OKLAHOMA FUNDING AGENCY COORDINATING TEAM

Engineering and Environmental Guides and Forms

for

Water and Wastewater Projects

ENDORSED BY:

OKLAHOMA WATER RESOURCES BOARD STAFF
OKLAHOMA DEPARTMENT OF COMMERCE
OKLAHOMA CITY AREA INDIAN HEALTH SERVICE
USDA - RURAL DEVELOPMENT - OKLAHOMA
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

REVISED: January 1, 2004

Revised: 01/01/04

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

MANUAL OF OKLAHOMA GUIDES FOR PREPARATION OF ENGINEERING REPORTS AND ENVIRONMENTAL INFORMATION

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GUIDANCE INFORMATION

These guides, checklist, and forms were created by a joint effort of the funding and regulatory agencies that are members of the Funding Agency Coordinating Team (more commonly known as the FACT team).

This effort by the FACT team was made to provide **water and wastewater applicants** a single uniform method for requesting funding and regulatory approvals. All state and Federal Agencies that make up the FACT team accept these guides, checklist, and forms.

Procedure for Engineering and Environmental Information Document Review

1. Entity determines need for a project.

2. Entity selects a consultant and enters into an agreement(s) for the engineering and environmental activities.

3. Consultant downloads the Agency(s) application forms and the FACT Team Engineering and Environmental Guides and Forms for Water and Wastewater Projects. Consultant prepares engineering report and environmental information documents.

4. Entity adopts the engineering report and the environmental information document.

5. Consultant submits the engineering report to the DEQ. Consultant also submits the engineering report and environmental information documents to the applicable funding agencies. Please note, the DEQ will only require a copy of the environmental information documents if Drinking Water State Revolving Funds will be used as a funding source for the project.

6. The DEQ shall respond to the loan recipient and funding agencies with comments pertaining to the engineering report. The funding agency shall respond to loan recipient with comments (as needed) on engineering report and environmental information document.

7. At such time as the reports are determined to have met the criteria established in the FACT Team Engineering and Environmental Guides and Forms as well as other applicable rules, the DEQ and the funding agencies shall issue separate approval letters for the engineering and/or environmental report(s) to the loan recipient.

8. Any modifications to the project during design or construction, which significantly changes the scope of the project, must be reported to the funding agency and DEQ to allow additional review and approval of documents. All modifications must be approved in writing by DEQ and the funding agencies before work proceeds.

9. The funding agencies will not complete processing of an application until DEQ issues a letter approving the engineering report.

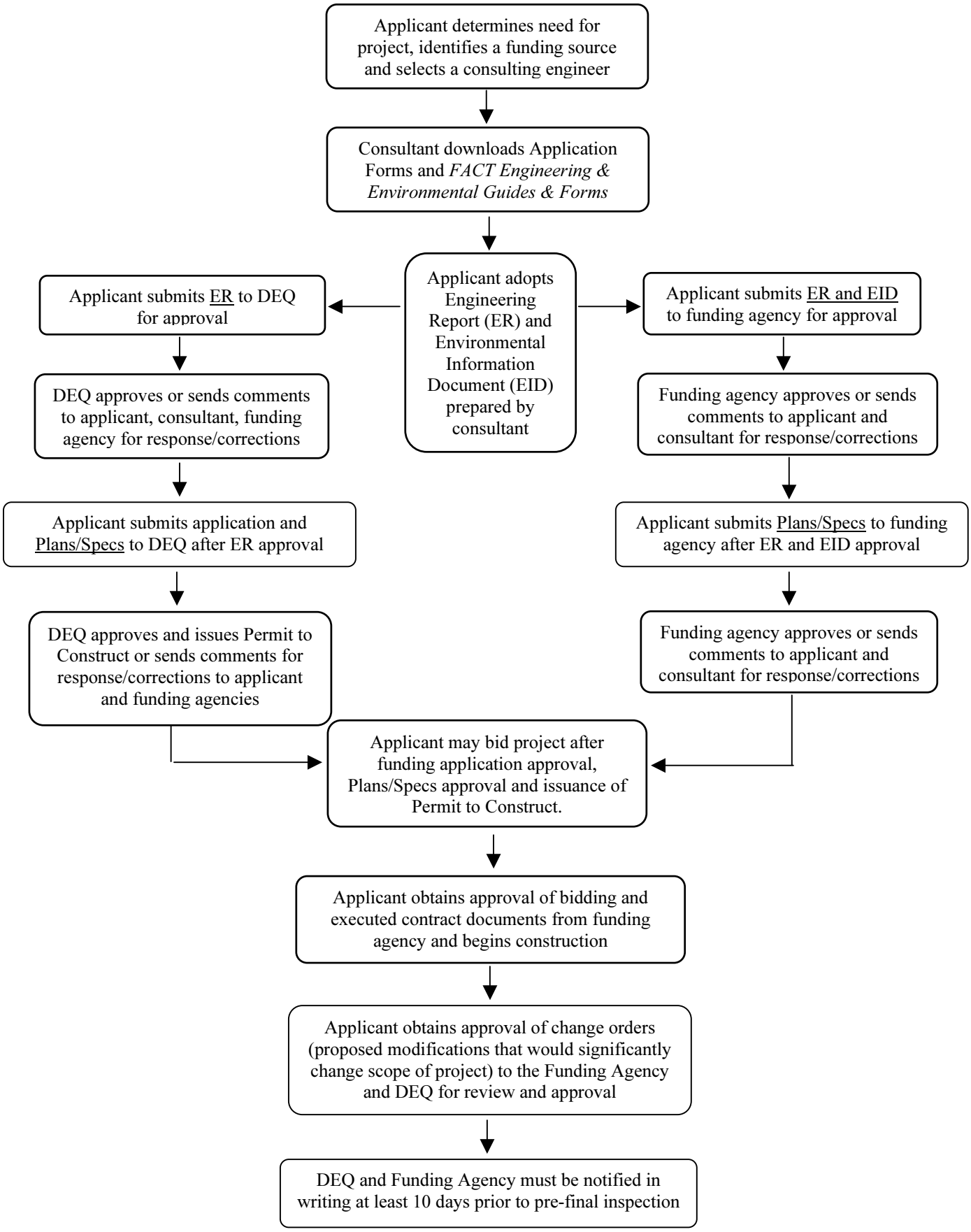
10. Plans and specifications must be approved and a “permit to construct” issued by DEQ prior to letting a contract for construction.

11. The DEQ and the funding agency must be notified in writing at least 10 days prior to the pre-final inspection.

12. Consultant submits a copy of the plans of record ("as-built plans") and specifications to DEQ, Rural Development and the funding agencies that may additionally request the plans of record.

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

Procedures for Engineering & Environmental Document Review



Rev. 01/04

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

GUIDELINES FOR

ENGINEERING REPORTS

FOR

WATER PROJECTS

ENDORSED BY:

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ENGINEERING REPORT
Water Projects

I. GENERAL. The Engineering Report should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action, from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner. The following should be used as a guide for the preparation of Engineering Reports for water systems in Oklahoma.

II. PROJECT PLANNING AREA. Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. The description should include information on the following:

A. Location. Maps, photographs, and sketches. These materials should indicate legal and natural boundaries, major obstacles, elevations, etc.

B. Environmental Resources Present. Provide a general description of the environmental resources present. A detailed description should be included in the environmental information document.

C. Growth Areas and Population Trends. Specific areas of concentrated growth should be identified. Population projections for the project planning area and concentrated growth areas should be provided for the project design period. These projections should be based on historical records with justification from recognized sources.

D. Current and Projected Water Use Data. For existing systems, the current water use data should be used as a basis for the proposed design. If a deviation is deemed necessary, a justification must be provided.

III. EXISTING FACILITIES. Describe the existing facilities including at least the following information:

A. Location Map. Provide a schematic layout and general service area map (may be identified on project planning area maps).

B. Condition of Facilities. Describe present condition; suitability for continued use; adequacy of water supply; and, if any existing central facilities, the treatment, storage, and distribution capabilities. Also, describe compliance with all state and federal requirements for water supply systems including: primary and secondary drinking water standards,

National Pollutant Discharge Elimination System permits, handicap accessibility standards for public areas such as the office, and security standards for protection of all drinking water facilities.

C. Financial Status of any Operating Central Facilities. Provide information regarding rate schedules, annual operating and maintenance (O&M) cost, tabulation of users by monthly usage categories and revenue received for the last three fiscal years. Give status of existing debts and required reserve accounts.

IV. NEED FOR PROJECT. Describe the needs in the following order of priority:

A. Health and Safety. Describe concerns and include relevant regulations and correspondence from/to Federal and State regulatory agencies such as DEQ inspection reports, Notices of Violation, and Consent or Administrative Orders. This section should also discuss any improvements necessary to provide enhanced security at source or treatment facilities and improved handicap accessibility in public areas as required by the Americans with Disabilities Act.

B. System O&M. Describe the concerns and indicate those with the greatest impact. Investigate water loss, management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.

C. Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

D. Sewerage System Available. Describe the existing sewerage system and sewage treatment works, with special reference to their relationship to existing or proposed waterworks structures which May affect the operation of the water supply system, or which may affect the quality of the supply. Water plans will not be approved before a community sewage disposal system is approved, if one is to be installed.

V. ALTERNATIVES CONSIDERED. This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need. The description should include the following information on each alternative:

A. Description. Describe the facilities associated with the alternative. Describe all feasible water supply sources and provide comparison of such sources. Also, describe treatment, storage and distribution facilities.

B. Design Criteria. State the design parameters used for evaluation purposes.

C. Environmental Impacts. Provide a short description of environmental impacts that may preclude any alternatives. Include a detailed description in the environmental report. Only projects that will utilize funds that have a federal identity require the completion of an EID. Those current funding sources would be as follows:
1. Rural Development Loan and Grant Programs for Water and Wastewater
2. Department of Commerce Community Development Block Grants
3. OWRB-DEQ State Revolving Loan Funds
4. Oklahoma City Area Indian Health Service

D. Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired or leased.

E. Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, flood plain areas, or other conditions which may affect cost of construction or operation of facility.

F. Cost Estimates.
1. Construction.
2. Non-Construction and Other Projects.
3. Annual Operation and Maintenance.
4. Cost Effective Present Worth Analysis. A sample format is available upon request from the Oklahoma Water Resources Board.

G. Advantages/Disadvantages. Describe the specific alternatives ability to meet the owner's needs within its financial and operational resources, comply with regulatory requirements, compatibility with existing comprehensive area-wide development plans, and satisfy public and environmental concerns. A matrix rating system could be useful in displaying the information.

VI. PROPOSED PROJECT (RECOMMENDED ALTERNATIVE). This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At least the following information should be included:

A. Project Design

1. Source(s) of Water Supply. The applicant should describe the proposed source or sources of water supply to be developed, the reasons for their selection, and provide the following information:

a. Include requirements for quality and quantity.

b. Describe recommended source, including site.

c. For surface water sources, include:

(1). hydrologic data, stream flow and weather records.
(2). safe yield, including all factors that may affect it.
(3). maximum flood or pool elevation.
(4). description of the watershed, noting any existing or potential sources of contamination which may affect water quality.
(5). summary of the quality of raw water with special reference to fluctuations in quality.

d. For ground water sources, include:

(1). sites considered.
(2). advantages of the site selected.
(3). elevations with respect to surroundings and floodplain(s).
(4). character of formations through which the source is to be developed.
(5). geologic conditions affecting the site.
(6). summary of source exploration, test well depth, and method of construction; placement of liners or screen; test pumping rates and their duration; water levels and specific capacity, chemical and radiological quality of the water.
(7). all sources of possible contamination including but not limited to sewers and sewerage facilities, landfills, outcroppings of consolidated water bearing formations, waste disposal wells, slush pits, irrigation wells, and abandoned wells.
(8). industrial and other private supply. Where pertinent, use significant groundwater developments within a one mile (1.6 kilometer) radius of the proposed groundwater source, giving depths, size, protective casing depth, capacity, location, type and any available information pertaining thereto.

2. <u>Water Use Data</u>. Water use data shall include the following:

a. A description of population trends as indicated by available records, and the estimated population that will be served by the proposed water supply system or expanded system.

b. Present water consumption and the projected average maximum daily demands, and peak hourly flow shall be used as the basis of design.

c. Present and/or estimated yield of the sources of supply.

3. Fire Flow Requirements. Fire flow requirements shall include the following:

   a. Requirements of the Insurance Services Office or other similar agency as to the fire flows required or recommended in the service area involved.

   b. Fire flows which will be made available by the proposed or enlarged system.

