural Development or the OWRB and it is determined by the Construction Permit Unit engineer that the required TMF Capacity is not adequately demonstrated, the project will be rejected and the applicant will be notified.
  - When the application is administratively complete, the reviewer shall log the date and immediately notify the applicant by mail. The period for technical review begins.

#### v. TMF review. The WQD, Construction Permit Section, shall have 30 days after administrative review for technical compliance with the relevant

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regulations and reach a final determination.

- Not complete.
  - Upon determining the plans and specifications are not complete, the reviewer shall immediately notify the applicant by mail, describing inadequacies and measures necessary to complete the technical portion of the application.
  - Except for good cause shown, failure by an applicant to supplement an application within 180 days after the mailing date of a notice of deficiencies, or by a date agreed to by DEQ and the applicant, shall void the application and forfeit the fees. DEQ shall notify the applicant of an opportunity to show cause why this should not occur. Failure to show cause shall result in an order appealable according to 75 O.S. ' 318.
  - Extensions. Extensions to the time lines may be made as provided by law.
  - Plan reviews are completed by utilizing the appropriate check sheet. Separate check sheets used for each type of unit proposed are as follows, along with the applicable DEQ Regulation:
    - Engineering Report (OAC 252:626-3-6)
    - Water Wells (OAC 252:626-7-4)
    - Water Treatment (OAC 626:9)
    - Pumping Facilities (OAC 626:15)
    - Finished Water Storage (OAC 626:17)
    - Water Distribution System (OAC 626:19)
    - Sludge (Biosolids) Management Plan (OAC 606:7-4)
    - Managerial Capacity (OAC 626:1)
    - Financial Capacity (OAC 626:1)

d. Statute (operator certification). DEQ has responsibility under 27A O.S. Supp. 1993, Section 2-1-101 et seq. and 59 O.S. Supp. 1993, Section 1101 et seq. for assuring that all operators, managers, or other personnel capable of affecting water quality be properly trained and certified as to their abilities to perform their duties. A water supply system demonstrates that it has an element to achieve both the financial and the managerial capacities if it can consistently meet the operator certification requirements.

The applicable section of the statute is as follows:

*...The Department shall have the ... powers to enforce the provisions of the Waterworks and Wastewater Works Operator Certification Act...A. Except as otherwise provided in the Waterworks and Wastewater Works Operator Certification Act, it shall be unlawful:*

- *For any person to employ or appoint or vote for or approve the employment or appointment of any person as an operator of a waterworks or wastewater works who does not possess a valid current certificate issued under the Waterworks and Wastewater Works Operator Certification Act...;*
- *For any person to be the operator of a waterworks or wastewater works for the operation of which the person does not hold a required*

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*certificate...;*

e. Operator Certification Regulations. These statutes are implemented through OAC 252:710 Waterworks and Wastewater Works Operator Certification.

*OAC 252:710-3-31. Certificate required*

*(a) General requirement. The following shall hold certifications...*

*(1) All persons who make decisions regarding the daily operational activities of:*

*(A) a public water system, water treatment facility and/or distribution system that will directly impact the quality and/or quantity of drinking water, including a nontransient noncommunity water system; or*

*(B) a wastewater system, wastewater treatment facility and/or collection system.*

*(2) All persons who program or maintain telemetry/SCADA systems and also make process control/system integrity decisions.*

*(3) All laboratory operators who are in general supervision of waterworks/wastewater works laboratory control tests.*

f. Operator Certification Procedures. All community water supply systems must be operated by a certified operator. Training is required for annual certification renewal. The certification renewal process requires four hours of continued education each year. Renewal training must be obtained within the fiscal year which is from July 1 to June 30 with a 31 day grace period. To regain any certificate that has expired July 1 or later, the individual must file the renewal application, pay the reactivation fee and show proof of four hours of training per year of inactivation. A certification that has expired for two years from July 1 cannot be renewed.

Laboratory Operator Certification Procedures: Laboratory operator certification is required for the laboratory operator of any Class C or higher rated facility. The rules state that there shall be at least one individual operator certified in laboratory analysis at each facility and that certified individual is responsible for the accuracy and reporting of the laboratory results. Other operators may perform the analysis but the certified laboratory operator must record the results at the time of analysis in a bound volume. Each entry shall be dated and signed by the individual who performed the analysis.

An individual certified in laboratory only is not allowed to interpret the laboratory results and give operational orders unless that individual is also a certified waterworks operator.

If any or all of the required operational tests are performed by an associated or commercial laboratory, the waterworks shall notify WQD, DEQ within ten days in writing:

i. What required operational analyses are being performed by the

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associated laboratory;

- ii. Whether the associated laboratory is currently certified by DEQ; and
- iii. Whether the associated laboratory operator is certified as a waterworks operator.

**GENERAL:** Employers may require a higher certification than is required by state law. The employer and the operator are responsible for the operator being properly certified. The operator is responsible for keeping a record of training hours. Any trailer park or other community water system which produces its own water, from wells or a surface water treatment plant, is required to submit monthly bacteriological samples as well as have a properly certified operator. A certified water operator can work on any part of the community system without any supervision. Under the terms of OAC 252, it is unlawful for any person to employ or appoint or vote for or approve the employment or appointment of any person as an operator who does not possess a valid current certificate issued by DEQ.

Complete copies of the statutes and regulations may be found at:

<http://www.deq.state.ok.us/rules/626.pdf>, and

<http://www.deq.state.ok.us/rules/710.pdf>, and

<http://www.oscn.net/applications/oscn/DeliverDocument.asp?citeid=78943>.

An *Application for Laboratory Certification* may be found at:

<http://www.deq.state.ok.us/csdnew/LabCert/gwqlabcertapps.htm>.

2. OWRB. The State of Oklahoma has established four programs by which the OWRB can provide funding for proposed construction of public water systems. These programs are the REAP, the Statewide Water Development Revolving Fund (bond fund), the Water Resources Fund, (established to fund emergency situations), and the DWSRF. OWRB grant and Loan recipients must demonstrate both managerial and financial capacities before they are able to apply for funds. Applicants must also prove reliability and viability for their projects are funded. Three of these programs are discussed here, as new systems proposed, might seek funding through one or more of these sources. New water supply systems are generally ineligible for DWSRF funding.

a. Statute. 62 O.S. Supp. 1993, Section 2003 et seq. establishes the REAP program, 82 O.S. Supp. 1993, Section 1085.40 et seq. provides for the Statewide Water Development Revolving Fund, and 82 O.S. Supp. 1993, Section 1085.33 et seq. establishes the Water Resources Fund [reference 82 O.S. 1981, '1085.2, 75 O.S. 1981, '302, 82 O.S. 1981, "1085.31 through 1085.49, "1085.51 through 1085.65 as amended, 82 O.S. Supp. 1994, "1085.71 through 1085.84, and as otherwise authorized under the laws of the State of Oklahoma].

b. Rules. These statutes are implemented through OAC 785:50 and promulgated to provide standards, guidelines and policy statements related to the Board's Financial Assistance Program. There are four major sources of financial assistance described as follows:

- i. The Water and Sewer program, created under Sections 1085.31 through 1085.49 of Title 82 of the Oklahoma Statutes, consists of the following:



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- Loans made pursuant to 82 O.S. Section 1085.36.
  - Grants from the ... Water Resources Fund ... 82 O.S. Section 1085.39.
- ii. The Wastewater Facility Construction loan program created under Sections 1085.51 through 1085.65 of Title 82 of the Oklahoma Statutes.
  - iii. The Drinking Water Treatment Revolving Loan program created under Sections 1085.71 through 1085.84 of Title 82 of the Oklahoma Statutes.
  - iv. The REAP grant program created under Sections 2003 and following of Title 62 of the Oklahoma Statutes (785:50-1-3.).

