STATEMENT OF CONSIDERATIONS

REQUEST BY TEXACO EXPLORATION AND PRODUCTION INC. (TEXACO) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER COOPERATIVE AGREEMENT NO. DE-FC22-93BC14960 - W(A)-93-023, CH-0782

The Participant, Texaco, was awarded this Cooperative Agreement under the Class I Oil Program: Mid-term Activities, consistent with the National Energy Strategy Advanced Oil Recovery Program. Texaco was selected based on its proposal submitted in response to a PON from DOE in the Class I Oil Program. This Cooperative Agreement is to demonstrate the feasibility of carbon dioxide, miscible flooding techniques enhanced with horizontal drilling applied to a Fluvial Dominated Deltaic reservoir. The process will be demonstrated in the Marginulina sand, Port Neches field, Orange County, Texas.

Texaco has requested a waiver of domestic and foreign rights for all subject inventions under this Agreement. By letters dated July 9, 14, and 23 the request is clarified to include the inventions of the industrial partner and subcontractor, Texaco Inc's Exploration and Production Technology Division (EPTD). EPTD large business has joined and approved, but the other subcontractor, SAIC, has not joined in this request for waiver. Louisiana State University will be accorded Patent Rights for Small Businesses and Nonprofit organizations permitting it to elect title to inventions of its employees under its subcontract. Accordingly, the waiver is to be for the inventions of the Participant and of its partner and subcontractor, EPTD.

Texaco's response to questions 2, 3 and 8 of the petition show the total estimated cost of the Agreement to be about \$23.9 million with DOE providing about \$8.5 million and Texaco the remainder for 64% cost sharing. In the response to question 8, Texaco indicates it will invest \$0.43 million for technology transfer to other oil producers.

In its response to questions 5 and 7, Texaco explains that it has strong background interest and expertise in the technology of this project. Texaco has conducted CO2 floods in Louisiana since the early 1980's and holds U.S. Patent No. 4,819,724 "Modified Push/Pull Flood Process For Hydrocarbon Recovery". Also Texaco states it has acquired a computer and software and expended substantial effort in project design for carbon dioxide flooding. This private investment and proposed cost sharing clearly demonstrates Texaco's commitment to the technology and indicates likelihood of effort to commercialize the results of the agreement. From the response to question 10, there would be only limited effect on competition and market concentration by grant of the waiver. Texaco states it has not used its background patent to prevent other oil producers from performing CO2 floods. Also the results of this project will be made available to interested parties.

The Petitioner has agreed to the standard provisions with respect to invention waivers with the substitution of the march in rights, U.S. manufacturing preference and U.S. government license provided in 35 U.S.C. 202-204. Additionally, Texaco has accepted standard background patent and data provisions of paragraphs (k) and (h) along with a special U.S. Competitiveness provision (attached) to assure substantial manufacture in the United States.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. Therefore, in view of the objectives and considerations set forth in DOE 41 CFR 9-9.109-6, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.



Hugh W. Glenn Assistant Chief Office of Intellectual Property Counsel, CH

Date august 2, 1993

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE:



Sandra L. Waisley, Acting Director Office of Oil and Gas Exploration and Production

Date 3/22/94.

APPROVAL:



Assistant General Counsel for Technology Transfer and Intellectual Property Date <u>3/25/94</u>

(FOR INSERTION IN ADVANCE WAIVER OF PATENT RIGHTS)

(c) (3) (ix) U.S. COMPETITIVENESS

The Participant (waiver recipient) agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Participant (waiver recipient) can show to the satisfaction of the DOE that it is not commercially feasible to do In the event the DOE agrees to foreign manufacture, there will so. be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Participant (waiver recipient) agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Participant (waiver recipient) or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.