4. Water Rights. Existing and proposed (Discuss the status of any water rights acquisition(s).

5. Treatment. Describe process in detail and identify location of plant and site of any process discharges.

6. Storage. Identify size, type and site location. Discuss hydraulic interactions with existing facilities.

7. Pumping Stations. Identify size, type, site location and any special power requirements.

8. Distribution Layout. Identify general location of line improvements: lengths, sizes and key components.

9. Hydraulic Calculations. This information should provide sufficient detail in a tabular format to determine compliance with ODEQ design requirements. Automation tools may be used by the engineer. The submittal should include a map with a list of nodes and pipes and the associated characteristics, such as elevation of node, pipe diameter, pipe segment length, reservoir elevation, domestic and industrial water demands, pressures, fire flow, etc.

10. Capacity Funding Limitations for Drinking Water State Revolving Fund (DWSRF) Projects. The eligible capacity shall be determined using average daily flow and maximum daily flow according to population and per capita flow estimates provided by the applicant. Peak hourly flow shall be used to determine pump capacity. Project capacity must be consistent with environmental constraints and affordability.

a. Eligible design capacity for treatment plants will be up to a period of 20 years from the estimated date of initiation of construction.

b. Eligible capacity for lines will be based on flow for a maximum of 40 years from the estimated date for initiation of construction.

c. Eligible design capacity shall be based on the local population projection for the design year and the appropriate local per capita flow.

11. Soil, Ground Water and Foundation Conditions. Soil, ground water and foundation conditions shall include a description of the following:

    a. The character of the soil through which water mains are to be installed.

    b. Foundation conditions and floodplain elevations prevailing at sites of proposed structures.

    c. The appropriate elevation of ground water in relation to subsurface structures.

12. Waste Disposal. Discuss the various wastes from the water treatment plant, their volume, proposed treatment, points of discharge and/or method of disposal. Project sites shall include the following:

    a. Discussion of the various sites considered and advantages of the recommended ones.

    b. The proximity of residences, industries, and other establishments.

    c. Any potential sources of pollution that may influence the quality of the supply or interfere with effective operation of the water works system, including but not limited to: absorption systems, septic tanks, privies, cesspools, sink holes, sanitary landfills, refuse and garbage dumps.

13. Table. Show the design capacity for each existing unit, proposed unit, DEQ required capacity (OAC 252:626), and indicate if plant design meets DEQ requirement, as follows:

EXAMPLE

Unit	Existing Design	Proposed Design	DEQ Requirement (OAC 252:626)	Meets
Water Treatment Plant	500,000 GPD Plant	1 MGD Plant	n/a	n/a
Rapid Mix	40 sec detention	None	30 sec detention	Yes
Flocculation	45 min detention	None	30 min detention	Yes
Sedimentation	3 hr	6 hr	4 hr	Yes
Disinfection	15 min	30 min	30 min	Yes
Filtration	5 gal/min/ft^2	3 gal/min/ft^2	4 gal/min/ft^2	Yes
Lagoon	1 year	3 years	2.5 years	Yes

B. Cost Estimate. Provide an itemized estimate of the project cost based on the anticipated period of construction. Include development and construction, land and rights, legal, engineering, interest, equipment, contingencies, refinancing, and other costs associated with the proposed project. (For projects containing both water and waste disposal systems, provide a separate cost estimate for each system.)

C. Annual Operating Budget. (For USDA-RD Projects Only)

1. Income. Provide a rate schedule. Project income realistically, based on user billings, water treatment contracts, and other sources of income.

2. Operations and Maintenance Costs. Project costs realistically. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, wages, taxes, accounting and auditing fees, legal fees, interest, utilities, gasoline, oil and fuel, insurance, repairs and maintenance, supplies, chemicals, office supplies and printing, and miscellaneous.

3. Capital Improvements. If purchasing water or if water is being treated by others, these costs should be included in O&M costs.

4. Debt Repayments. Describe existing and proposed project financing from all sources.

VII. Conclusions and Recommendations. Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlight the need for special coordination, a recommended plan of action to expedite project development, etc.

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

GUIDELINES FOR

ENGINEERING REPORTS

FOR

WASTEWATER PROJECTS

ENDORSED BY:

OKLAHOMA WATER RESOURCES BOARD STAFF
OKLAHOMA DEPARTMENT OF COMMERCE
OKLAHOMA CITY AREA INDIAN HEALTH SERVICE
USDA - RURAL DEVELOPMENT - OKLAHOMA
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Revised: January 1, 2004

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ENGINEERING REPORT
Wastewater Projects

I. GENERAL. The Engineering Report should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action, from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner. The following should be used as a guide for the preparation of Engineering Reports for sanitary sewer systems in Oklahoma.

II. PROJECT PLANNING AREA. Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. The description should include information on the following:

A. Location. Maps, photographs, and sketches. These materials should indicate legal and natural boundaries, major obstacles, elevations, etc.

B. Environmental Resources Present. Include in the environmental report.

C. Growth Areas and Population Trends. Specific areas of concentrated growth should be identified. Population projections for the project planning area and concentrated growth areas should be provided for the project design period. These projections should be based on historical records with justification from recognized sources.

III. EXISTING FACILITIES. Describe the existing facilities including at least the following information:

A. Location Map. Provide a schematic layout and general service area map (may be identified on project planning area maps).

B. Condition of Facilities. Describe present condition; suitability for continued use; adequacy of water supply; and, if any existing central facilities, the treatment, storage, and collection capabilities. Also, describe compliance with all state and federal requirements for wastewater systems including: Water Pollution Control Standards, National Pollutant Discharge Elimination System permits, handicap accessibility standards for public areas, and security standards for the protection of all wastewater facilities.

C. Financial Status of any Operating Central Facilities. Provide information regarding rate schedules, annual operating and maintenance (O&M) cost, tabulation of users by monthly usage categories and revenue received for last three fiscal years. Give status of existing debts and required reserve

accounts.

IV. NEED FOR PROJECT. Describe the needs in the following order of priority:

A. Health and Safety. Describe concerns and include relevant regulations and correspondence from/to Federal and State regulatory agencies such as DEQ inspection reports, Notices of Violation, and Consent or Administrative Orders. This section should also discuss any improvements necessary to provide enhanced security at source or treatment facilities and improved handicap accessibility in public areas as required by the Americans with Disabilities Act.

B. System O&M. Describe the concerns and indicate those with the greatest impact. Investigate inflow, infiltration and leakage, management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.

C. Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

V. ALTERNATIVES CONSIDERED. This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need(s). The description should include the following information on each alternative:

A. Description. Describe the facilities associated with the alternative, including treatment, storage, pumping, collection system, discharge and sludge handling facilities.

B. Design Criteria. State the design parameters used for evaluation purposes.

C. Environmental Impacts. Provide a short description of environmental impacts that may preclude any alternatives. Include a detailed description in the environmental report for the proposed alternative. Only projects that will utilize funds that have a federal identity require the completion of an EID. Those current funding sources would be as follows:
1. Rural Development Loan and Grant Programs for Water and Wastewater
2. Department of Commerce Community Development Block Grants
3. OWRB-DEQ State Revolving Loan Funds
4. Oklahoma City Area Indian Health Service

D. Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, or leased.

E. Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, floodplain areas, or other conditions which may affect cost of construction or operation of facility.

F. Cost Estimates.
1. Construction.
2. Non-Construction and Other Projects.
3. Annual Operation and Maintenance.
4. Cost Effective Present worth Analysis. A sample format is available upon request from the Oklahoma Water Resources Board.

G. Advantages/Disadvantages. Describe the specific alternative's ability to meet the owner's needs within its financial and operational resources, comply with regulatory requirements, compatibility with existing comprehensive area-wide development plans, and satisfy public and environmental concerns. A matrix rating system could be useful in displaying the information.

VI. PROPOSED PROJECT (RECOMMENDED ALTERNATIVE). This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At least the following information should be included:

A. Project Design.

1. Treatment. Describe process in detail and identify location of plant and site of any discharges. Provide status of compliance with the 208 Plan (if applicable, include current revisions with copy of ODEQ approval letter). For existing plants and proposed land application projects, provide a description of how sludge is managed and a copy of the approved Sludge Management Plan (if applicable, include a copy of ODEQ approval letter).

2. Pumping Stations. Identify size, type, site location and any special power requirements.

3. Collection System Layout. Identify general location of line improvements: Lengths, sizes and key components.

4. Hydraulic Calculations. This information should provide sufficient detail in a tabular format to determine compliance with ODEQ design requirements. Automation tools may be used by the engineer. The submittal should include a map with a list of manholes and pipes and the associated characteristics, such as elevation of inverts, pipe diameter, pipe segment length, etc.

5. Table. Show the design capacity for each existing unit, proposed unit, DEQ required capacity (OAC 252:656), and indicate if plant design meets DEQ requirement, as follows:

EXAMPLE

Unit	Existing Design	Proposed Design	DEQ Requirement (OAC 252:656)	Meets
Wastewater Plant	500,000 GPD Plant	1 MGD Plant	n/a	n/a
Aeration	1,300 ft^3/lb peak BOD_5	1,500 ft^3/lb peak BOD_5	1,500 ft^3/lb peak BOD_5	Yes
Reactor Volume	10 hr hydraulic detention	20 hr hydraulic detention	18 hr hydraulic detention	Yes
Clarifier	700 gal/ft^2/day hydraulic overflow rate	1,000 gal/ft^2/day hydraulic overflow rate	1,000 gal/ft^2/day hydraulic overflow rate	Yes
Lagoon-primary cell	none	60 days retention	60 days retention	Yes
Lagoon-secondary cell	none	60 days retention and 120 days retention in system	60 days retention and 120 days retention in system	Yes

6. Soil Groundwater and Foundation Conditions. Soil, groundwater and foundation conditions shall include a description of the following:

   a. The character of the soil through which sewer lines are to be installed.

   b. Foundation conditions and floodplain elevations prevailing at sites of proposed structures.

   c. The appropriate elevation of ground water in relation to subsurface structures.

7. Waste Disposal. Discuss the various wastes from the wastewater treatment plant, their volume, proposed treatment, points of discharge, and/or method of disposal. Project sites shall include the following:

   a. Discussion of the various sites considered and advantages of the recommended ones.

   b. The proximity of residences, industries, and other establishments.

B. Cost Estimate. Provide an itemized estimate of the project cost based on the anticipated period of construction. Include development and construction, land and rights, legal, engineering, interest, equipment, contingencies, refinancing, and other costs associated with the proposed project. (For projects containing both water and waste disposal systems, provide a separate cost estimate for each system.)

C. Annual Operating Budget. (For USDA-RD Projects Only)

1. Income. Provide a rate schedule. Project income realistically, based on user billings, wastewater treatment contracts, and other sources of income.

2. Operations and Maintenance Costs. Project costs realistically. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, wages, taxes, accounting and auditing fees, legal fees, interest, utilities, gasoline, oil and fuel, insurance, repairs and maintenance, supplies, chemicals, office supplies and printing, and miscellaneous.

3. Capital Improvements. Provide a summary of any existing capital improvement projects which would affect the operation of the proposed project or repayment of the debt incurred by the proposed project.

4. Debt Repayments. Describe existing and proposed project financing from all sources.

VII. CONCLUSIONS AND RECOMMENDATIONS. Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlight the need for special coordination, a recommended plan of action to expedite project development, etc.

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

CHECKLIST FOR

ENGINEERING REPORTS

FOR

WATER PROJECTS

ENDORSED BY:

OKLAHOMA WATER RESOURCES BOARD STAFF
OKLAHOMA DEPARTMENT OF COMMERCE
OKLAHOMA CITY AREA INDIAN HEALTH SERVICE
USDA - RURAL DEVELOPMENT - OKLAHOMA
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Revised: January 1, 2004

Complete	Not Applicable	Engineering Report Checklist: Water Projects

I. General

☐ ☐ -- A description of the existing water system.
☐ ☐ -- A summary of the alternatives analyzed.
☐ ☐ -- A recommendation for a specific course of action.

II. Project Planning Area

☐ ☐ -- A map showing legal and natural boundaries.
☐ ☐ -- A map showing new service areas or annexed areas, if applicable
☐ ☐ -- Population projections within the project planning area and/or concentrated growth areas for the design period (must be based on recognized sources)
☐ ☐ -- A map showing elevations, and major obstacles (where applicable)
☐ ☐ -- A map and description of the environmental resources present
☐ ☐ -- A summary of the current and projected water use data

III. Existing Facilities

A. Location map:

☐ ☐ -- Provide schematic layout
☐ ☐ -- Discuss general service area

B. Condition of Centralized and On-Site Facilities:

☐ ☐ -- Water and sewer distribution lines; discuss adequacy and suitability for continued use, and compliance with ODEQ requirements (Consent orders, etc.)
☐ ☐ -- Pump stations and storage; discuss adequacy and suitability for continued use, and compliance with ODEQ requirements (Consent orders, etc.)
☐ ☐ -- Treatment facilities; discuss adequacy and suitability for continued use, and compliance with ODEQ requirements (Consent orders, etc.)
☐ ☐ -- Security; provide determination of necessary security improvements as defined by the system's vulnerability assessment. Note: the information contained in the engineering report should only describe the construction necessary to enhance the water system's security. It **should not** provide any specific information regarding inadequacies.
☐ ☐ -- Handicap accessibility (for federally funded projects); provide a description of the accessibility of the office or other public spaces. Any deficiencies should be addressed in the proposed project.

