PROJECT FACT SHEET

CONTRACT TITLE: Environmental Research - Lower Cost Produced Water Disposal

ID NUMBER: 95-A06 Task 08

B & R CODE: AC1015000

DOE PROGRAM MANAGER:
NAME: William H. Hochheiser
PHONE: (202) 586-5614

DOE PROJECT MANAGER:
NAME: Rhonda P. Lindsey
LOCATION: BPO
PHONE: (918) 337-4407

PROJECT SITE
CITY: Bartlesville **STATE:** OK
CITY: **STATE:**
CITY: **STATE:**

CONTRACTOR: BDM-Oklahoma
NIPER
ADDR: 220 N. Virginia
P.O. Box 2565
Bartlesville, OK 74003

CONTRACT PROJECT MANAGER:
NAME: Steve Jones
PHONE: (918) 337-4528
FAX: (918) 337-4365
INTERNET ADDRESS: sjones@bpo.gov

CONTRACT PERFORMANCE PERIOD:
11/01/1995 to 11/07/1996

PROGRAM: Environmental-Oil
RESEARCH AREA:

FUNDING (1000'S)	DOE	CONTRACTOR	TOTAL
PRIOR FISCAL YRS	0	0	0
FISCAL YR 1996	201	0	201
FUTURE FUNDS	0	0	0
TOTAL EST'D FUNDS	201	0	201

OBJECTIVE: Identify the regulatory requirements, candidate technologies, and demonstration sites; and conduct the demonstrations.

METRICS/PERFORMANCE:
Products developed:

PROJECT DESCRIPTION:

Background: The domestic fossil Energy industry produces significant amounts of oil and natural gas from operations on the outer continental shelf, territorial seas, and coastal waters. Produced water, a by-product, is brought to the surface during the production of oil and gas. Most produced water from onshore operations is injected via injection wells. For offshore and coastal production, produced water is discharged directly to the surface water. Increasing emphasis on protection of the environment has raised concern about the practice of direct discharge. Technical difficulties and costs will prevent subsurface disposal of produced water from becoming the standard offshore option. Lower cost treatment technologies for produced water need to be developed for oil and gas production to be maintained while concurrently protecting the environment.

The primary technology used for treating produced water is settling tanks. This treatment removes insoluble oil and grease, but does not facilitate removal of soluble organic or inorganic contaminants. The soluble compounds are of increasing concern as regulations target the toxicity of the water. Cost effective treatment technologies will enable operators to reduce toxicity and protect the environment.

Existing technologies are currently in use with other waste streams for the removal of soluble organic contaminants. BDM-OKLAHOMA proposes to research and identify the technologies that exhibit applicability to the oil and gas industry. Information will be developed on the technical performance of the technologies as well as the anticipated cost for implementation on a typical production platform. The technical performance will be evaluated against the criteria specific for this application. Technologies with favorable evaluations will be recommended for further study i.e. bench scale and/or field implementations. The proposed research of lower cost produced water treatment technologies will permit DOE to invest in the evolution of existing technologies to new applications. Utilizing existing technologies will limit development costs and provide for rapid implementation and commercialization.

The objective of the project is the application of existing wastewater treatment technologies to produced water treatment. The ideal technology will allow an operator to discharge large quantities of produced water and maintain compliance with regulatory parameters. The success of this project will be measured by the number and thoroughness of evaluated technologies.

Work to be performed: This project will consist of two major tasks: Task 1 - Identify the regulatory requirements, candidate technologies, and demonstration sites; and Task 2 - Conduct the bench scale or field demonstrations.

STATUS:

Work Status: Technology survey stated.

Scheduled Milestones:

Identify candidate technologies	06/95
Issue report on technologies	12/96

Accomplishments: Regulatory requirements defined. Potential technology sources identified. Report on technologies and regulatory requirement ended. Planning for bench scale testing completed and research lab being prepared for testing.