Section 785:50-3-2 ensures that applicants meet managerial capacity for loan and grant funds. It states "The financial assistance made available through...the DWSRF program may be obtained, for an eligible project, by any duly constituted and existing political subdivision of the State of Oklahoma, including but not limited to counties, cities, towns and municipalities, and, by any duly constituted and existing special purpose water resource district..."

Section 785:50-7-2(a)(5 & 6) ensure that applicants meet the financial and technical capacity requirements. It states: "The Board shall consider the overall apparent economic viability and feasibility of the project as a whole including proposed revenues from the project and the adequacy and reliability of estimated revenues necessary for loan repayment when indicated...The Board shall consider from the engineering data submitted and otherwise available whether the proposed project appears to be feasible..."

c. Procedures. OWRB develops and maintains Oklahoma's Water Quality Standards and routinely collects physical, chemical and biological data. OWRB identifies impairment sources, detects water quality trends, and provides needed information for water quality standards, and facilitates prioritization of pollution control activities.

The complete statutes and rules may be found at:

<http://www.oscn.net/datafiles/superseded/oklahoma/statutes/title62/X270888X62%20OS%202003.html>, and

<http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=97548>, and [http://www.owrb.ok.gov/util/rules/pdf\\_rul/Chap50.pdf](http://www.owrb.ok.gov/util/rules/pdf_rul/Chap50.pdf).

3. DOC. DOC was assigned the administrative responsibility for the CBDG Program in Oklahoma in 1982. The CBDG Program is authorized under Title I of the Housing and Community Development Act of 1974, as amended. The small cities portion of the program appropriates monies to the Department of Housing and Urban Development for allocation to the states. Grant recipients are required to demonstrate economic viability, financial capacity, and administrative capacity.

a. DOC Statute. The Oklahoma Statutes governing the DOC are set forth in Title 74 of the Oklahoma Statutes. The applicable Statute authorizing the DOC to administer the Small Cities Community Development Block Grant Program is as follows: Title 74 ' 5003.7B. The Department, in conjunction with the Oklahoma Development Finance Authority, is authorized to develop an

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infrastructure program which will enable political subdivisions of this state to finance public works projects in order to modify or improve existing public facilities for purposes of bringing said facilities, and the operation thereof, into compliance with and maintaining compliance with federal, state and local laws and regulations pertaining to the protection of the public health and the environment.

b. DOC Regulations. The applicable rules for the Small Cities CDBG Program are set forth in OAC 150:15. The applicable Sections of Chapter 15 are as follows:

i. Subchapter 3. Section 1. ...(b) - The application packet is developed in such a manner that it describes the criteria for project selection set out in the State Plan Economic Development set-aside funds will be awarded to units of general local government utilizing a review process that includes, but is not limited to, statutory and programmatic project eligibility review and an economic viability review system that results in complete project proposal review through the use of an advisory committee input process.

ii. Subchapter 3. Section 2. ...(b) - The application packet is developed in such a manner that it describes the criteria for project selection set out in the State Plan Economic Development set-aside funds will be awarded to units of general local government utilizing a review process that includes, but is not limited to, statutory and programmatic project eligibility review and an economic viability review system that results in complete project proposal review through the use of an advisory committee input process.

iii. Subchapter 5 Section 2(1)(A)(v) - indicate administrative capacity, particularly adequacy of satisfying complete audit requirements regarding any previous Department funded project.

iv. Subchapter 5 Section 2(1)(B) - Community Development set-aside selection factors shall be applied to all project proposals meeting the Community Development threshold requirements for purposes of rating, reviewing and rank ordering to establish a funding priority list. The selection factors will provide a system of measurement tools sufficient to draw empirical conclusions regarding both an Applicant's economic circumstance and financial and administrative capacities; and

v. Subchapter 5. Section 2.(2)(B) - Economic Development set-aside selection factors shall be applied to all project proposals meeting the Economic Development threshold requirements for purposes of determining the proposed project's economic viability. The selection factors will provide a system of financial analysis tools sufficient to draw conclusions regarding the overall feasibility of an Applicant's business plan and ability to repay the requested program loan amount.

c. DOC Procedures. The primary national objective of the program is the development of viable urban communities by providing decent housing and a suitable living environment and expanding economic opportunities, principally for persons of low income. DOC shall conduct an evaluation of applications to ensure compliance with the National Objectives, all threshold and program

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requirements. The specific community development objectives include: The State is committed to the National Objective of developing viable urban communities and the program supports the development of local capacity.

Federal rules governing the CDBG Program (24 CFR Part 570) may be located at 24 CFR Part 570 (<http://ecfr.gpoaccess.gov>).

The complete statutes and regulations can be found at:

<http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=437892>, and <http://www.oar.state.ok.us/oar/codedoc02.nsf/All/12DD193B482E947A86257506001605D6?OpenDocument>.

4. OCC. The OCC regulates privately owned "for profit" PWS systems and evaluates the system's TMF Capacity as part of the rate setting process.
  - a. OCC Statutes: The OCC regulatory authority is authorized by Oklahoma Constitution Article IX, Section 18, 17 O.S. Sections 151 and 152, and Implemented through OAC 165:65 Water Service Utilities. 17 O.S. Sections 151 and 152 establish the following: The Commission shall have general supervision over all public utilities, with power to fix and establish rates and to prescribe and promulgate rules, requirements and regulations, affecting their services, operation, and the management and conduct of their business; shall inquire into the management of the business thereof, and the method in which same is conducted. The Commission shall have full visitorial and inquisitorial power to examine such public utilities, and keep informed as to their general conditions, their capitalization, rates, plants, equipments, apparatus, and other property owned, leased, controlled or operated, the value of same, the management, conduct, operation, practices and services; not only with respect to the adequacy, security and accommodation afforded by their service, but also with respect to their compliance with the provisions of this act, and with the Constitution and laws of this state and with the orders of the Commission.
  - b. OCC Rules: OAC 165:65 establishes that OCC has the authority to promulgate rules concerning the provision of water service to all consumers within the State of Oklahoma pursuant to Okla. Const. Art. IX §§18 and 34 and 17 O.S. §151 et seq.
  - c. OCC Procedures: The Public Utility Division of OCC provides technical support and policy analysis to:
    - i. assure reliable public utility services at the lowest reasonable cost,
    - ii. assure open, workable, competitive markets in the transition to competition, and
    - iii. fulfill constitutional and statutory obligation.

The complete statutes and rules may be found at:

<http://www.occ.state.ok.us/Divisions/GC/Rulesfrm.htm>, and

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<http://www.oscn.net/applications/oscn/index.asp?ftdb=STOKCN>, and  
<http://www.oscn.net/applications/oscn/deliverdocument.asp?citeid=66528>, and  
<http://www.oscn.net/applications/oscn/deliverdocument.asp?citeid=66529&date=12/15/70>.

**5. RD.** (United States Department of Agriculture, Rural Development, Water and Waste Disposal Programs). The Rural Utilities Service, the Rural Business-Cooperative Service, and the Rural Housing Service comprise USDA Rural Development (RD) mission area. As the name suggests, the agency's three programs are designed to meet the needs of people who live in rural areas, including infrastructure, housing, health and medical, education, community services and economic development. RD's Water Programs Division under the Rural Utilities Services have programs which provide financial and technical assistance for development and operation of safe and affordable water supply systems and sanitary sewage systems; solid waste disposal facilities and storm wastewater disposal facilities.