Complete	Not Applicable	Engineering Report Checklist: Water Projects

C. Financial Status of any Operating Central Facilities:

☐ ☐ -- Provide rate schedule(s)
☐ ☐ -- Discuss annual O & M cost
☐ ☐ -- Provide tabulation of users by monthly usage categories, and revenue received for the last three fiscal years
☐ ☐ -- Discuss status of existing debt

IV. Need for Project

A. Health and Safety:

☐ ☐ -- Discuss concerns expressed by regulatory agencies, and relevant correspondence included
☐ ☐ -- Include copy of applicable agency regulation(s)

B. System O&M:

☐ ☐ -- Provide description of concerns (indicate those with greatest impact)
☐ ☐ -- Describe investigation of water losses
☐ ☐ -- Discuss adequacy of management
☐ ☐ -- Discuss inefficient design(s)
☐ ☐ -- Discuss problem elimination

C. Growth:

☐ ☐ -- Describe growth capacity necessary to meet needs during planning period
☐ ☐ -- Determine facilities needed to meet future growth
☐ ☐ -- Design for phased construction
☐ ☐ -- Provide number of new customers committed to project

D. Sewage System Availability:

☐ ☐ -- Describe existing sewage system & treatment
☐ ☐ -- Describe effect of proposed project on existing sewage system

V. Alternatives Considered

A. Description of facilities associated with each alternative:

☐ ☐ -- Source of water
☐ ☐ -- Treatment
☐ ☐ -- Storage
☐ ☐ -- Distribution lines
☐ ☐ -- Pump stations

Complete	Not Applicable	Engineering Report Checklist: Water Projects

B. Design criteria used for evaluation purposes:

☐ ☐ -- State the design parameters used for evaluation purposes, including average daily flow, maximum daily flow, and peak hourly flow

C. Environmental impacts:

☐ ☐ -- Provide summary of environmental impacts for each alternative which may preclude that alternative
☐ ☐ -- Provide detailed description of environmental impacts of chosen alternative

D. Land requirements:

☐ ☐ -- Identify site(s), and specify if currently owned or to be purchased or to be leased
☐ ☐ -- Identify easement(s) to be acquired

E. Construction Problems Affecting Cost or Operation of Facility:

☐ ☐ -- Subsurface rock
☐ ☐ -- High water table
☐ ☐ -- Flood prone area(s)
☐ ☐ -- Limited access

F. Cost Estimates:

☐ ☐ -- Construction
☐ ☐ -- Non-construction
☐ ☐ -- Annual O&M cost
☐ ☐ -- Present Worth Analysis

G. Advantages/Disadvantages:

☐ ☐ -- Ability to meet owners needs within its financial and operational resources
☐ ☐ -- Compliance with ODEQ requirements
☐ ☐ -- Compatibility with existing comprehensive area-wide development plans

Complete	Not Applicable	Engineering Report Checklist: Water Projects

VI. Proposed Project (Recommended Alternative)

A. Project Design:

1. Source of Water:

☐ ☐ -- Provide requirements for quality and quantity
☐ ☐ -- Describe recommended source, including site

For surface water sources, include:
☐ ☐ -- Hydrologic data, stream flow & weather records
☐ ☐ -- Safe yield
☐ ☐ -- Maximum flood/pool elevation(s)
☐ ☐ -- Summary of raw water quality
☐ ☐ -- Consideration of fluctuation of raw water quality

For groundwater sources, include:
☐ ☐ -- Sites considered
☐ ☐ -- Advantage of selected site
☐ ☐ -- Elevation with respect to surroundings
☐ ☐ -- Floodplain elevation(s)
☐ ☐ -- Character of formations
☐ ☐ -- Geologic conditions of site
☐ ☐ -- Summary of source exploration
☐ ☐ -- Description of all possible sources of contamination

2. Water Use Data:

☐ ☐ -- Provide a description of population trends
☐ ☐ -- Describe present water consumption
☐ ☐ -- Provide projected average and maximum daily demands, and justification thereof
☐ ☐ -- Describe present and/or estimated yield of sources of supply

3. Fire Flow Requirements:

☐ ☐ -- Describe requirements of Insurance Services Office
☐ ☐ -- Describe fire flows as provided by proposed project

4. Water Rights:

☐ ☐ -- Describe existing water rights
☐ ☐ -- Describe proposed water rights, and status of acquisition

Complete	Not Applicable	Engineering Report Checklist: Water Projects

5. Treatment:

☐ ☐ -- Provide schematic of plant location
☐ ☐ -- Detail proposed process
☐ ☐ -- Discuss any process discharges

6. Storage:

☐ ☐ -- Identify size, type & site location for each proposed storage facility
☐ ☐ -- Discuss hydraulic interactions with existing facilities

7. Pumping Stations:

☐ ☐ -- Identify size, type, site location and any special power requirements

8. Distribution Layout:

Identify general location of line improvements, including:
☐ ☐ -- Lengths
☐ ☐ -- Sizes
☐ ☐ -- Key components
☐ ☐ -- Provide hydraulic information as listed in next section

9. Hydraulic Calculations:

Provide hydraulic information about all proposed improvements, with respect to existing facilities at various static & dynamic conditions, including:
☐ ☐ -- Elevation of node
☐ ☐ -- Pipe diameter
☐ ☐ -- Pipe segment length
☐ ☐ -- Reservoir elevation
☐ ☐ -- Domestic & commercial water demands
☐ ☐ -- Pressures
☐ ☐ -- Fire flow
☐ ☐ -- Include hydraulic map corresponding to hydraulic analysis

10. Capacity Funding Limitations (DWSRF Projects only):

☐ ☐ -- Provide eligible design capacity for treatment plants (20 years)
☐ ☐ -- Provide eligible capacity for lines (40 years)
☐ ☐ -- Provide basis for design capacity using local population projection & appropriate local per capita flow

Complete	Not Applicable	Engineering Report Checklist: Water Projects

11. Soil, Groundwater & Foundation Conditions:

☐ ☐ -- Describe character of soil through which mains will be installed
☐ ☐ -- Describe foundation conditions and floodplain elevations at sites of proposed structures
☐ ☐ -- Provide approximate elevation of groundwater in relation to subsurface structures

12. Waste Disposal:

☐ ☐ -- Discuss types of waste, volumes, proposed treatment points of discharge and/or method of disposal
☐ ☐ -- Discuss various sites considered and advantages of recommended site
☐ ☐ -- Discuss proximity to residences, industry and other establishments
☐ ☐ -- Discuss potential sources of pollution

13. Design Capacity Table:

☐ ☐ -- Provide a table showing the design capacity for each treatment unit
☐ ☐ -- Show detailed calculations for the design capacities listed in the table

B. Cost Estimate:

☐ ☐ -- Construction
☐ ☐ -- Non-Construction and other project costs
☐ ☐ -- Annual O&M for proposed improvements
☐ ☐ -- Cost Effective Present Worth Analysis of proposed costs
☐ ☐ -- Proposed engineering, legal and resident inspection fees
☐ ☐ -- Proposed contingency cost

C. Annual Operating Budget: (For USDA-RD Projects Only)

☐ ☐ -- Income
☐ ☐ -- Operation & maintenance cost
☐ ☐ -- Capital improvements
☐ ☐ -- Debt repayment

VII. Conclusions and Recommendations

☐ ☐ -- Additional finding
☐ ☐ -- Additional recommendations
☐ ☐ -- Special coordination
☐ ☐ -- Implementation plan
☐ ☐ -- Special studies

END OF CHECKLIST

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

CHECKLIST FOR

ENGINEERING REPORTS

FOR

WASTEWATER PROJECTS

ENDORSED BY:

OKLAHOMA WATER RESOURCES BOARD STAFF
OKLAHOMA DEPARTMENT OF COMMERCE
OKLAHOMA CITY AREA INDIAN HEALTH SERVICE
USDA - RURAL DEVELOPMENT - OKLAHOMA
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Revised: January 1, 2004

Complete	Not Applicable	Engineering Report Checklist: Wastewater Projects

I. General

☐ ☐ -- A description of the existing wastewater system
☐ ☐ -- A summary of the alternatives analyzed
☐ ☐ -- A recommendation for a specific course of action

II. Project Planning Area

☐ ☐ -- A map showing legal and natural boundaries
☐ ☐ -- A map showing new service areas or annexed areas, if applicable
☐ ☐ -- Population projections within the project planning area and/or concentrated growth areas for the design period (must be based on recognized sources)
☐ ☐ -- A map showing elevations, and major obstacles (where applicable)
☐ ☐ -- A map and description of the environmental resources present

III. Existing Facilities

A. Location map:

☐ ☐ -- Provide schematic layout
☐ ☐ -- Discuss general service area

B. Condition of Centralized and On-Site Facilities:

☐ ☐ -- Sewer and water lines; discuss adequacy and suitability for continued use, and compliance with ODEQ requirements (Consent orders, etc.)
☐ ☐ -- Lift stations; discuss adequacy and suitability for continued use, and compliance with ODEQ requirements (Consent orders, etc.)
☐ ☐ -- Treatment facilities; discuss adequacy and suitability for continued use, and compliance with ODEQ requirements (Consent orders, etc.)
☐ ☐ -- Security; provide determination of necessary security improvements as defined by the system's vulnerability assessment. Note: the information contained in the engineering report should only describe the construction necessary to enhance the sewer system's security. It **should not** provide any specific information regarding inadequacies.
☐ ☐ -- Handicap accessibility (for federally funded projects); provide a description of the accessibility of the office or other public spaces. Any deficiencies should be addressed in the proposed project.

C. Financial Status of any Operating Central Facilities: (For USDA-RD Projects Only)

☐ ☐ -- Provide rate schedule(s)
☐ ☐ -- Discuss annual O & M cost
☐ ☐ -- Provide tabulation of users by monthly usage categories, and revenue received for the last three fiscal years
☐ ☐ -- Discuss status of existing debt

Complete	Not Applicable	Engineering Report Checklist: Wastewater Projects

IV. Need for Project

A. Health and Safety:

☐ ☐ -- Discuss concerns expressed by regulatory agencies, and relevant correspondence included
☐ ☐ -- Include copy of applicable agency regulation(s) included

B. System O&M:

☐ ☐ -- Description of concerns (indicate those with greatest impact)
☐ ☐ -- I & I and leakage investigated
☐ ☐ -- Adequacy of management
☐ ☐ -- Discuss inefficient design(s)
☐ ☐ -- Discuss problem elimination

C. Growth:

☐ ☐ -- Describe growth capacity to necessary to meet needs during planning period described
☐ ☐ -- Determine facilities needed to meet future growth
☐ ☐ -- Design for phased construction
☐ ☐ -- Provide number of new customers committed to project

V. Alternatives Considered

A. Description of facilities associated with each alternative:

☐ ☐ -- Treatment
☐ ☐ -- Storage
☐ ☐ -- Collection lines
☐ ☐ -- Lift stations
☐ ☐ -- Discharge facilities (if applicable)
☐ ☐ -- Sludge handling facilities

B. Design criteria used for evaluation purposes:

☐ ☐ -- State the design parameters used for evaluation purposes

C. Environmental impacts:

☐ ☐ -- Provide a summary of environmental impacts for each alternative which may preclude that alternative
☐ ☐ -- Provide a detailed description of the environmental impacts of chosen alternative

Complete	Not Applicable	Engineering Report Checklist: Wastewater Projects

D. Land requirements:

☐ ☐ -- Identify site(s), and specify if currently owned or to be purchased or to be leased.
☐ ☐ -- Identify easement(s) to be acquired

E. Construction Problems Affecting Cost or Operation of Facility:

☐ ☐ -- Subsurface rock
☐ ☐ -- High water table
☐ ☐ -- Flood prone area(s)
☐ ☐ -- Limited access

F. Cost Estimates:

☐ ☐ -- Construction
☐ ☐ -- Non-construction
☐ ☐ -- Annual O&M cost
☐ ☐ -- Present Worth Analysis

G. Advantages/Disadvantages:

☐ ☐ -- Ability to meet owners needs within its financial and operational resources
☐ ☐ -- Compliance with ODEQ requirements
☐ ☐ -- Compatibility with existing comprehensive area-wide development plans

VI. Proposed Project (Recommended Alternative)

A. Project Design;

1. Treatment:

☐ ☐ -- Provide schematic and identify plant location and site of any discharges
☐ ☐ -- Describe the process in detail
☐ ☐ -- Provide status of compliance with the 208 plan (applicable for discharging facilities)
☐ ☐ -- Provide description of how sludge is/will be managed and a copy of ODEQ approval letter for sludge management plan

2. Pumping Stations:

☐ ☐ -- Identify size, type, site location and any special power requirements

Complete	Not Applicable	Engineering Report Checklist: Wastewater Projects

3. Collection System Layout:

Identify general location of line improvements, including:

☐ ☐ -- Lengths
☐ ☐ -- Line sizes
☐ ☐ -- Key components

4. Hydraulic Calculations:

Provide hydraulic information about all proposed improvements, with respect to existing facilities including:

☐ ☐ -- Manholes
☐ ☐ -- Pipe sizes, lengths and locations
☐ ☐ -- Elevation of inverts
☐ ☐ -- Include a hydraulic map corresponding to the hydraulic analysis

5. Soil, Groundwater & Foundation Conditions:

☐ ☐ -- Describe the character of the soil through which mails will be installed
☐ ☐ -- Describe the foundation conditions and floodplain elevations at sites of proposed structures
☐ ☐ -- Provide approximate elevation of groundwater in relation to subsurface structures

6. Waste Disposal:

☐ ☐ -- Discuss types of waste, volumes and proposed treatment points of discharge and/or method of disposal
☐ ☐ -- Discuss various sites considered and advantages of recommended site
☐ ☐ -- Discuss proximity to residences, industry and other establishments

B. Cost Estimate:

☐ ☐ -- Construction
☐ ☐ -- Non-Construction and other project costs
☐ ☐ -- Annual O&M for proposed improvements
☐ ☐ -- Cost Effective Present Worth Analysis of proposed costs
☐ ☐ -- Proposed engineering, legal and resident inspection fees
☐ ☐ -- Proposed contingency costs

C. Annual Operating Budget (For USDA-RD Projects Only)

☐ ☐ -- Income
☐ ☐ -- Operation & maintenance cost
☐ ☐ -- Capital improvements
☐ ☐ -- Debt repayment

Complete	Not Applicable	Engineering Report Checklist: Wastewater Projects

VII. Conclusions and Recommendations

☐ ☐ -- Additional findings
☐ ☐ -- Additional recommendations
☐ ☐ -- Special coordination
☐ ☐ -- Implementation plan
☐ ☐ -- Special studies

END OF CHECKLIST

Revised: 01/01/04

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

Environmental Information Document Checklist

for

Water and Wastewater Projects

ENDORSED BY:

OKLAHOMA WATER RESOURCES BOARD STAFF
OKLAHOMA DEPARTMENT OF COMMERCE
OKLAHOMA CITY AREA INDIAN HEALTH SERVICE
USDA - RURAL DEVELOPMENT - OKLAHOMA
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

REVISED: January 1, 2004

State of Oklahoma
Environmental Information Document
Checklist

Introduction

The attached "Checklist for the Preparation of the Environmental Information Document" (EID) has been developed to facilitate funding agency compliance with the National Environmental Policy Act (NEPA) for proposed water and wastewater projects in Oklahoma. The applicants for funding of these types of projects will be required to submit an EID to the appropriate funding agency(s) unless the proposed project meets the criteria for being excluded from an environmental review as discussed below. An EID will need to be sent to DEQ for Drinking Water SRF projects only. Upon final acceptance of the EID the agencies will notify the applicant of the acceptance of the EID and of further agency-specific requirements to conclude the environmental review process.

The state and federal agencies which provide funding for water and wastewater projects in Oklahoma have agreed to accept the attached checklist to assist in the preparation of the EID. It is important for the EID to follow the format as shown in the checklist. This will facilitate agency review and acceptance of the EID.

Please note that only projects which will utilize funds which have a federal identity require the completion of an EID. Those funding sources would be as follows:

1. Rural Development Loan and Grant Programs for Water and Wastewater
2. Department of Commerce Community Development Block Grants
3. OWRB-DEQ State Revolving Loan Funds
4. Indian Health Service

National Environmental Policy Act

The National Environmental Policy Act (NEPA) establishes the basic charter for the protection of the environment. The goals of NEPA have been extended through executive orders and additional environmental laws and regulations since the initial inception of NEPA. In order to achieve the goals, NEPA set up a tiered approach to environmental compliance. Those tiers are as follows:

First Tier - Categorical Exclusions

Certain types of projects may not require the completion of an EID. Generally these types of projects would not cumulatively over time, or in conjunction with other projects have a significant effect on the quality of the human environment.

Categorical Exclusions must be approved by the funding agencies, based upon the information provided to the agency by the applicant. It is extremely important for the applicant to contact the agency in the early planning stages to determine if the proposed project will fit the criteria for a Categorical Exclusion. Each agency has their own criteria for what projects qualify for Categorical Exclusions.

Second Tier - Environmental Information Document

The EID describes the proposed project and its relationship to the environment and should supplement the Engineering Report. It is recommended that the Engineering Report (ER) and the EID be submitted in one combined document. For example:

Section I - Engineering Report
Section II - Environmental Information Document

The agencies will use the EID to assess project compliance with NEPA. Upon acceptance of the EID the applicant will be notified of any additional information needed to conclude the environmental review process. Each funding agency has their own process to follow after accepting the EID. Generally this involves the agency taking the EID and completing an Environmental Assessment. At the point of completion of the assessment the agency will issue the “Finding of No Significant Environmental Impact” (FONSEI). The issuance of the FONSEI most generally would involve public notification as directed by each agency.

Third Tier - Environmental Impact Statement

If through the environmental review process it is determined that the proposed project will have a significant impact on the environment, and cannot be resolved by the completion of an EID, then an Environmental Impact Statement will need to be completed. Alternatives to mitigate the impacts to affected environmental resources will need to be further examined. Additional consultation will need to occur with other federal and state agencies that have jurisdiction over specific environmental resources.

CHECKLIST FOR THE PREPARATION OF THE ENVIRONMENTAL INFORMATION DOCUMENT FOR WATER PROJECTS

Name of Project: _____
Funding Agency Project No.:_____ Date:_____

1. Engineering Report (ER) submitted to owner for review on _____.
2. Resolution accepting ER & Environmental Information Document (EID).
3. ER Reviewed and Accepted by ODEQ: _____.
4. ER and EID Reviewed and Accepted by applicable Funding Agency(s):
   ( ) Funding Agency or Agencies
   Date Accepted _____ (USDA - RD)
   Date Accepted _____ (ODOC)
   Date Accepted _____ (OWRB)
   Date Accepted _____ (IHS)
   Date Accepted _____ (Others)
   Date Accepted _____ (ODEQ - Drinking Water SRF projects).

5. Existing and proposed Water Rights (include copy of permit or application)_____.
6. Certification of technical, managerial & financial capacity for construction and O&M.
7. Specific reference for legal basis for implementation & obtaining site_____.
8. Public Hearing held on __/__/__. ER, EID, and financial information presented. (Contact each agency for required procedures for Public Hearings.)

I. Project Information - Purpose and Need

☐ A. Applicant,_____, Signatory agents_____
☐ B. Purpose, need, water quality to be attained, and description of proposed project including, a legal description as well as Latitude and Longitude in degrees, hours, and minutes
☐ C. Existing problems and needs
   1. Schematic of existing plant
   2. Condition and age of each unit and existing components to be abandoned, retained, or renovated and why
   3. Design parameters and capacity for each unit
   4. Treatment efficiencies for each unit
   5. O&M problems
☐ D. Projected problems and needs
☐ E. Scope of planning and drinking water standards to be attained

II. Cost & Design Analysis of Alternatives and Their Environmental Impacts

(May reference specific section in ER to address issues in this section)

☐ A. Design criteria
   B. Identification of source alternatives (briefly describe)
☐ 1. Surface
☐ a) Safe yield
☐ b) Watershed description (existing or potential sources of pollution)
☐ c) Raw water quality and fluctuations
☐ 2. Ground
☐ a) Source capacity
☐ b) Elevations with respect to surroundings
☐ c) Character of formation

- ☐ d) Geologic conditions affecting the site
- ☐ e) Test well data including chemical and radiological quality
- ☐ f) Potential sources of contamination
- ☐ g) Water demand by others in the area
- ☐ h) Selection of site discussed

C. Identification of Treatment Alternatives (briefly describe)

- ☐ 1. No action
- ☐ 2. Upgrading O&M efficiency (evaluation as an alternative or supplement)
- ☐ 3. Renovation or upgrading existing system
- ☐ 4. Alternate source
- ☐ 5. New treatment facility or specific treatment units
- ☐ 6. The purchase of treated water rather than a treatment option

D. Line rehabilitation & proposed new distribution systems

- ☐ 1. Document public health problem
  - ☐ a) For new lines, describe and show location of all existing private systems
  - ☐ b) Documentation of quality standard violations
  - ☐ c) Documentation of pressure problems
- ☐ 2. Alternative configurations discussed
- ☐ 3. Estimated footage of each size line for each area and basis for need
- ☐ 4. Phasing considered, if applicable

☐ E. Alternatives screened to identify the ones that are feasible for further evaluation

F. Evaluation of each feasible alternative for:

- ☐ 1. Site considerations
- ☐ 2. Ability to meet drinking water standards
- ☐ 3. Ultimate disposal of waste
- 4. Flood hazard
  - ☐ a) 100 year flood plain map
  - ☐ b) Alternatives to avoid adverse effects and incompatible development in floodplains.
  - ☐ c) Discuss all protective measures
- 5. Cost Analysis
  - a) Non-monetary cost described
    - ☐ 1) Primary and secondary effects
    - ☐ 2) Implementation capability
    - ☐ 3) Operability
    - ☐ 4) Performance reliability
    - ☐ 5) Flexibility
  - b) Monetary costs (May need to seek funding agency guidance as to what are eligible project expenses.)
    - ☐ 1) Planning cost
    - ☐ 2) Field exploration, soil test when required
    - ☐ 3) Design engineering
    - ☐ 4) Land -Contact funding agency for guidance
    - ☐ 5) Relocation, easement, leases and right-of-way costs
    - ☐ 6) Construction cost
    - ☐ 7) Engineering services during construction
    - ☐ 8) Project Inspector
    - ☐ 9) Administrative and legal costs
    - ☐ 10) Interest during construction
    - ☐ 11) Cost of bond sales
    - ☐ 12) Contingency (10% before bid, 5% after bid)
    - ☐ 13) O&M costs (including present worth Analysis)
    - ☐ 14) Laboratory equipment and/or facility costs
- ☐ 5. Tabulation of monetary costs for each alternative
- ☐ 6. Environmental impacts for each alternative

G. Alternatives ranked in terms of:

- ☐ 1. Environmental effects

☐ 2. Monetary costs
☐ 3. Public acceptability
☐ 4. Resources and energy use
☐ 5. Reliability
☐ 6. Selection of lowest costs without over-riding adverse factors
☐ 7. Solving existing problem

H. Selected Alternative

III. Affected Environment/Environmental Consequences of Selected Alternative

☐ A. Description of the planning area

1. Service area - Maps which shows outlined project areas
   ☐ a) USGS Topographic Maps (1:24,000)
   ☐ b) NRCS Soil Survey Maps
   ☐ c) FEMA Flood Insurance Rate Maps
   ☐ d) Nationwide Wetland Inventory Maps
   ☐ e) Hydrologic Atlas
   ☐ f) Site Photographs
   ☐ 2. Physical characteristics of the project area
3. Environmental setting and future of the area with and without the project
   ☐ a) Land Use
      ☐ 1) Prime Farmland
      ☐ 2) Prime Forestland
      ☐ 3) Prime Rangeland
      4) Formerly Classified Lands Which Includes the Following:
         ☐ National Parks and Monuments
         ☐ National Natural Landmarks
         ☐ National Battlefield Park Sites
         ☐ National Historic Sites and Parks
         ☐ Wilderness Areas
         ☐ Wild, Scenic, and Recreational Rivers
         ☐ Wildlife Refuges
         ☐ National Seashores, Lake Shores and Trails
         ☐ State Parks
         ☐ Bureau of Land Management (BLM) Administered Lands
         ☐ National Forests and Grasslands
         ☐ Native American Owned Lands; and Leases Administered by the Bureau of Indian Affairs (BIA)
   ☐ b) Floodplains
   ☐ c) Wetlands
   d) Cultural Resources
      ☐ 1) State Historic Preservation Officer (SHPO)
      ☐ 2) State Archeologist
   e) Biological Resources
      ☐ 1) Threatened and Endangered Species
      ☐ 2) Fish and Wildlife Resources
      ☐ 3) Vegetation
   ☐ f) Areas of geological hazards
   ☐ g) Socio-Economic Issues/Environmental Justice
   ☐ h) Air Quality
   ☐ i) Transportation
   ☐ j) Noise
   ☐ k) Miscellaneous
4. Population
   ☐ a) Existing (basis for estimate given including 2000 census, current water use data, etc)

☐ b) Past population, 1980, 1990 census
☐ c) Projections for 5, 10, 15, and 20 years

B. Water Demand and Water Quality Issues
☐ 1. Available water sources.
☐ 2. Utilized water sources.
- Percent of capacity utilized
☐ 3. Aquifer recharge zones
☐ 4. Sole Source Aquifer
☐ 5. Present water production (MGD) and maximum flow
☐ 6. Per capita requirement (G/C/D) as determined from records
☐ 7. Projected water production (MGD) and proposed maximum flow (Design Flow)
☐ 8. Fire flow requirements
☐ 9. Identify existing and projected industrial demand in planning area

C. Composite water characteristics
☐ 1. Raw water quality
☐ 2. Treated water quality
☐ 3. Chart including design and DEQ standards

D. Additional Impacts
☐ 1. Recreational and open space issues
☐ 2. General growth impacts

E. Project effects on environmental resources
☐ 1. Direct effects
☐ 2. Indirect effects
☐ 3. Cumulative effects

F. Justification of selected alternative solving project requirements

IV. Summary of Mitigation Measures

V. Correspondence and Public Participation Program

A detailed project description and legible location map must be sent to the following agencies for review. **The transmittal to each agency must identify the specific federal authority for which the review is requested (see "Subject(s) of Comment" below).** As a minimum, response letters must be received from commenting agencies preceded with an (*) unless the project will not occur within or near the counties listed in the "Subjects of Comments" column below. Additional requirements requested in response letters from commenting agencies must also be completed. Include copies of the transmittal letters and all response letters in the EID.