A brief description of available water programs may be found at:  
<http://www.usda.gov/rus/water/program.htm#LOANS>

Available water program regulations may be found at:  
<http://www.usda.gov/rus/water/regs.htm>

**D. Program Evaluation.** New water supply systems, as well as all water supply systems in Oklahoma are continually monitored through periodic review and compliance monitoring (sample analysis) to ensure that each system is technically, financially, and managerially capable and delivers only safe drinking water to the public. DEQ staff routinely review new systems for compliance through the established programs PWS Sanitary Surveys, Compliance Monitoring, and Operator Training and Certification. Also, DEQ has contracted with the Oklahoma Rural Water Association and Community Resource Group to review and provide technical assistance to water supply systems. These contractors review the systems technical, financial, and managerial capacities and assist the systems as needed.

The CD for New Systems Program, as outlined above, will be reviewed and reported annually as a part of the state reporting requirements the DWSRF Program and every 3 years as required for in the CD requirements. The capacity of new systems applying for permits and the capacity of new systems permitted will be presented.

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## **SECTION 3** **CD for Systems Seeking DWSRF Assistance**

### **A. SDWA Requirements for the DWSRF.**

The SDWA enables the federal government to offer an annual capitalization grant to Oklahoma to provide for a Drinking Water State Revolving Fund (DWSRF). The DWSRF is a low-interest loan program dedicated to funding drinking water system projects. The SDWA includes the requirement that systems receiving DWSRF assistance have sufficient TMF capacities. Section 1452(a)(3) of SDWA prohibits a state from providing DWSRF assistance to a system that lacks TMF capacities unless:

1. The use of the financial assistance will ensure SDWA compliance, and/or
2. The owner or operator agrees to undertake feasible and appropriate changes to assure that adequate Capacity will be put in place.

The EPA capitalization grant application requires a commitment to assess the CD of all applicants for DWSRF funding. Similarly, under EPA's Guidance Criteria for the DWSRF program, a State's IUP must describe the criteria and methods that will be used to distribute funds, including methods to assess CD. The DEQ IUP and CDS describe procedures for:

1. Assessing TMF capacities at present and for the foreseeable future (5-to-10 years);
2. Assessing whether DWSRF assistance will help ensure SDWA compliance, if not currently in compliance; and
3. Assessing whether the system has an effective, long-term plan to develop adequate TMF Capacity, if it is currently lacking.

### **B. Coordination Between Agencies Administering the DWSRF.**

The DWSRF Program in Oklahoma is conducted by the DEQ (as the primacy agency) and the OWRB (as the funding agency). DEQ and OWRB have entered into an Inter/Agency Agreement (I/A) to provide working procedures. Before a loan can be made, OWRB requires assurance that the applicant will be able to repay the loan. As the primacy agency, DEQ must develop and implement the CDS that includes the assurance that DWSRF applicants have sufficient TMF Capacity for the foreseeable future.

### **C. Requirements for DWSRF Applicants.**

1. DEQ DWSRF Statute: Title 82 of Oklahoma Statutes Annotated, Section 1085.71 and following, establishes the DWSRF to implement portions of the federal SDWA. Sections 1085.71 through 1085.84 establish the duties of the Oklahoma Water Resources Board (OWRB) and the Department of Environmental Quality (DEQ). An Inter-Agency Agreement between DEQ and OWRB further clarifies the duties and roles of each agency by establishing procedures to ensure compliance with state and federal laws.

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2. DEQ DWSRF Regulations: The regulation is cited as OAC 252:633. Drinking Water State Revolving Fund.
3. OWRB DWSRF Regulations: The applicable portions of the regulations are found in OAC 785:50-10-3.
4. DWSRF Procedures: DEQ has the responsibility to make application for and receive the capitalization grant from the EPA. DEQ prepares an annual IUP for public review and submittal to EPA. DEQ and OWRB negotiate, as part of the I/A, an annual budget which reflects the anticipated administrative expenses for the agencies for the DWSRF program. DEQ has prepared the Operating Agreement with EPA and, as necessary, will prepare annual updates. DWSRF procedures are outlined in these two documents. DEQ submits the documents to EPA, as attachments to the capitalization grant application process.
5. OWRB CD: The OWRB maintains loan programs both for water supply and wastewater treatment projects. In 1993 OWRB received authority to implement the Clean Water SRF loan program and OWRB will administer the loans to recipients for the DWSRF. The Board also operates other grants and loans for the water and sewer needs. For all of its loan and grant programs, OWRB conducts a complete review of all applicants, and requires ongoing covenants which form the basis of a long term plan to develop and maintain adequate TMF capacity. This review is in the area of financial and managerial capacity, with an emphasis on creditworthiness and ability to repay. These reviews are intensive and comprehensive and determine the creditworthiness of the applicant.
6. DEQ PWS Construction Statute: The Oklahoma Water Supply Systems Act, 27A O.S. Supp. 1993, Sec. 2-6-301 (as quoted in Section 2) requires that any construction of waterworks receive a permit to construct from the DEQ. This provision requires DEQ to review, and reject if necessary, the plans for all new water systems.
7. DEQ PWS Construction Regulations: DEQ's existing regulations are designed to ensure that all water systems are properly designed and that the physical facilities can be operated in a safe and technically appropriate manner. OAC 252:626 requires that all construction on any waterworks requires a permit. The applicable portions of the rule are as follows:

*252:626-1-1. Purpose*

*(b) This chapter applies to any person or entity that constructs or modifies a public water supply distribution system or water supply system and sets the permit and construction standards for all public water supply systems...*

*252:626-3-1. General*

*(a) ...A permit is required for construction or modification of a PWS system or an extension of the distribution system...*

OAC 252:626-3-2 requires that applicants demonstrate the existence of a legal entity

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responsible for operation of the facility.

### *252:626-3-2. Applications*

*(a) Submit legible applications on forms provided by the DEQ and include:*

*(1) the type of entity that is applying,*

*(2) the legal description,*

*(3) a minimum of 2 sets of plans and specifications,*

*(4) a final design analysis,*

*(5) all appropriate fees, and*

*(6) engineering report approved by the DEQ for major waterworks projects, or smaller projects utilizing non-conventional processes.*

*(b) Public entities other than municipalities must provide certified copies of the results of the last election or appointment of the members of the governing body. Public entities must provide a citation of legal authority to own and operate the proposed facility.*

*(c) Applicants other than public entities must provide copies of documents that created them and provide a citation to their statutory authority.*

8. Operator Certification Statute: DEQ has responsibility under 27A O.S. Supp. 1993, Section 2-1-101 et seq. and 59 O.S. Supp. 1993, Section 1101 et seq.

"Waterworks and Wastewater Works Operator Certification Act" for assuring that all operators, managers, or other personnel capable of affecting water quality be properly trained and certified as to their abilities to perform their duties.

9. Operator Certification Regulations: This is cited in OAC 252:710

Waterworks and Wastewater Works Operator Certification Rules.

10. CD Technical Assistance Contract: DEQ contracts annually to provide technical assistance to water systems on the DWSRF Project Priority List to assure sufficient technical and managerial capacity to be eligible for a DWSRF loan. The contractor assists applicants and referred systems as directed by DEQ. Annual contracts are maintained with ORWA, Utility Assistance and Services, Inc., and with Community Resource Group.