Commenting Agency	**Subject(s) of Comments**
*Planning Branch U.S. ARMY CORPS OF ENGINEERS TULSA DISTRICT ATTN: CESWT-PE-P 1645 S. 101 East Ave. Tulsa, OK 74128-4609 918-669-7401	Floodplain management
*Regulatory Branch U.S. ARMY CORPS OF ENGINEERS TULSA DISTRICT ATTN: CESWT-PE-R 1645 S. 101 East Ave. Tulsa, OK 74128-4609 918-669-7401	Section 404 Permits

*State Conservationist Natural Resources Conservation Service Oklahoma State Office 100 USDA, Suite 206 Stillwater, OK 74074-2655 405-742-1204	Prime farmlands & wetlands on agricultural lands
*U.S. Dept. of Interior Fish & Wildlife Service Ecological Services 222 South Houston, Suite A Tulsa, OK 74127 918-581-7458	Threatened/Endangered Species, fish and wildlife protection
*Oklahoma Historical Society State Historic Preservation Office 2704 Villa Prom, Shepherd Mall Oklahoma City, OK 73107 405-521-6249	Historical sites/landmarks
National Park Service Southwest Division Environmental Review & Coordination P.O. Box 728 Santa Fe, NM 87502	National Parks, recreation areas
*State Archeologist The University of Oklahoma Oklahoma Archeological Survey 111 Chesapeake Norman, OK 73019 405-325-7211	Archeological sites/cultural resources
*Federal Emergency Management Agency Region IV, Mitigation Division Federal Regional Center 800 North Loop 288 Denton, TX 76209 940-898-5334	Floodplain management, seismic conditions (FEMA's general response will be to contact the local floodplain coordinator for comment. A list of local coordinators can be found at the following web site: http://www.owrb.state.ok.us/hazard/fp/pdf_fp/fpa_list.pdf (or phone 405-530-8800)
Okla. Dept. of Environmental Quality Margaret M. Graham Environmental Review Coordinator P.O. Box 1677 Oklahoma, OK 73101-1677 405-702-1000	Water quality, sludge management, 208 Wastewater Water Quality Management Planning Air Quality Waste Management Sole Source Aquifer (Arbuckle-Simpson) - (Only for projects in Carter, Johnston, Murray, and Pontotoc Counties.)

Bureau of Indian Affairs (for projects in Eastern Oklahoma) U.S. Department of Interior Federal Building 3100 W. Peak Blvd. Muskogee, OK 74401 (Area Archeologist) 918-781-4684	Native American sites, landmarks
Bureau of Indian Affairs (for projects in Western Oklahoma) P.O. Box 368 Anadarko, OK 73005 (Area Archeologist) 405-247-6673	
Water Management Division Okla. Water Resources Board 3800 N. Classen Blvd. Oklahoma City, OK 73118 405-530-8800	Development on State-owned property within floodplains and water rights permits
*Oklahoma Scenic Rivers Commission P.O. Box 292 Tahlequah, OK 74465-0292 918-456-3251	Wild and Scenic Rivers Only for projects in Adair, Cherokee, Delaware, Sequoyah, and McCurtain Counties
Okla. Dept. of Tourism and Recreation State Liaison Officer Land and Water Conservation Division P.O. Box 52002 Oklahoma City, OK 73105	Recreational/tourism facilities
U.S. Forest Service Department of Agriculture 401 W. Peach St. Atlanta, GA 30365	Forest, grassland resources (only if project is in LeFlore, McCurtain or Roger Mills counties)

The project description and location map must also be sent to the Substate Planning District in which the project is located. Their addresses are listed below:

Association of Central Oklahoma Governments 21 E. Main Street, Suite 100 Oklahoma City, OK 73104-2405 (405) 234-2264 / fax:234-2200 email: acog@acogok.org 405-234-2264	Association of South Central Okla. Govts. P.O. Box 1647 Duncan, OK 73534 (580) 252-0595
Central Okla. Economic Development District 400 North Bell Shawnee, OK 74801 (405) 273-6410	Eastern Okla. Economic Development Dist. P.O. Box 1367 Muskogee, OK 74402 (918) 682-7891
Indian Nations Council of Governments 201 West 5th Street, Suite 600 Tulsa, OK 74103	Southwestern Okla. Development Authority P.O. Box 569 Burns Flat, OK 73624

(918) 584-7526

Kiamichi Economic Development District
P.O. Box 638
Wilburton, OK 74578
(918) 465-2367

Northern Okla. Development Association
2901 N. Van Buren
Enid, OK 73703
(580) 237-4810

Southern Okla. Development Association
P.O. Box 709
422 Cessna St.
Durant, Oklahoma 74702
(580) 920-1388

(580) 562-4886

Grand Gateway Economic Development Assoc.
P.O. Drawer B
Big Cabin, OK 7433-0502
(918) 783-5793

Oklahoma Economic Development Assoc.
P.O. Box 668
Beaver, OK 73932
(580) 625-4531

VI. Exhibits

( ) ( ) A) Letters of Correspondence from Individuals and Agencies
( ) ( ) B) Maps
( ) ( ) C) Photographs

CHECKLIST FOR THE PREPARATION OF THE ENVIRONMENTAL INFORMATION DOCUMENT FOR WASTEWATER PROJECTS

Name of Project: _____
Funding Agency Project No.: _____ Date:_____

1. Engineering Report (ER) submitted to owner for review on _____.
2. Resolution accepting ER and Environmental Information Document (EID).
3. ER reviewed and accepted by ODEQ _____.
4. ER and EID reviewed and accepted by applicable funding agency(s):
   ( ) Funding Agency or Agencies
   Date Accepted _____ (USDA - RD)
   Date Accepted _____ (ODOC)
   Date Accepted _____ (OWRB)
   Date Accepted _____ (IHS)
   Date Accepted _____ (Others)
5. EID for review on _____
6. Certification of technical, managerial & financial capacity for construction and O&M.
7. Specific reference for legal basis for implementation & obtaining site_____.
8. Public Hearing held on __/__/__. ER, EID, and financial information presented. (Contact each agency for required procedures for Public Hearings.)

I. Project Information - Purpose and Need

☐ A. Applicant,_____, Signatory agents_____

☐ B. Purpose, need, and description of proposed project

Proposed Project: Give a legal description as well as Latitude and Longitude in degrees, hours, and minutes for the project. Describe the proposed project including unit processes and sizes and lengths of any proposed linework. Attach a schematic and hydraulic profile of the proposed treatment facility. If project is to be phased, describe the work, estimated cost, and projected construction dates for each phase.

Design Data:
1. Design avg. daily flow _____MGD
   . Domestic _____MGD
   . Industrial _____MGD
   . I/I _____MGD
2. Design peak flow _____MGD
3. Design year _____ Design Pop. _____
4. Effluent limits to be achieved:
   $CBOD_5$ / BOD_5 _____mg/l
   TSS _____mg/l
   _____mg/l
   _____mg/l
   _____mg/l

☐ C. Project information

1. Receiving Stream _____Segment no. _____(208 WQMP)
2. NPDES Permit No. _____ Date Issued _____ Expiration Date _____
   Effluent limits:
   (mg/l)
   $CBOD_5$ / BOD_5 _____ TSS _____
   NH_3N _____ D.O._____

3. Provide status of compliance with the 208 Plan (if applicable include current revisions w/DEQ and EPA approval letters).
4. Is sludge being managed in accordance with an approved Sludge Management Plan? (if applicable, attach DEQ's approval of sludge management plan)

☐ D. Existing problems

Existing Facilities: Describe the existing wastewater collection and treatment system including unit processes and include a schematic of the treatment facility.

Description:

1. Facility Data:
   a. Design capacity _____ MGD
   b. Exist. Population _____
   c. Exist. Avg. daily flow _____ MGD
      .Domestic _____ MGD
      .Industrial _____ MGD
      .I/I _____ MGD
   d. Exist. Peak flow _____ MGD
   e. Current Inf./Eff. Quality:

	Influent (mg/l)	Effluent (mg/l)
$CBOD_5$ /BOD_5	_____	_____
TSS	_____	_____
	_____	_____

   f. Schematic of existing plant
   g. Condition and age of each treatment unit
   h. Design parameters and capacity for each unit
   i. Treatment efficiencies for each unit
   j. O&M problems
   k. List the existing components to be abandoned, retained, or renovated, and why

☐ E. Projected problems and needs

☐ F. Scope of planning and water quality standards to be attained

II. Cost & Design Analysis of Alternatives and Their Environmental Impacts
(May reference specific section in ER to address issues in this section)

☐ A. Design criteria

☐ B. Identification of Treatment Alternatives (briefly describe)

☐ 1. No action

☐ 2. Upgrading O&M efficiency (evaluation as an alternative or supplement)

☐ 3. Renovation or upgrading existing system

☐ 4. New treatment facility or specific treatment units

C. Line rehabilitation & proposed new collection systems

☐ 1. Document public health problem

☐ a) For new lines, describe and show location

☐ b) Documentation of water quality standard violations

☐ 2. Alternative configurations discussed

☐ 3. Estimated footage of each size line for each area and basis for need

☐ 4. Phasing considered, if applicable

☐ D. Alternatives screened to identify the ones that are feasible for further evaluation

E. Evaluation of each feasible alternative for:

☐ 1. Site considerations
   a. Geologic conditions affecting the site
   b. Character of formation
   c. Test bore data
   d. Selection of site discussed relative to geologic considerations.

☐ 2. Ultimate disposal of waste

3. Flood hazard
   - ☐ a) 100 year flood plain map
   - ☐ b) Alternatives to avoid adverse effects and incompatible development in floodplains.
   - ☐ c) Discuss all protective measures
4. Cost Analysis
   - a) Non-monetary cost described
     - ☐ 1) Primary and secondary effects
     - ☐ 2) Implementation capability
     - ☐ 3) Operability
     - ☐ 4) Performance reliability
     - ☐ 5) Flexibility
   - b) Monetary costs (May need to seek funding agency guidance as to what are eligible project expenses.)
     - ☐ 1) Planning cost
     - ☐ 2) Field exploration, soil test when required
     - ☐ 3) Design engineering
     - ☐ 4) Land- Contact funding agency for guidance.
     - ☐ 5) Relocation, easement, leases and right-of-way costs
     - ☐ 6) Construction cost
     - ☐ 7) Engineering services during construction
     - ☐ 8) Administrative and legal costs
     - ☐ 9) Interest during construction
     - ☐ 10) Cost of bond sales
     - ☐ 11) Contingency (10% before bid, 5% after bid)
     - ☐ 12) O&M costs (including present worth analysis)
     - ☐ 13) Laboratory equipment and/or facility costs
5. ☐ Tabulation of monetary costs for each alternative
6. ☐ Environmental impacts for each alternative

F. Alternatives ranked in terms of:
1. ☐ Environmental effects
2. ☐ Monetary costs
3. ☐ Public acceptability
4. ☐ Resources and energy use
5. ☐ Reliability
6. ☐ Selection of lowest costs without over-riding adverse factors

G. Selected Alternative

III. Affected Environment/Environmental Consequences of Selected Alternative

☐ A. Description of the planning area
1. Service area - Map which show outlined project areas
   - ☐ a) USGS Topographic Maps (1:24,000)
   - ☐ b) NRCS Soil Survey Maps
   - ☐ c) FEMA Flood Insurance Rate Maps
   - ☐ d) Nationwide Wetland Inventory Maps
   - ☐ e) Hydrologic Atlas
   - ☐ f) Site Photographs
2. ☐ Physical characteristics of the project area
3. Environmental setting and future of the area with and without the project
   - ☐ a) Land Use
     - ☐ 1) Prime Farmland **(NOTE: If prime farmland is identified as being affected, the funding agency should be notified as soon as possible; alternative sites may or may not need to be identified for the project)**
     - ☐ 2) Prime Forestland
     - ☐ 3) Prime Rangeland
     - 4) Formerly Classified Lands Which Includes the Following:

☐ National Parks and Monuments
☐ National Natural Landmarks
☐ National Battlefield Park Sites
☐ National Historic Sites and Parks
☐ Wilderness Areas
☐ Wild, Scenic, and Recreational Rivers
☐ Wildlife Refuges
☐ National Seashores, Lake Shores and Trails
☐ State Parks
☐ Bureau of Land Management (BLM) Administered Lands
☐ National Forests and Grasslands
☐ Native American Owned Lands; and Leases Administered by the Bureau of Indian Affairs (BIA)

☐ b) Floodplains
☐ c) Wetlands
d) Cultural Resources
☐ 1) State Historic Preservation Officer (SHPO)
☐ 2) State Archeologist
e) Biological Resources
☐ 1) Threatened and Endangered Species
☐ 2) Fish and Wildlife Resources
☐ 3) Vegetation
☐ f) Areas of geological hazards
☐ g) Socio-Economic Issues/Environmental Justice
☐ h) Air Quality
☐ i) Transportation
☐ j) Noise
☐ k) Miscellaneous

4. Population
☐ a) Existing (basis for estimate given)
☐ b) Past population , 1980, 1990, 2000 census
☐ c) Projections for 5, 10, 15, and 20 years

B. Water Quality Issues
☐ 1. Aquifer recharge zones in project area
☐ 2. Sole Source Aquifer in project area
☐ 3. Present wastewater production (MGD) and maximum flow
☐ 4. Per capita requirement (G/C/D) as determined from records
☐ 5. Projected wastewater production (MGD) and proposed maximum flow (Design Flow)
☐ 6. Identify existing and projected industrial demand in planning area

C. Additional Impacts
☐ 1. Recreational and open space issues
☐ 2. General growth impacts

D. Project effects on environmental resources
☐ 1. Direct effects
☐ 2. Indirect effects
☐ 3. Cumulative effects

E. Justification of selected alternative solving project requirements

IV. Summary of Mitigation Measures

V. Correspondence and Public Participation Program

A detailed project description and legible location map must be sent to the following agencies. **The transmittal to each agency must identify the specific federal authority for which the review is requested (see "Subject(s) of Comment" below).** As a minimum, response letters must be received from commenting agencies preceded with an (*) unless the project will not occur within or near the

counties listed in the "Subjects of Comments" column below. Additional requirements requested in response letters from commenting agencies must also be completed. Include copies of the transmittal letters and all response letters in the EID.

Commenting Agency	**Subject(s) of Comments**
*Planning Branch U.S. ARMY CORPS OF ENGINEERS TULSA DISTRICT ATTN: CESWT-PE-P 1645 S. 101 East Ave. Tulsa, OK 74128-4609 918-669-7197	Floodplain management
*Regulatory Branch U.S. ARMY CORPS OF ENGINEERS TULSA DISTRICT ATTN: CESWT-PE-R 1645 S. 101 East Ave. Tulsa, OK 74128-4609 918-669-7401	Section 404 Permits
*State Conservationist Natural Resources Conservation Service Oklahoma State Office 100 USDA, Suite 206 Stillwater, OK 74074-2655 405-742-1204	Prime farmlands & wetlands on agricultural lands
*U.S. Dept. of Interior Fish & Wildlife Service Ecological Services 222 South Houston, Suite A Tulsa, OK 74127 918-581-7458	Threatened/Endangered Species, fish and wildlife protection
*Oklahoma Historical Society State Historic Preservation Office 2704 Villa Prom, Shepherd Mall Oklahoma City, OK 73107 405-521-6249	Historical sites/landmarks
*National Park Service Southwest Division Environmental Review & Coordination P.O. Box 728 Santa Fe, NM 87502	National Parks, recreation areas (Only if your project area is near a National park or recreation area)
*State Archeologist The University of Oklahoma Oklahoma Archeological Survey 111 Chesapeake Norman, OK 73019 405-325-7211	Archeological sites/cultural resources

*Federal Emergency Management Agency Region IV, Mitigation Division Federal Regional Center 800 North Loop 288 Denton, TX 76209 940-898-5334	Floodplain management, seismic conditions (FEMA's general response will be to contact the local floodplain coordinator for comment. A list of local coordinators can be found at the following website: http://www.owrb.state.ok.us/hazard/fp/pdf_fp/fpa_list.pdf or phone 405-530-8800)
*Okla. Dept. of Environmental Quality Margaret M. Graham Environmental Review Coordinator P.O. Box 1677 Oklahoma, OK 73101-1677 405-702-1000	Water quality, sludge management, 208 Wastewater Water Quality Management Planning Air Quality Waste Management Sole Source Aquifer (Arbuckle-Simpson) - (Only for projects in Carter, Johnston, Murray, and Pontotoc Counties.)
Bureau of Indian Affairs (for projects in Eastern Oklahoma) U.S. Department of Interior Federal Building 3100 W. Peak Blvd Muskogee, OK 74401 (Area Archeologist) 918-781-4684	Native American sites, landmarks
Bureau of Indian Affairs (for projects in Western Oklahoma) P.O. Box 368 Anadarko, OK 73005 (Area Archeologist) 405-247-6673	
*Water Management Division Okla. Water Resources Board 3800 N. Classen Blvd. Oklahoma City, OK 73118 405-530-8800	Development on State-owned property within floodplains and water rights permits
*Oklahoma Scenic Rivers Commission P.O. Box 292 Tahlequah, OK 74465-0292 918-456-3251	Wild and Scenic Rivers Only for projects in Adair, Cherokee, Delaware, Sequoyah, and McCurtain Counties.
Okla. Dept. of Tourism and Recreation State Liaison Officer Land and Water Conservation Division P.O. Box 52002 Oklahoma City, OK 73105	Recreational/tourism facilities
*U.S. Forest Service Department of Agriculture 401 W. Peach St. Atlanta, GA 30365	Forest, grassland resources (only if project is in LeFlore, McCurtain or Roger Mills county)

* The project description and location map must also be sent to the Substate Planning District in which the project is located. Their addresses are listed below. Please include copies of transmittal letter(s) and all response letter(s) in the EID.

Association of Central Oklahoma Governments
21 E. Main Street, Suite 100
Oklahoma City, OK 73104-2405
(405) 234-2264 / fax:234-2200
email: acog@acogok.org
405-234-2264

Association of South Central Okla. Govts.
P.O. Box 1647
Duncan, OK 73534
(580) 252-0595

Central Okla. Economic Development District
400 North Bell
Shawnee, OK 74801
(405) 273-6410

Eastern Okla. Economic Development District
P.O. Box 1367
Muskogee, OK 74402
(918) 682-7891

Indian Nations Council of Governments
201 West 5th Street, Suite 600
Tulsa, OK 74103
(918) 584-7526

Southwestern Okla. Development Authority
P.O. Box 569
Burns Flat, OK 73624
(580) 562-4886

Kiamichi Economic Development District
P.O. Box 638
Wilburton, OK 74578
(918) 465-2367

Grand Gateway Economic Development Association
Drawer B
Big Cabin, OK 7433-0502
(918) 783-5793

Northern Okla. Development Association
2901 N. Van Buren
Enid, OK 73703
(580) 237-4810

Oklahoma Economic Development Assoc.
P.O. Box 668
Beaver, OK 73932
(580) 625-4531

Southern Okla. Development Association
P.O. Box 709
422 Cessna St.
Durant, Oklahoma 74702
(580) 920-1388

VI. Exhibits

( ) ( ) A) Letters of Correspondence from Individuals and Agencies
( ) ( ) B) Maps
( ) ( ) C) Photographs

CWSRF Public Participation Documentation

Please attach the following documentation:

1. Certified newspaper advertisement of the public hearing notice **(30 days notice is required)**.
2. List of attendees/witnesses
3. Verbatim Transcript or an audible tape recording of the hearing.
4. Applicant's statement that hearing was held in conformance with the hearing notice.
5. Resolution adopting the Facilities Plan. (see ORF-203R)

A copy of the Notice of Public Hearing and availability of the planning and environmental information document(s) must be sent to (no response required):

1. Local DEQ Office (Contact State DEQ Director for Addresses)

2. Bureau of Indian Affairs (Area Director)
   U.S. Department of Interior
   Federal Building
   Muskogee, Oklahoma 74401

3. U.S. Department of the Interior
   Bureau of Land Management
   P.O. Box 27115
   Santa Fe, New Mexico 87502-7115

4. Department of Housing & Urban Development
   Environment & Standards Officer
   P.O. Box 2905
   Ft. Worth, Texas 76113

5. Land Owners effected by the project

(SAMPLE)

NOTICE OF PUBLIC HEARING
PUBLIC WORKS AUTHORITY
CWSRF PROJECT NO. ORF _____

The _____ Authority will hold a public hearing at __P.M. on (Month, Day, and Year) in the council chambers of the _____ City Hall. The hearing is to discuss proposed improvements to the Authority's wastewater collection and treatment facilities, alternatives to the proposed improvements and their associated costs. One purpose of the hearing is to discuss the potential environmental impacts of the project and the alternatives to it.

The proposed project is identified in the Planning and Environmental Information Document and consists of the following major elements:

1. (Describe major component)

2. (Describe major component)

3. etc.

The Planning document which includes environmental information is on file and available for public inspection at (District Office) (City Hall), _____(address), Oklahoma. These documents provide a detailed description of the project cost, financing information, cost to users, alternatives considered and environmental effects.

The public is invited to attend.

Authority Chairman

_____, Secretary

SEAL

[Note: Resolution should be adopted in next public meeting following the Public Hearing]

SAMPLE ORF-203R

RESOLUTION NO. _____

The _____ Authority, acting through the City of _____, hereby adopts the Planning and Environmental Information Document for the proposed wastewater improvements. Said document dated _____, 200_ and was prepared by _____, consulting engineers.

The Authority sets forth the intent to construct, operate, and maintain such proposed facilities in accordance with state and federal requirements if said facility is approved and funded with a loan from the Clean Water State Revolving Fund.

The Authority hereby further certifies that a Public Hearing was held on _____ in accordance with the Public Notice as attached hereto:

PASSED AND ADOPTED THIS ___ DAY OF _____ , 200__.

_____

MAYOR/CHAIRMAN

ATTEST:

_____

CITY CLERK/SECRETARY

(SEAL)

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

GUIDELINES FOR

REQUEST FOR PROPOSAL

FOR

ENGINEERING SERVICES

ENDORSED BY:

OKLAHOMA WATER RESOURCES BOARD STAFF
OKLAHOMA DEPARTMENT OF COMMERCE
OKLAHOMA CITY AREA INDIAN HEALTH SERVICE
USDA - RURAL DEVELOPMENT - OKLAHOMA
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Revised: January 1, 2004

PURPOSE:
The _____(Name of Entity)___ desires to seek financial assistance from a selected combination of the following agencies to resolve its (water, wastewater) problem:

List potential funding agencies:
_____
_____
_____
_____
_____

It becomes necessary for the ___(Name of entity)___ to have a Engineering Report and Environmental Information Document prepared by a qualified Engineering Firm licensed to do business in the State of Oklahoma, or a Professional Engineer licensed in the State of Oklahoma through the Request for Proposal (RFP) process.

The problem(s) is (are) (*describe*):
_____
_____

BACKGROUND INFORMATION:
1. Location.
   (*county, distance from nearest major city, etc.)*
2. Present Population: _____.
3. Number of Water Customers:
   Domestic _____.
   Commercial _____.
   Industrial _____.
4. Number of Sanitary Sewer Customers:
   Domestic _____.
   Commercial _____.
   Industrial _____.
5. Water System (when applicable):
   a. Water Source: (*describe*).
   b. Water Treatment process: (*describe*).
   c. Total length of distribution mains: _____ *feet (or miles)*
   d. Total elevated storage capacity: _____ *gallons*
6. Sanitary Sewer System (when applicable):
   a. Collection Mains: _____ *feet (or miles)*
   b. Number of Lift stations: _____
   c. Treatment process: (*describe*)

SCOPE OF WORK:
The Scope of Work will be as outline in the Agreement for Engineering Services

PROJECT AREA:
The primary project area is the (describe)_____

PROJECT CONTACT PERSON(S):
(*Give name, address, phone number, FAX number, and e-mail (if available) of the person(s) responsible for receiving proposals, and to answer questions)*

SUBMITTAL OF PROPOSALS:
Proposals must be submitted to the (insert name of appropriate official) by 5:00 p.m. on (date), at (give mailing and physical address). The proposal shall be placed in a sealed envelope marked clearly, "Response to RFP for (water, wastewater) Project."