### **Engineering Planning and Design Grant Program.**

The DEQ has established an Engineering Planning and Design Grant (EPDG) Program to provide assistance to drinking water systems serving a population of 10,000 or less. Eligible entities are the same as defined in the DWSRF Regulations at OAC 252:633-1-5. The program will be effective July 1, 2009. The EPDG Program will be managed by the Capacity Development Coordinator and funded through the DWSRF State Program Management and/or Local Assistance and Other State Programs set-asides. The EPDG program applications will be ranked using the existing DWSRF Priority System and grant funds will be awarded quarterly to applicants with the highest priority points.

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Eligible expenses include engineering fees for engineering report, plans and specifications, environmental review documents, and applicable tests, analyses, and studies. The applicant may seek funding for construction from sources other than DWSRF.

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## SECTION 4 CD FOR EXISTING SYSTEMS

### A. Existing State Programs.

The DEQ Water Quality Division Public Water Supply Section (PWS) management and staff have gained experience in management and oversight of water supply systems. It has been their task to ensure that water systems in Oklahoma continually and consistently deliver safe and adequate drinking water to the public. These years of experience provide a wealth of expertise in dealing with systems with problems caused by inadequate TMF Capacity. As trends in system problems develop, the PWS staff attempt remedies and corrections until the water system is able to provide safe and adequate water supplies. All public water systems are monitored through sanitary surveys, compliance monitoring, complaint review, and self reporting. If there is an indication of a developing problem, technical assistance is offered. This usually prevents acute problems from growing. This procedure has resulted in a comprehensive public water supply supervision program. DEQ will utilize existing programs as a foundation for the CDS. In the preparation of the CDS, it was important to determine the current activities relating to CD, how they impact TMF Capacity, and how these activities are coordinated within the state.

1. Existing Technical Capacity Assessment Activities.
  - a. DEQ has responsibility under 27A O.S. Supp. 1993, Section 2-1-101 et seq. and 59 O.S. Supp. 1993, Section 1101 et seq. "Waterworks and Wastewater Works Operator Certification Act" for assuring that all operators, managers, or other personnel capable of affecting water quality be properly trained and certified as to their abilities to perform their duties (shown in Section 2, A-3). This is implemented through OAC 252:710 Waterworks and Wastewater Works Operator Certification Rules.
  - b. OAC 252:633-3-9 requires documentation of technical capacity.
  - c. Sanitary Surveys are routinely performed by local DEQ Environmental Complaint and Local Services (ECLS) personnel and Water Quality Division (WQD) staff. Surface public water supply systems are surveyed on a quarterly basis, groundwater systems semiannually, and purchase systems annually. Additional sanitary surveys may be performed as a result of request for technical assistance or as a follow-up to complaints or enforcement actions by both ECLS staff and/or WQD PWS District Engineers.
  - d. WQD PWS District Engineers have been trained to perform Comprehensive Performance Evaluations (CPEs) on surface water treatment systems.
  - e. Vulnerability Assessments were conducted on community systems to process monitoring waivers for analysis of Primary Drinking Water Standards by PWS District Engineers.
  - f. Source Water Assessments are being performed on all water sources as part of the Source Water Protection Program and Monitoring Waivers will be reevaluated as a part of this assessment.

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- g. DEQ has entered into a contract with the Oklahoma Rural Water Association for services which include activities that result in improved compliance with drinking water standards, improved compliance with monitoring and reporting requirements, improved quality of service to customers, improved quality of water system management, and increased knowledge of efficient water system operation by board members.
2. Existing Managerial Capacity Assessment Activities.
- a. State statute O.S. 82-1324.16-B requires that all Rural Water District board members and non-profit water corporations take training regarding their responsibility for proper management. After January 1, 1995, a requirement for qualification to serve as a board member for a rural water district shall be a written pledge that upon election such board member shall attend a minimum of six (6) hours of workshop training to be offered periodically on a regional basis within twelve (12) months following election of such board member. The study and instruction shall be in areas of district financing, law, and the ethics, duties and responsibilities of district board members.
- b. OWRB has entered into a contract with ORWA to fulfill these statutory requirements for Board Member Training. A minimum of six (6) board member training session will be held. Curriculum for these sessions will be developed in coordination with the Secretary of Environment and will include district financing, law and the ethics, duties and responsibilities of rural water district board members. Training will conform to the requirements of Title 82 O.S. § 1324.16(B) which requires training for newly elected directors. At least one workshop will be held in each of the four quadrants of the state. Training facilities will be utilized that are as equidistant as possible to board members residences. ORWA will be responsible for the development and preparation of lesson plans, manuals, and handout materials necessary for carrying out the training services. All lesson plans, handouts, manuals, books, guides and other material developed by ORWA are the property of ORWA for its exclusive use and shall be retained by ORWA at the end of the contract period
- c. 82 O.S., Supp. 1996, Section 1085.74 requires the Oklahoma Water Resources Board to evaluate loan applicants regarding legal, managerial and financial capacity of the water system and requires changes necessary to assure adequate ability to provide proper operation and repayment of loans.
- d. DEQ Drinking Water State Revolving Fund Statute and Rules (Title 82 of Oklahoma Statutes Annotated, Section 1085.71 through 1085.84 and OAC 252:633-3-9 and 252:633-3-11 require documentation of managerial capacity.
- e. DEQ has entered into a contract with the Oklahoma Rural Water Association for services which include activities that result in improved compliance with drinking water standards, improved compliance with monitoring and reporting requirements, improved quality of service to customers, improved quality of water system management, increased knowledge of efficient water system operation by board

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members.

### 3. Existing Financial Capacity Assessment Activities.

- a. The Oklahoma Corporation Commission under 17 O.S. Section 151 and 152 and OAC 165:65 Water Service Utilities regulates privately owned "for profit" public water supply systems and evaluates the system's financial capacity as part of the rate-setting process.
- b. The OWRB under 82 O.S. Supp. 1996, Section 1085.74 requires that DWSRF applicants demonstrate adequate TMF Capacity. OAC 252:633 requires documentation of adequate financial capacity.
- c. DEQ public water supply construction requirements in OAC 252:626 require that as a part of the permitting process for improvements to water systems, applicants must demonstrate the existence of a legal entity capable of responsibly operating the water system.
- d. DEQ public water supply construction requirements in OAC 252:626 requires that applicants must be entities that can demonstrate financial accountability for proper operation of the water system for the life of the facility.
- e. DEQ public water supply construction requirements in OAC 252:626 requires that applicants demonstrate the existence of a legal entity responsible for operation of the system.

## **B. Establishment of a Baseline.**

### 1. General.

As part of the process of determining the basic CD needs of water systems, prioritizing systems for technical assistance, and measuring improvement over time, a baseline must be established. The baseline will be established using sanitary survey information on NTNC water systems. DEQ will obtain the required information as a part of the ongoing sanitary survey program. A numerical average will be determined from the previous year's sanitary survey forms. This average will establish the baseline and will be a screening level assessment that will rely on TMF indicators. The calculation of the average will be done annually to measure improvements over time. It will provide a numerical score to provide information for the DEQ Board, the Governor, the legislature, and EPA, stakeholders, and interested parties on relative improvement in TMF Capacity.

## **C. Prioritization of Systems to Receive Technical Assistance.**

Initially, systems will be prioritized for targeted technical assistance using a five-component approach. The five components are:

1. DWSRF Project Priority List. Systems that are eligible for DWSRF funding must request placement on the DWSRF Project Priority List to be ranked and added to the IUP. Prior to receiving DWSRF loan, each system must demonstrate adequate TMF Capacity or demonstrate that the use of the DWSRF money will result in sufficient CD.
2. DEQ Level 1 List. The Level 1 List establishes a tracking mechanism to ensure

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that all state SNC violations are being responded to in a timely and appropriate manner. A timeline for appropriate enforcement actions is established and followed for each SNC.

The Level 1 List includes a list of facilities with a description of the noncompliance (reference categories of violations listed below). The facilities on the Level 1 List have not yet been subjected to formal enforcement action (reference the following DEQ Formal Enforcement Action List).

An important function of the Level 1 List is to track and review the timely and appropriate responses from facilities which have exceeded state SNC criteria and require informal or formal enforcement action if timely and appropriate responses are not received. Monthly Level 1 List meetings are conducted and participants are briefed on any informal enforcement action taken, scheduled inspections, information gathered, and possible compliance/enforcement strategies. Any system which continues to exceed the SNC criteria will be referred for escalated formal enforcement action.

Formal enforcement action(s) can include the following: NOV, CO, Boil Order, ACO, ACPO, or Judicial Action, depending on the severity of the violation. Each Level 1 List meeting is structured to review the status of all facilities that are included on the Level 1 List, to inform the enforcement staff about facilities designated as violators of SNC criteria and to discuss the need for placement of other facilities on the Level 1 List.

The review of the status of those facilities on the Level 1 List includes a discussion about each system with direct input from the PWS District Engineer/Inspector assigned to the system and other participants. These individuals provide an up-to-date summary based on system inspections, file review, Monthly Operational Reports (MOR) review, complaint investigations, correspondence, and other information available to help in the investigation of the system non-compliance.

Facilities with corrective efforts that are acceptable will be monitored and will be retained on the Level 1 List until the instances of noncompliance do not exceed SNC criteria. At that time the system is removed from the list and routine compliance monitoring is followed.

For facilities that exceed SNC criteria and whose noncompliance cannot be promptly corrected through informal enforcement, the appropriate formal enforcement action is recommended and discussed at the meeting. Formal enforcement action is evaluated and taken in cases of violations of SNC criteria. The action taken, or the reasons for not taking action, are documented for all SNC violations. At the monthly Level 1 meeting, or in a separate meeting when appropriate, the Enforcement Engineer or

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Inspector provides information and documentation concerning facts and evidence which document the DEQ position to the appropriate attorney from the Office of General Council. In some instances, the attorney is provided with a draft NOV, ACO, CO, or ACPO to review. In other cases, the staff will discuss the elements, facts, and violations that a draft enforcement document should contain, and the Enforcement Coordinator or Enforcement Engineer/Inspector will prepare the initial draft document, as appropriate, and establish a time frame for review and issuance. Once a formal enforcement action is undertaken, the system is placed on the Formal Enforcement Action List (see below).

Level 1 violations are described as follows:

Category A - Construction of an unpermitted facility, a violation of construction permit conditions so as to seriously threaten the effectiveness of the treatment plant, wells or distribution system, or a cross-connection to unapproved systems.

Category B - Supplying water which violates chemical or radiochemical primary drinking water standards which may pose an immediate threat to some consumer or the verification of unsafe bacteriological samples which are not immediately corrected or turbidity value greater than 5 nephelometric turbidity units (NTUs).

Category C - Failure of the operator to conduct and report results of control tests and laboratory checks required by the Public Water Supply Operating Rules for 3 months in a row or the failure to submit the proper number of bacteriological samples for 3 months in a row; failure to submit truthful records. Maximum Allowable Limits (MAL) violation or failure to perform monitoring and reporting requirements, for bacteriological or turbidity, for any 3 months out of a 12 month period.

Category D - An intentional contamination of a public water supply so that there is extreme danger to consumers; failure to provide adequate water pressure and/or quantity under normal circumstances.

Category E - Violation of any order of the Executive Director. Rating score of less than 60 or, three (3) or more critical violations on any central office or local DEQ sanitary survey (inspection).

Category F - Failure to perform any significant maintenance functions. ("Significant maintenance" shall be defined as maintenance required to comply with all Level 1 requirements).

Category G - Failure to employ a certified operator.



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3. DEQ Formal Enforcement Action List. DEQ holds a monthly Formal Enforcement meeting that includes the same participants and follows the same format as described in the DEQ Level 1 List (#2 above). The list of facilities subject to a formal enforcement action (NOV, BO, CO, ACO, ACPO, or other action) is reviewed in detail during each meeting. If there is a compliance schedule, report requirement or other milestone for a system listed in its formal enforcement document, the status of compliance is discussed by the appropriate PWS District Engineer/Inspector and/or Enforcement Coordinator. Additional information, inspection, sampling, corrective action and remedial action needs are identified.

Violations of compliance schedules or other portions of the formal enforcement action are discussed for cause, correction, impact, and need for supplemental or escalated enforcement action. Systems in compliance with the requirements in the formal enforcement document are reviewed for potential problems in satisfying remaining tasks required in the order. Systems satisfactorily completing elements of the formal enforcement document are identified and the mechanism for closing the case, removing the system from the Formal Enforcement Action List and notifying the system is discussed. If the system is compliant with SNC criteria and is in compliance with stated requirements in any formal enforcement document and any compliance schedule, the system is usually returned to routine compliance monitoring oversight. Where environmental damage has resulted but was not addressed in the previous enforcement action, strategies for achieving remediation and restoration of natural resources will be evaluated. In addition, administrative penalties will be sought in any appropriate case even if the system has been returned to compliance status.

The Level 1 List and Formal Enforcement Action List are presented to ECLS District Environmental Program Directors and Local DEQ Representatives and discussed at the monthly District ECLS meeting. The monthly District meeting allows for questions and input of information from the local representative to the attorney and WQD staff, while keeping the local representative informed of overall caseload, similar enforcement matters, and specific enforcement actions being handled through the central DEQ office.

4. System Request. Water systems that request CD assistance will be prioritized to receive CD technical assistance from DEQ or their contractors.

5. TMF Self-Assessment Form. Water systems which complete a self assessment form that indicates a need for technical assistance.

**D. Technical Assistance.** Technical assistance may be provided to the systems by DEQ, OWRB, or DEQ contractors. The DEQ assistance is a continuation of the existing



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assistance that is provided and an expansion into new areas.

1. Technical assistance.

- a. PWS District Engineers provide technical assistance to all water systems as part of their routine duties.
- b. The DEQ Certification program for operators is being expanded to include non-transient non-community systems. This will provide for training and certification for operators which improve compliance by these systems.
- c. The ORWA contract for small system operational and managerial capacity assistance.
- d. The ORWA contract with DEQ for small system surface water treatment plant optimization to assist these systems in their attempts to meet Disinfectant/Disinfectant By-product and Surface Water Treatment rules. The ORWA contract with DEQ for source water protection implementation will assist the water systems in all phases of the source water protection and well head protection programs.
- e. The OML has developed source water protection model ordinances under contract to DEQ. The contractor shall assist municipalities by the development of model ordinances that will be protective of their water supply sources. The contractor provided a model ordinance achieving the maximum protection of a delineated wellhead protection area or sourcewater protection area consistent with state statutes. This ordinance will provide assistance to communities in their source water protection efforts.
- f. DEQ will assist water systems by completing source water delineations and assessments, and will assist with implementation efforts by the water system.
- g. DEQ has updated the "Small Water System Operation and Maintenance Manual".