PRE-SUBMITTAL MEETING: {OPTIONAL}
A pre-response meeting will be held on _____, 20___ at _____ in the _____ at _____ located at _____ _____

EVALUATION CRITERIA:
All Proposals will be evaluated on the following:
1. Technical and Environmental qualifications.
2. Past experience with this kind of project: list previous projects, and the total project cost.
3. Recommendations of previous clients.
4. Experience in working with the above-listed state and federal funding agencies.
5. Capability to meet time schedules and project budget requirements.
6. Experience in designing facilities that reflect modest design, simple operational requirements, and economical cost of operation.
7. Evidence of ability to design a project appropriate for the (entity name) size, financial strength, and ability to repay loan funds and operation and maintenance cost.
8. (*additional criteria of entity*)

SELECTION PROCESS:
Out of the Proposals received by the (name of entity), it is expected that the three best will be selected for final consideration. Interviews will be conducted in order for the selection committee to ask questions to each candidate and evaluate their responses. The engineering firm and engineer under consideration will be notified as to time, date, and location of these interviews.

RESPONSIBILITIES OF THE (Name of Entity)
1. Furnish to the Engineer all existing studies, reports, and other available data pertinent to the assignment. Obtain or authorize the Engineer to obtain or provide additional reports and data as required, and furnish to Engineer services of others as required for the performance of Engineers services.

2. The (Name of Entity) will bear all cost related to its responsibilities described herein.

END OF REQUEST FOR PROPOSAL

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

AGREEMENT

FOR

ENGINEERING SERVICES

ENDORSED BY:

OKLAHOMA WATER RESOURCES BOARD STAFF OKLAHOMA
DEPARTMENT OF COMMERCE
OKLAHOMA CITY AREA INDIAN HEALTH SERVICE
USDA - RURAL DEVELOPMENT - OKLAHOMA
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

REVISED: January 1, 2004

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

AGREEMENT FOR ENGINEERING SERVICES

This Agreement, made this _____ day of _____ , _____

by and between _____ , hereafter referred to as the OWNER,

and_____ , hereinafter referred to as the ENGINEER:

THE OWNER intends to construct a _____

_____in _____County, State of Oklahoma, which may be paid for in part with financial assistance from one or more funding Agencies both federal and/or state and for which the ENGINEER agrees to perform the various professional engineering services for the design and construction of said system. By definition FUNDING AGENCY may refer to one or more Agencies involved in funding the proposed project.

WITNESSETH:

That for and in consideration of the mutual covenants and promises between the parties hereto, it is hereby agreed:

SECTION A - ENGINEERING SERVICES

The ENGINEER shall furnish engineering services as follows:

1. The ENGINEER will conduct preliminary investigations, prepare preliminary drawings, provide a preliminary itemized list of probable construction costs effective as of the date of the report, and submit an engineering report following funding Agency instructions and guides.

2. The ENGINEER will furnish 10 copies of the engineering report, and layout maps to the OWNER.

3. The ENGINEER will attend conferences with the OWNER, representatives of the funding Agency, or other interested parties as may be reasonably necessary.

4. After the engineering report has been reviewed and approved by the OWNER, the funding agency, and by the Department of Environmental Quality and the OWNER directs the ENGINEER to proceed, the ENGINEER will perform the necessary design surveys, accomplish the detailed design of the project, prepare construction drawings, specifications and contract documents, and prepare a final cost estimate based on the final design for the entire system. It is also understood that if subsurface explorations (such as borings, soil tests, rock soundings and the like) are required, the ENGINEER will furnish coordination of said explorations without additional charge, but the costs incident to such explorations shall be paid for by the OWNER as set out in Section D hereof.

5. The contract documents furnished by the ENGINEER under Section A-4 shall utilize funding Agency endorsed construction contract documents, including funding Agency General Conditions, Contract Change Orders, and partial payment estimates. All of these documents shall be subject to funding Agency approval. Copies of guide contract documents may be obtained from the funding Agency.

6. Prior to the advertisement for bids, the ENGINEER will provide for each construction contract, not to exceed 10 copies of detailed drawings, specifications, and contract documents for use by the OWNER, appropriate Federal, State, and local agencies from whom approval of the project must be obtained. The cost of such drawings, specifications, and contract documents shall be included in the basic compensation paid to the ENGINEER.

7. The ENGINEER will furnish additional copies of the drawings, specifications and contract documents as required by prospective bidders, material suppliers, and other interested parties, but may charge them for the reasonable cost of such copies. Upon award of each contract, the ENGINEER will furnish to the OWNER five sets of the drawings, specifications and contract documents for execution. The cost of these sets shall be included in the basic compensation paid to the ENGINEER. Original documents, survey notes, tracings, and the like, except those furnished to the ENGINEER by the OWNER, are and shall remain the property of the ENGINEER.

8. The drawings prepared by the ENGINEER under the provisions of Section A-4 above shall be in sufficient detail to permit the actual location of the proposed improvements on the ground. The ENGINEER shall prepare and furnish to the OWNER without any additional compensation, three copies of a map(s) showing the general location of needed construction easements and permanent easements and the land to be acquired. Property surveys, property plats, property descriptions, abstracting and negotiations for land rights shall be accomplished by the OWNER, unless the OWNER requests, and the ENGINEER agrees to provide those services. In the event the ENGINEER is requested to provide such services, the ENGINEER shall be additionally compensated as set out in Section D hereof.

9. The ENGINEER will attend the bid opening and tabulate the bid proposals, make an analysis of the bids, and make recommendations for awarding contracts for construction.

10. The ENGINEER will review and approve, for conformance with the design concept, any necessary shop and working drawings furnished by contractors.

11. The ENGINEER will interpret the intent of the drawings and specifications to protect the OWNER against defects and deficiencies in construction on the part of the contractors. The ENGINEER will not, however, guarantee the performance by any contractor.

12. The ENGINEER will establish baselines for locating the work together with a suitable number of benchmarks adjacent to the work as shown in the contract documents.

13. The ENGINEER will provide general engineering review of the work of the contractors as construction progresses to ascertain that the contractor is conforming with the design concept.

14. Unless notified by the OWNER in writing that the OWNER will provide for resident inspection, the ENGINEER will provide resident construction inspection. The ENGINEER'S undertaking hereunder shall not relieve the contractor of contractor's obligation to perform the work in conformity with the drawings and specifications and in a workmanlike manner; shall not make the ENGINEER an insurer of the contractor's performance; and shall not impose upon the ENGINEER any obligation to see that the work is performed in a safe manner.

15. The ENGINEER will cooperate and work closely with funding Agency representatives.

16. The ENGINEER will review the contractor's applications for progress and final payment and, when approved, submit same to the OWNER for payment.

17. The ENGINEER will prepare necessary contract change orders for approval of the OWNER, the funding Agency, and others on a timely basis.

18. The ENGINEER will make a final review prior to the issuance of the statement of substantial completion of all construction and submit a written report to the OWNER and the funding Agency. Prior to submitting the final pay estimate, the ENGINEER shall submit a statement of completion to and obtain the written acceptance of the facility from the OWNER and the funding Agency.

19. The ENGINEER will provide the OWNER with one set of reproducible record (as-built) drawings, and two sets of prints at no additional cost to the OWNER. Such drawings will be based upon construction records provided by the contractor during construction and reviewed by the resident inspector and from the resident inspector's construction data.

20. If State statutes require notices and advertisements of final payment, the ENGINEER shall assist in their preparation.

21. The ENGINEER will be available to furnish engineering services and consultations necessary to correct unforeseen project operation difficulties for a period of one year after the date of statement of substantial completion of the facility. This service will include instruction of the OWNER in initial project operation and maintenance but will not include supervision of normal operation of the system. Such consultation and advice shall be furnished without additional charge except for travel and subsistence costs. The ENGINEER will assist the OWNER in performing a review of the project during the 11th month after the date of the certificate of substantial completion.

22. The ENGINEER further agrees to obtain and maintain, at the ENGINEER'S expense, such insurance as will protect the ENGINEER from claims under the Workman's Compensation Act and such comprehensive general liability insurance as will protect the OWNER and the ENGINEER from all claims for bodily injury, death, or property damage which may arise from the performance by the ENGINEER or by the ENGINEER'S employees of the ENGINEER'S functions and services required

under this Agreement.

23. The services called for in the Section A-1 and A-2 of this Agreement shall be completed and the report submitted within _____calendar days from the date of authorization to proceed. After acceptance by the OWNER and the funding Agency of the Engineering Report and upon written authorization from the OWNER, the ENGINEER will complete final plans, specifications and contract documents and submit for approval of the OWNER, the funding Agency and all State regulatory agencies within _____ calendar days from the date of authorization unless otherwise agreed to by both parties.

If the above is not accomplished within the time period specified, this Agreement may be terminated by the OWNER. The time for completion will be extended by the OWNER for a reasonable time if completion is delayed due to unforeseeable causes beyond the control and without the fault or negligence of the ENGINEER.

SECTION B - COMPENSATION FOR ENGINEERING SERVICES

1. The OWNER shall compensate the ENGINEER for preliminary engineering services in the sum of _____Dollars ($_____) after the review and approval of the engineering report by the OWNER, the Department of Environmental Quality, and the funding Agency.

2. The OWNER shall compensate the ENGINEER for design and contract administration engineering services in the amount of: (Select (a) or (b))

☐ (a)_____ Dollars ($_____) or

☐ (b) As shown in Attachment 1

3. When Attachment 1 is used to establish compensation for the design and contract administration services, the actual construction costs on which compensation is determined shall exclude legal fees, administrative costs, engineering and environmental fees, land rights, acquisition costs, water costs, interest expense, and other such costs not directly related to actual construction incurred during the construction period.

The compensation for preliminary engineering services, design and contract administration services shall be payable as follows:

(a) A sum which equals seventy percent (70%) of the total compensation payable under Section B-1 and 2, after completion and submission of the construction drawings, specifications, cost estimates, and contract documents, and the acceptance of the same by OWNER, the Department of Environmental Quality, and the funding Agency.

(b) A sum which, together with the compensation provided in Section B-3-(a) above, equals eighty percent (80%) of the compensation payable immediately after the construction contracts are awarded.

(c) A sum equal to fifteen percent (15 %) of the compensation will be paid on a monthly basis for general engineering review of the contractor's work during the construction period on percentage ratios identical to those approved by the ENGINEER as a basis upon which to make partial payments to the contractor(s). However, payment under this paragraph and of such additional sums as are due the ENGINEER by reason of any necessary adjustments in the payment computations will be in an amount so that the aggregate of all sums paid to the ENGINEER will equal ninety-five (95%) of the compensation. A final payment to equal 100 percent shall be made when it is determined that all services required by this Agreement have been completed except for the services set forth in Section A-21 hereof.

SECTION C - COMPENSATION FOR RESIDENT INSPECTION AS SET FORTH IN SECTION A- 14

When the ENGINEER provides resident inspection, the ENGINEER will, prior to the preconstruction conference, submit a resume of the resident inspector's qualifications, anticipated duties and responsibilities for approval by the OWNER and the funding Agency. The OWNER agrees to pay the ENGINEER for such services in accordance with the schedule set out in Attachment 1. The ENGINEER will render to OWNER for such services an itemized bill, once each month, for compensation for such services performed hereunder during such period, the same to be due and payable by the OWNER to the ENGINEER on or before the 10th day of the following period.

Under normal construction circumstances, and for the proposed construction period of _____days, the cost of resident inspection is estimated to be $ _____.

SECTION D - ADDITIONAL ENGINEERING SERVICES

In addition to the foregoing being performed, the following services may be provided UPON PRIOR WRITTEN AUTHORIZATION OF THE OWNER and written approval of the funding Agency.

1. Site surveys for water treatment plants, sewage treatment works, dams, reservoirs, and other similar special surveys as may be required.

2. Laboratory tests, well tests, borings, specialized geological, soils, hydraulic or other studies recommended by the ENGINEER.

3. Property surveys, detailed description of sites, maps, drawings, or estimates related thereto; assistance in negotiating for land and easement rights.

4. Necessary data and filing maps for water rights, water adjudication, and litigation.

5. Redesigns ordered by the OWNER after final plans have been accepted by the OWNER and the funding Agency, except redesigns to reduce the project cost to within the funds available.

6. Appearances before courts or boards on matters of litigation or hearings related to the project.

7. Performance of detailed staking necessary for construction of the project in excess of the control staking set forth in Section A-12.
8. The ENGINEER further agrees to provide the operation and maintenance manual for facilities when required for $ _____.

Payment for the services specified in this Section D shall be as agreed in writing between the OWNER and approved by the funding Agency prior to commencement of the work. Barring unforeseen circumstances, such payment is estimated not to exceed $ _____.