2. Managerial Assistance.

- a. PWS District Engineers provide technical assistance to all water systems.
- b. DEQ requires that all managers of public water supply systems be certified operators.
- c. The ORWA contract provides operational and managerial assistance free to small water systems.
- d. The OWRB evaluates the legal and managerial capacity of systems wishing to utilize funding through DWSRF.
- e. OWRB evaluates the financial and managerial Capacity of systems wishing to
- f. The OWRB contract with ORWA to train rural water district and non profit system managers, and other loan and grant programs administered by OWRB.

3. Financial Assistance.

- a. PWS District Engineers provide technical assistance and ranking of water systems.
- b. OWRB evaluates the financial capacity of systems wishing to utilize the DWSRF.



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- c. OWRB evaluates the financial capacity of systems wishing to utilize the CWSRF.
- d. Quarterly FACT meetings coordinate funding agency efforts.
- 4. Technical Assistance Contracts. The SDWA Amendments allow Oklahoma to use funds from the DWSRF for various program activities, including technical assistance and CD.
  - a. ORWA Contract. The Contractor shall provide services that will assist the water system in local efforts to assemble teams, locate potential sources of pollution, development of contingency plans, and implementation of management practices and controls to protect drinking water sources consistent with the approved source water protection plan. These services shall be provided to systems identified in need of assistance by DEQ or at the request of the water system.

Contractor services shall be provided to systems identified in need of assistance by DEQ or requested by the water systems. Contractor services shall include activities in the following areas which result in:

- i. improved compliance with drinking water standards;
- ii. improved compliance with monitoring and reporting requirements;
- iii. improved quality of service to customers;
- iv. improved quality of water system management; and
- v. increased knowledge of efficient water system operation by board members.

The contractor shall also provide technical assistance by evaluating the ability of small water treatment plants to:

- meet enhanced surface water treatment regulations, and
  - treat organics to meet proposed total trihalomethanes and total haloacetic acid regulations. In addition, the contractor shall recommend treatment modifications necessary to meet EPA requirements when system deficiencies are identified
- b. UAS and CRG Contracts. DEQ will refer small systems to the Contractor from one of following three categories of public water supply systems:
    - i. Public water systems that have been placed on the DEQ Consent Order list pursuant to DEQ jurisdiction and/or enforcement;
    - ii. Eligible projects proposed by systems requesting funding from the DWSRF; and
    - iii. New public water systems.

A summary of the financial and managerial capacity assistance provided is as follows:

- Obtain referrals from DEQ and schedule site visits;
- Assess and prioritize financial and managerial capacity;

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- Submit initial assessment forms to DEQ;
- Define work objectives and work plan;
- Initiate work activities and tasks;
- Work plans will be completed on all referred systems;
- Rate studies will be completed on referred systems whose financial audits indicate the need;
- The Check Up Program for Small Systems (CUPSS) may be utilized for select small systems serving populations of 3,300 or fewer;
- Consult with DEQ regarding problems;
- Report on progress achieved each month;
- Complete work objectives and close out projects; and
- Submit final progress report to DEQ.

### **E. Measurement of Progress and Improvement in System.**

The improvement in the annual numerical average score on sanitary surveys and the reduction of the number of systems requiring enforcement actions will be used to measure the progress and improvement in systems over time. In addition, the improvements as documented by the TMF Self-Assessment form will be useful in evaluating progress.

### **F. Regionalization of Existing Water Systems.**

1. Regionalization Options. Regionalization options often are described as being "structural" or non-structural.

Structural options include the following:

- Consolidating systems;
- Co-development of sources of drinking water supplies;
- Constructing interconnecting mains with adjacent systems; and,
- Establishing new regional water purveyors.

Non-structural options include the following:

- Replacing existing system management with new managers;
- Changing ownership from public to private (or vice versa);
- Establishing service agreements to share facilities, resources, and management;
- Establishing close cooperation between systems in management and planning of current and future services;
- Hiring circuit riders to provide O&M services; and,
- Contracting for services with another organization

2. Barriers to Regionalization and Strategies to Overcome Barriers. The following barriers to regionalization were identified as part of the CDS. A recommended strategy to overcome each barrier is presented.

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*Barrier:* Loss of local managerial control of the entity being acquired, merged or consolidated; and potential loss of jobs by having another entity assume the day-to-day operations of the facilities. In many cases, this is true, such as the case in which a municipality acquires a utility outside its jurisdictional boundaries.

*Recommended Strategy:* Encourage the formation of regional authorities with equal representation of each water system involved in management of the water system.

*Barrier:* Extensive legal requirements to establish a new regional water system, particularly when two or more existing water systems with different ownership types propose to consolidate.

*Recommended Strategy:* Develop model regionalization/consolidation agreements to assist water system attorneys in drafting necessary documents.

*Barrier:* The mechanisms to help pay for the up-front costs to investigate and implement regionalization and consolidation strategies are unclear, creating a considerable disincentive for investigating these opportunities. Regionalization/consolidation studies may require sizable cash and resource outlays for engineering and other services.

*Recommended Strategy:* Institute a multi-agency engineering report review. Most funding agencies have a mechanism for reimbursement for these costs if the project is a viable project.

*Barrier:* Lack of encouragement to investigate public-private partnerships or cooperative agreements with other entities for outsourcing specific services, such as meter reading, billing, and data processing, and plant operations.

*Recommended Strategy:* Develop model contracts and mutual assistance agreements to facilitate outsourcing of essential services.

*Barrier:* Inadequate incentive in funding agency priority systems to promote consolidation.

*Recommended Strategy:* Modify funding agency priority systems to promote consolidation.

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## **SECTION 5 STAKEHOLDER INVOLVEMENT IN THE DEVELOPMENT OF THE STRATEGY**

Report on the  
CDS  
STAKEHOLDER WORKSHOP  
Oklahoma City, Oklahoma  
Held March 2, 1998

Held by Oklahoma Department of Environmental Quality

Facilitated by the University of New Mexico Environmental Finance Center  
Heather Himmelberger, PE, Director  
Susan Butler, Community Planner  
Margie Krebs-Jespersen, Environmental Engineer

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This report summarizes the comments and key findings from the CDS Stakeholder Workshop held in Oklahoma City on March 2, 1998. The Oklahoma Department of Environmental Quality, Water Quality Division, sponsored the workshop while the University of New Mexico Environmental Finance Center facilitated the sessions. The purpose of this meeting was to explain the CD requirements of the 1996 Amendments to the Safe Drinking Water Act, and to gather stakeholder input on specific CD issues.

### **A. Introduction.**

The 1996 Safe Drinking Water Act (SDWA) Amendments include requirements for states to:

- Obtain authority to prevent new non-viable systems,
- Develop a strategy to address the capacity of existing systems, and
- Ensure that potential SRF recipients obtain and maintain sufficient TMF Capacity prior to receiving loan funds.

For existing water systems, the SDWA requires a state to:

- Describe the methods or criteria to be used in identifying and prioritizing systems most in need of TMF assistance;
- Identify factors that encourage or impair CD;
- Describe how resources will be utilized for assisting public drinking water systems in complying with regulations, encourage the development of partnerships, and assist public water systems in training and certification;
- Establish a baseline against which to measure improvements; and

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- Identify and coordinate with individuals that have an interest in the development and implementation of the CDS.

However it is not sufficiently clear that states *must* include each of these items, but rather that they must *consider* each of the items in developing the strategy. Clearly, including each of the required elements produces a comprehensive CD program for the state and addressees all of the necessary issues. However, each state must examine each of the issues and determine those elements that best fit the needs of the state. The participants at the March 2 meeting addressed several of these elements.