The ENGINEER will render to OWNER for such services an itemized bill, separate from any other billing, once each month, for compensation for services performed hereunder during such period, the same to be due and payable by OWNER to the ENGINEER on or before the 10th day of the following period.

SECTION E - INTEREST ON UNPAID SUMS

If OWNER fails to make any payment due ENGINEER within 60 days for services and expenses and funds are available for the project then the ENGINEER shall be entitled to interest at the rate of _____ percent per annum from said 60th day, not to exceed an annual rate of 12 percent.

SECTION F - SPECIAL PROVISIONS

SECTION G - ENVIRONMENTAL INFORMATION DOCUMENT

CHECK ONE OF THE FOLLOWING:

☐ 1. The ENGINEER will not be responsible under this contract to prepare the Environmental Information Document (EID).

☐ 2. The ENGINEER will furnish the Environmental Information Document (EID) following the Funding Agency Coordinating Team Checklist and Guides which includes, but is not limited to the following scope of services:

a. Data Collection and Mapping.

b. Coordination with State and Federal Agencies by written notification.

c. Draft Environmental Information Document including alternative analysis.

d. Final Environmental Information Document. (Includes revisions to the EID as requested by the Funding Agency and/or the Oklahoma Department of Environmental Quality, but does not include revisions based upon alternative location and/or treatment technologies not evaluated as part of the original EID.)

Special Note: This scope of services does not include additional studies related to the completion of the EID. These studies would include but are not limited to:

Wetland Delineation
Archeological Inspections
Hazardous Waste Studies
Endangered Species and Critical Habitat Studies
Sludge Management Plans

The compensation for preparing an acceptable Environmental Information Document will be accomplished by one of the following methods of compensation. Please check (A or B) one of the following methods:

==========

A. ---- Lump Sum in an amount not to exceed_____dollars (_____).
Due and payable upon acceptance by the owner and Funding Agency(s) and based upon availability of Agency funds. The owner will be billed upon the completion of the three following deliverables:

	Amount
Deliverable 1: Data Collection, Mapping, and Coordination with State and Federal Agencies	----------
Deliverable 2: Draft Environmental Information Document	----------
Deliverable 3: Final Environmental Information Document	----------
Total:	----------

==========

B. ----- Hourly Rate

Due and payable upon acceptance by the owner and Funding Agency(s) and based upon availability of Agency funds. The owner will be billed upon completion of the three following deliverables:

Deliverable 1:	Hourly Rate	Estimated Hours	Total
Data Collection, Mapping, and Coordination with State and Federal Agencies	_____	_____	_____
Deliverable 2:			
Draft Environmental Information Document	_____	_____	_____
Deliverable 3:			
Final Environmental Information Document	_____	_____	_____

Total: _____

SECTION H – EXECUTION OF AGREEMENT

This Agreement shall become effective once the two parties listed below, OWNER and ENGINEER, have signed with their signatures properly attested to:

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in duplicate on the respective dates indicated below:

(OWNER SEAL)

OWNER:

By_____

Type Name _____

ATTEST _____

Title_____

Type Name _____

Date_____

Title _____

(ENGINEER SEAL)

ENGINEER:

By _____

ATTEST_____

Type Name _____

Type Name _____

Title_____

Title _____

Date_____

When a funding agency is required to approve Engineering Agreements, this agreement will be provided to the agency after a commitment of financial assistance by the funding agency. Such approval shall be evidenced by the signature of a duly authorized representative of the funding agency in the space provided at the end of this Agreement. The approval shall signify that the provisions of this Agreement are consistent with the requirements of the funding agency.

APPROVAL:

FUNDING AGENCY

By _____

Type Name _____

Title _____

Date _____

APPROVAL: (If more than one funding Agency)

FUNDING AGENCY

By _____

Type Name _____

Title_____

Date_____

INTERIM AGREEMENT

(For use only when OWNER is not legally organized on the date the Agreement for Engineering Services is executed.)

In lieu of the execution of the foregoing Agreement for Engineering Services dated the _____day of _____ , ____ , by the party designated as OWNER therein, the undersigned, hereinafter referred to as INTERIM PARTIES, have executed this Interim Agreement in consideration of the services described in Section A- 1 through A-3, inclusive, of said Agreement for Engineering Services to be performed by the ENGINEER, and the ENGINEER agrees to accept this Interim Agreement as evidenced by ENGINEER'S execution hereof contemporaneously with the execution of the Agreement for Engineering Services. The ENGINEER also agrees to perform the services set forth in Section A-1 through A-3, inclusive, of said Agreement in consideration of the sum stated in Section 13- 1 of said Agreement be paid in the manner set forth therein.

It is anticipated that the OWNER shall promptly become a legal entity with full authority to accept and execute said Agreement for Engineering Services and that the OWNER, after becoming so qualified, shall promptly take such action necessary to adopt, ratify, execute, and become bound by the Agreement for Engineering Services. The ENGINEER agrees that upon such due execution of the Agreement for Engineering Services by the OWNER, the INTERIM PARTIES automatically will be relieved of any responsibility or of liability assumed by their execution of this Interim Agreement, and that the ENGINEER will hold the OWNER solely responsible for performance of the terms and conditions imposed upon the OWNER by the Agreement for Engineering Services, including the payment of all sums specified in Section B- 1 of said Agreement.

If the OWNER is not legally organized, or if after being duly organized it fails or refuses to adopt, ratify, and execute the Agreement for Engineering Services within 30 days from the date it becomes legally organized and qualified to do so, or if for any other reason the project fails to proceed beyond the preliminary stage described in Section A- 1 through A-3 inclusive, of said Agreement, the INTERIM PARTIES agree to pay ENGINEER for such preliminary engineering services, an amount not to exceed the sum specified therefore in Section B- 1 of said Agreement.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in duplicate this_____ day of _____, ____.

_____ _____

OWNER ENGINEER

ATTACHMENT 1 - Agreement for Engineering Services Page 1

RECOMMENDED ALLOWABLE FEES FOR PROFESSIONAL ENGINEERING SERVICES
(AS A PERCENTAGE OF TOTAL ACTUAL CONSTRUCTION COST)

I. GENERAL

The engineering fees indicated below are the recommended allowable for funding agency financed projects in Oklahoma. These fees will be based upon the total actual construction cost only. Each system Owner is encouraged to negotiate the professional engineering fee in order to obtain the most equitable fee structure for each given project.

II. ENGINEERING FEES

The following table is the recommended allowable engineering fee for Funding Agency-financed projects. This fee includes preliminary engineering services in accordance with Funding Agency guides (Section B.1) and design and contract administration services (Section B.2) for the total engineering fee.

Net Construction Cost of Entire Project	Percent Fee
$ 60,000	13.2
70,000	12.6
80,000	12.3
90,000	12.0
100,000	11.9
200,000	10.5
300,000	9.7
400,000	8.9
500,000	8.5
600,000	8.2
700,000	8.0
800,000	7.8
900,000	7.7
1,000,000	7.5
2,000,000	6.7
3,000,000	6.4
4,000,000	6.3
5,000,000	6.2
10,000,000	6.0

Oklahoma State Statute requires that a licensed engineer must design any facility that affects public health or safety. The Funding Agency requires that the licensed engineering firm make necessary inspections during the construction phase of the facility to see that it is constructed according to the approved plans and specifications. These fees are established for professional services.

ATTACHMENT 1 - Agreement For Engineering Services Page 2

III. RESIDENT INSPECTION FEE

Net Construction Cost	Percent Fee
$100,000 or less	5.0 (or negotiated lump sum)
200,000	4.2
300,000	3.8
400,000	3.5
500,000	3.2
600,000	3.0
700,000	2.8
800,000	2.65
900,000	2.5
1,000,000	2.4
2,000,000	2.3
3,000,000	2.2
4,000,000	2.1
5,000,000	2.0
10,000,000	1.9

The fee for full-time resident inspection to be paid under this contract will be a percent of the cost of construction, as determined above unless one of the following is checked:

( ) 1. The fee for part-time resident inspection to be paid under the contract will be percent (_____._____%) of the total cost of construction. The percentage used for this method of inspection will be less than that shown above.

( ) 2. The fee for (full-time) (part-time) resident inspection to be paid under this contract will be a lump sum to be dispersed during construction on a periodic basis on percentage ratios identical to those approved by the Engineer as a basis upon which to make partial payments to the contractor(s). Precisely, the fee will be $_____.

( ) 3. The fee for (full-time) (part-time) resident inspection to be paid under this contract will be at the rate of $_____ per day which includes all travel and incidental expenses.

It is anticipated that on some jobs, such as where a storage tank is constructed, there may be little resident inspection needed. On projects involving pipeline installation, full-time resident inspection will be required.

The cost and type of resident inspection needed must be discussed by the applicant and consulting engineer and the fee established prior to the start of construction.

The engineer is not relieved of providing general engineering inspections by a qualified engineer when he is providing the full-time resident inspection.

Revised: 01/01/04

OKLAHOMA FUNDING AGENCY COORDINATING TEAM

AGREEMENT

FOR

ENVIRONMENTAL SERVICES

ENDORSED BY:

OKLAHOMA WATER RESOURCES BOARD STAFF
OKLAHOMA DEPARTMENT OF COMMERCE
OKLAHOMA CITY AREA INDIAN HEALTH SERVICE
USDA - RURAL DEVELOPMENT - OKLAHOMA
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

REVISED: January 1, 2004

OKLAHOMA FUNDING AGENCY

AGREEMENT FOR ENVIRONMENTAL SERVICES

This Agreement, made this _____ day of _____, _____

by and between _____, hereafter referred to as the OWNER,

and _____, hereinafter referred to as the

Environmental Consultant: THE OWNER intends to construct_____
_____ in _____ County, State of Oklahoma, which may be paid for in part with financial assistance from one or more funding Agencies both federal and/or state and for which the Environmental Consultant agrees to perform the various environmental services. By definition FUNDING AGENCY may refer to one or more Agencies involved in funding the proposed project.

SECTION A - SCOPE OF SERVICES

The Environmental Consultant will complete an Environmental Information Document (EID) following the Funding Agency Coordinating Team Checklist and agency specific guides which includes, but is not limited to the following scope of services:

1. Data Collection and mapping.

2. Coordination with State and Federal Agencies by written notification.

3. Draft Environmental Information Document including alternative analysis.

4. Final Environmental Information Document. (Includes revisions to the EID as requested by funding agencies and the Oklahoma Department of Environmental Quality, but does not include revisions based upon alternative location and/or treatment technologies not evaluated as part of the original EID.)

Special Note: This agreement does not include additional studies related to the completion of the EID. These studies would include but are not limited to:

Wetland Delineation
Archeological Inspections
Hazardous Waste Studies
Endangered Species and Critical Habitat Studies
Sludge Management Plans

SECTION B - COMPENSATION

The compensation for preparing an acceptable Environmental Information Document will be accomplished by one of the following methods of compensation. Please check (A or B) one of the following methods:

==========

A. ---- Lump Sum in an amount not to exceed _____ dollars ( ).
Due and payable upon acceptance of the owner and Funding Agency(s) and based upon availability of Agency funds. The owner will be billed upon the completion of the three following deliverables:

	Amount
Deliverable 1: Data Collection, Mapping, and Coordination with State and Federal Agencies	----------
Deliverable 2: Draft Environmental Information Document	----------
Deliverable 3: Final Environmental Information Document	----------
Total:	----------

==========

B. ----- Hourly Rate

Due and payable upon acceptance by the owner and Funding Agency(s) and based upon availability of Agency funds. The owner will be billed upon completion of the three following deliverables:

Deliverable 1:	Hourly Rate	Estimated Hours	Total
Data Collection, Mapping, and Coordination with State and Federal Agencies	_____	_____	_____
Deliverable 2:			
Draft Environmental Information Document	_____	_____	_____
Deliverable 3:			
Final Environmental Information Document	_____	_____	_____

Total: _____

SECTION C - APPROVAL BY FUNDING AGENCY

This Agreement shall become effective once the two parties listed below, OWNER and ENGINEER, have signed with their signatures properly attested to:

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in duplicate on the respective dates indicated below:

(OWNER SEAL)

OWNER:

By_____

Type Name _____

ATTEST _____

Title_____

Type Name _____

Date_____

Title _____

(ENGINEER SEAL)

ENGINEER:

By _____

ATTEST_____

Type Name _____

Type Name _____

Title_____

Title _____

Date_____

When a funding agency is required to approve Engineering Agreements, this agreement will be provided to the agency after a commitment of financial assistance by the funding agency. Such approval shall be evidenced by the signature of a duly authorized representative of the funding agency in the space provided at the end of this Agreement. The approval shall signify that the provisions of this Agreement are consistent with the requirements of the funding agency.

APPROVAL:

FUNDING AGENCY

By _____

Type Name _____

Title _____

Date _____

APPROVAL: (If more than one funding Agency)

FUNDING AGENCY

By _____

Type Name _____

Title_____

Date_____