## **B. The Stakeholders.**

A stakeholder group can help to improve communication and networks between different groups and within the constituencies of various groups. Much of the work of the CDS will be educating water system management, operators, and consumers. A stakeholder group that has access to these people through its membership can enhance the success of the strategy by providing information and educating and training their constituents. It is also important to have a continuing dialogue between the stakeholders and the regulatory and funding agencies as the CDS is implemented. A stakeholder group can work collaboratively to meet the common goal of increasing the capacity of water systems to provide safe drinking water for all Oklahoma residents.

The intent of this meeting was to have as inclusive a group as possible to provide opportunities for joint problem-solving and consensus building. Attachment A is the invitation letter from Oklahoma DEQ and a list of invitees. Some of the people invited responded that they were not able to attend, but expressed interest and asked to receive information from the workshop.

## **C. Meeting Site.**

The meeting was held on March 2, 1998 at the Springlake Metro Tech in Oklahoma City and followed the agenda below.

Welcome and Introductions

Norma Aldridge  
Oklahoma Dept. of Environmental Quality

Defining CD and CD Requirements  
Under SDWA

Heather Himmelberger, PE,  
New Mexico EFC

Oklahoma DEQ Existing CD Activities

Susan Butler  
New Mexico EFC

Objectives and Priorities of Oklahoma's CDS: Input  
Session 1 on Key Issues to be included in the CDS

Heather Himmelberger



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Input Session 2: Factors that Encourage or Impair Regionalization Susan Butler

Input Session 3: Baseline Measurements of CD in Water Systems Heather Himmelberger

Input Session 4: Factors that Encourage or Impair CD in Water Systems Susan Butler

Each input session was preceded by a short talk to present some background information. Then the groups were given a topic to brainstorm and specific questions to answer. Following the discussions, one member of each group was asked to report to the main group. These items were recorded on a flip-chart and displayed throughout the room. Following each session, participants were asked to change places to make sure that they were able to interact with as many others as possible and to ensure the each discussion group included a diversity of perspectives. Summarized below are each of the input session topics and a synopsis of the discussion by the stakeholders. See Attachment B for a list of the participants (meeting attendees) and Attachment C for actual comments from the individual groups. Attachment D is a copy of the handouts used for each of the sessions.

## **D. Input Session 1: Objectives and Priorities of Oklahoma's CDS - Key Issues to be Included in the Strategy.**

*Assignment:* Participants were asked to look five years into the future, and discuss what they hoped would be accomplished. They were asked to think about what they would include in a report to EPA and the Oklahoma Governor. They were asked to brainstorm an overall list then choose the top three priorities. The second part of the assignment was to decide, as a group, the most important aspects to include in the strategy. Because the strategy can not include everything, the stakeholders were to provide Oklahoma with advice on where to begin. For this part of the exercise, the stakeholders were to brainstorm possible priorities then select the top three from the list.

*Goal:* Consensus on the three main objectives to be accomplished in five years; to gain input on key issues which should be included in the strategy; and to develop a wish list of accomplishments.

*Discussion:* Most of the groups identified financial stability of water systems as one of the top strategy objectives, including the goal of systems charging the true cost of providing water service to customers. Another frequently identified objective was to develop policy changes and enabling actions to encourage systems to consolidate. Several groups felt that it was important to establish a concept of regionalization and to encourage a regional perspective. Education, including detailed staff and management

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training for rural water districts and municipalities as well as expanded operator training, was also mentioned as a top objective. Additional issues to include in Oklahoma's strategy included: 1) education of utility governing bodies on the TMF issues of water systems; and, 2) a review of operator certification regulations to decrease operator turnover rates and develop methods to retain qualified operators.

### **E. Input Session 2: Factors that Encourage and Impair Regionalization.**

*Assignment:* Participants were asked to brainstorm barriers to regionalization and to identify one or two of the most serious barriers; then brainstorm actions that could be taken to eliminate or reduce the barriers. As the second part of this session, participants were to brainstorm those factors which encourage regionalization and identify the two most important.

*Goal:* Consensus on the main factors that encourage or impair regionalization.

*Discussion:* The discussion groups came up with a variety of barriers to regionalization. One barrier that almost every group mentioned was the loss of local control. They agreed that "turf wars" and politics play an important role in inhibiting regionalization. One group pointed out that it is often only a perceived loss, not an actual loss of autonomy. Suggested ways to remove this barrier included: establishing area consortiums to share concerns and identify resources; conducting studies to point out benefits of consolidation in specific areas of Oklahoma; and, educating governing bodies and customers on advantages, disadvantages, costs, and liabilities of consolidation through public meetings. Another way to deal with loss of control issues is to make sure there is equitable representation, perhaps through creating a regional board with local representation, and by establishing an equitable rate structure.

Ways in which Oklahoma could encourage regionalization include developing a regionalization policy and establishing a "legal" definition of regionalization with appropriate laws.

### **F. Input Session 3: Baseline Measurement of CD in Water Systems.**

*Assignment:* Participants were asked to consider establishing a baseline of water system capacity. What should the system universe be and why? What key TMF information should be included in the baseline? The participants were asked to brainstorm information and then identify the top two items from each TMF category.

*Goal:* Consensus on what Oklahoma should consider as the system universe and the key information that should be included in the establishment of a baseline measurement.

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*Discussion:* There was no clear consensus on what the system universe should be. The following answers were provided by the groups: systems with less than 2,500 connections, systems serving less than 2,500 population, systems on the Significant Non-Complier (SNC) list, and systems under Consent Order. One group suggested prioritizing systems in order of known violators, systems at risk, and systems with ongoing monitoring.

All the groups agreed that sufficient income to cover expenses and capital improvements was an important baseline measurement for financial capacity. This included adequate billing system, proper monetary controls, and an adequate rate structure.

Key indicators of managerial capacity would include information about board training, staff training, as well as proper water testing and complaint monitoring. Measurements that could be used for technical capacity include: properly certified operator, monitoring and reporting, and proper recordkeeping.

### **G. Input Session 4: Factors that Encourage or Impair CD in Water Systems.**

*Assignment:* The participants were asked to think about structural, legal/regulatory, and economic/demographic impairments to CD. Each group was assigned one of the categories and asked to brainstorm about the items that encouraged and impaired capacity for that category. For those items identified as impairments, the groups were asked to brainstorm actions that could be taken to address the impairment.

*Goal:* Consensus on the factors that impair and encourage CD.

*Discussion:* Structural impairments included: age and size of system; geographic distribution of customers; lack of regional systems; and use of utility revenue for other purposes. Encouragements included promoting regionalization wherever possible and providing sufficient capital funding.

Economic and demographic impairments included small population base, with poor and elderly population, and unemployment. Ways to overcome these impairments included encouraging consolidation with larger systems and providing SRF loan and grants.

The most important legal and regulatory impairments identified were the difficulty of merging non-profit systems with rural water districts and the need, but inability, to monitor financial stability of systems. Another important legal and regulatory impairment seemed to be the constitutional prohibition of providing funds to private systems. There is a lack of long-term, low-interest funding available for these private systems.

## SECTION 6 FACTORS THAT ENCOURAGE OR IMPAIR CD

### A. Factors that Encourage CD.

The SDWA provides requirements that public water systems must meet. As systems without the TMF Capacity find difficulties with these requirements, they usually will violate one or more of the requirements. A violation will result in the system being placed on the DEQ Level 1 List. This sort of attention causes the owner, operator, and users of the system to realize that there is a deficiency in the Capacity of the system. This realization may result in a request for technical assistance. At this point the owner, operator, and users of the system are most cooperative with the agencies offering the assistance. DEQ has an existing comprehensive program for providing technical assistance to existing water systems. The CD requirements of the SDWA have allowed the DEQ to expand this program by entering into contracts with consultants that also provide technical assistance. The technical assistance program will continue to help systems develop the TMF Capacity that are lacking.

Regular sanitary surveys provide a high level of monitoring and review of the public water systems. Systems with problems that are revealed by the sanitary survey are provided an opportunity to receive assistance.

During the DEQ plan review process, Oklahoma has the ability to restrict the formation of new water systems that cannot demonstrate the TMF Capacity to provide safe and reliable service for the life of the proposed project. The effective use of this authority can eliminate the formation of water systems that do not demonstrate a long-term commitment to providing acceptable levels of service.

### B. Factors that Impair CD.

There are several factors that work against the goal of ensuring that every water system has the financial, managerial, and technical Capacity to provide safe and reliable service, both in the present and the future. This section presents factors that make it difficult for water systems to develop their Capacity to provide quality water service.

#### 1. Structural Factors.

a. The relative ease with which a water system can be established may be a source of problems. Oklahoma has hundreds of independently owned and operated water systems, with more being created each year. Many of these water systems are very small, serving fewer than 100 homes, and are not adequately operated or managed. Most of these very small water systems do not have full-time employees; professional staff; skilled operators; emergency response plans; capital reserves; or access to engineering, accounting, and legal expertise. Under normal conditions, many of these very small water systems are able to provide safe water to their customers. But as the system ages and if under stress (e.g., equipment failures, main breaks, extreme weather conditions), it is unlikely that these systems can respond appropriately, resulting in a potentially serious threat to the system users health and safety.

b. Many small systems are not operated as businesses. This factor makes it

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difficult to improve the Capacity of water systems which lack a profit motive in the operation of these small systems. These water systems are owned and operated on a not-for-profit basis: municipal systems, water districts, and water supply corporations, are all nonprofit entities. When a business is operated on a nonprofit basis, it often relies on volunteers to perform key functions, ranging from serving on boards of directors to assisting in the operations and maintenance of the system. Extreme efforts are often taken to maintain low water rates. Consequently, these systems do not accumulate sufficient fund reserves to make needed improvements or deal with normal operational problems much less emergencies.

c. Another significant factor in the structure of the Oklahoma water industry is the small number of large, multi-jurisdictional water systems. When such systems exist, they not only provide professional operations and management to the systems that they own, they also can make that expertise available to neighboring systems through contract management or other cooperative ventures. Over the years, the water industry in Oklahoma has developed on a localized basis which has resulted in the formation of very few large regional water suppliers.

d. Finally, the location of a water system can also impede its ability to develop the required Capacity. Water systems that are located in sparsely populated areas are unlikely to be able to rely on a regional water provider or service company. Similarly, systems that do not have access to high quality raw water will face higher costs and technical challenges that would not exist if higher quality water supplies were available.

2. Legal and Regulatory Factors. There is a lack of coordination among local, state, and federal entities regarding the formation of new water systems. However, the formation of the PERC and JERC committees are helping to encourage coordination.

3. Economic and Demographic Factors. Any discussion of the problems that impair the capacity of water systems would not be complete without recognizing that economics and demographic factors play a major role in the ability of a water system to provide safe and reliable service. If funds were unlimited, there would be few impediments to the provision of high-quality service by any water system. However, there are significant limits on the ability of water systems to raise their rates to generate the funds required to provide reliable service.

Water systems in areas that face demographic challenges (relatively few people, low income levels, a high percentage of people with incomes below the poverty level, high unemployment, a high percentage of elderly people) are likely to have water systems with CD challenges. It is necessary to recognize that the root cause of some community water systems' problems lies in the community itself.

In addition, economics greatly influence the decision of how to construct and finance a new water system. If the system is organized as a rural water district or municipality, it might qualify for tax-exempt or government-backed financing. If it is organized as a for profit corporation, it will be required to pay federal, state, and local taxes that can lead to higher rates.

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In addition, the effect of the tax laws can lead smaller investor owned utilities to operate a business that takes in more cash than it spends, but that shows a loss for tax purposes. This is not just a tax strategy. The effect on system operations is real: there is little incentive to invest in replacing or upgrading plant and equipment, since that would significantly reduce cash flow and have little effect on the income statement.

## **C. Mechanisms to Address CD Impairment.**

It is not easy to address many of these impairments to CD. Generally, each factor that impedes the development of the "desirable" structure for the water industry in Oklahoma exists for other equally valid reasons. For example, the legal requirements that encourage the development of nonprofit water systems help to keep rates affordable and encourage new development. Changing many of these impediments will require weighing the relative importance of water system CD against other important public policy goals.

Some methods to address barriers to CD are listed below:

### *Methods to Eliminate Structural Impairments*

DEQ assigns bonus ranking points in DWSRF priority ranking system for consolidation or interconnection of water systems.

Provide funding to encourage the creation of large, regional water suppliers (either wholesale or retail).

### *Methods to Enable DEQ to Facilitate Consolidation or Regionalization of Water Systems*

Provide State incentives (loans or grants) to enable water systems that want to become regional providers to acquire the needed water rights.

Improve the communication among those who might be able to influence the initiation or continuation of water systems, including: legislators, lenders, local government officials, real estate agents, home builders, developers, and consumers.

### *Methods to Eliminate Legal and Regulatory Impairments*

Improve the coordination among local, state, and federal regulations, particularly with regard to counties subdivision ordinances.

### *Methods to Eliminate Economic and Demographic Impairments*

Develop incentives for satellite management or other types of regionalization in areas that are confronted with economic and demographic challenges.

Develop programs to assist water systems that have a large number of low-income customers.

Obtain and utilize long-term projections of population growth and other demographic factors when planning new or expanded water systems.

Involve community leaders in understanding population and other demographic trends in their communities.

Educate consumers in low-income areas about their water rates and service.

Integrate water utility planning with land use planning in counties and cities.

## SECTION 7 IMPLEMENTATION PLAN

### A. Implementation Within the Agency.

1. Assist in Restructuring Non-Viable Systems - The following enhancements could assist in restructuring non-viable systems:
  - a. Encourage the formation of regional authorities with equal representation of each water system involved in management of the water system;
  - b. Develop model regionalization/consolidation agreements to assist water system attorneys in drafting necessary documents;
  - c. Multi-agency engineering report review;
  - d. Develop model contracts and mutual assistance agreements to facilitate outsourcing of essential services; and
  - e. Develop TMF Self-Assessment.
2. Sustainable Infrastructure Initiatives – This is intended to assist water systems to address infrastructure rehabilitation and replacement issues with efforts including:
  - a. Promote sustainable infrastructure through better management of water utilities, including environmental management systems and asset management;
  - b. Promote water rates that reflect the full cost pricing of services; and
  - c. Promote watershed approaches to protection as an integral part of infrastructure decision-making.
3. CDS for the Future - The following enhancements could be considered to expand CD at some future time:
  - a. Modify PWS Construction Standards to require the submission of a Business Plan, including financial and managerial information, as a part of the permit process for new community and non-transient public water supply systems if financial capacity is not being evaluated by funding agencies such as OWRB or RECD;
  - b. Contract for enhanced CD training for rural water districts through ORWA or other TA providers;
  - c. Contract for enhanced CD training for municipalities through the OML;
  - d. Develop CD training through the Customer Services Division of DEQ; and
  - e. Incorporate energy efficiency projects such as energy audits.

Note - Only the first suggestion would require any rule changes.