49. "THIRD AMENDMENT AND WODIFICATION OF STATE OIL AND GAS LEASE P.R.C. 186.1" (SECONDARY RECOVERY), BELMONT OFFSHORE FIELD, ORANGE COUNTY; HUMBLE OIL & REFINING COMPANY AND TEXACO INC. - W.O. 6280.

After consideration of Calendar Item 14 attached, and upon rotion duly made and unanimously carried, the following resolution was adopted:

## THE COMMISSION:

- 1. PURSUANT TO SECTION 6830.2 OF THE PUBLIC RESOURCES CODE, DETERMINES THAT IT IS IN THE BEST INTEREST OF THE STATE THAT THE PROPOSED AMENDATORY AGREEMENT BE ENTERED INTO; AND
- 2. AUTHORIZES THE EXECUTIVE OFFICER TO EXECUTE AND ISSUE A "THIRD AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE P.R.C. 186.1" (SECONDARY RECOVERY) A COPY OF WHICH IS MADE A PART HEREOF BY REFERENCE TO THE OFFICIAL FILES OF THE COMMISSION.

ALL OTHER TERMS AND CONDITIONS OF STATE OIL AND GAS LEASE P.R.C. 186.1 SHALL REMAIN IN FULL FORCE AND EFFECT.

Attachment Calendar Item 14 (2 pages)

14.

REQUEST FOR "THIRD AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE P.R.C. 186.1" (SECONDARY RECOVERY), BELMONT OFFSHORE FIELD, ORANGE COUNTY; HUMBLE OIL & REFINING COMPANY AND TEXACO INC. - W.O. 6280.

An application has been received from Humble and Texaco requesting modification of Lease P.R.C. 186.1 to provide for secondary recovery.

Oil and Gas Lease P.R.C. 186.1 (Exhibit 1) was issued on September 24, 1945, pursuant to competitive public bidding, to Marine Exploration Company for a period of 20 years, and on February 28, 1950, the lease term was extended by the Commission in accordance with the provisions of Section 6827 of the Public Resources Code. The present lessees are Humble Oil & Refining Company and Texaco Inc.

On June 11, 1958 (Minute Item 3, page 4055), the Commission approved a pilot water-injection program, which was commenced in November 1959. Pilot water-injection operations were discontinued in February 1965. During the period approximately 4,890,000 barrels of ocean water were injected. Evaluation of the resultant economic and engineering data indicates the desirability of expanding the pilot water-injection program into full-zone waterfloods.

The existent lease requires oil royalty payments to the State based on the calculation of graduated individual well royalta ates determined by production of each of the wells. The required capital investment and additional operating costs for a waterflood program can not be justified by the lessee if the calculation of graduated royalty rates is applied to augmented rates of production resulting from a waterflood program. Chapter 979, Statutes of 1961, which added Sections 6850.1, 6830.2, and 6830.3 to the Public Resources Code, authorizes lease modifications with the approval of the Commission for calculation of royalties on "primary" oil (i.e., that which would have been produced without a secondary recovery program) at the same rates that would have been applicable under the unmodified lease, and for establishment of the royalty rate for the "secondary" cil (i.e., production resulting from the secondary recovery operation) at not less than the minimum royalty provided by the prior lease (in this instance 16-2/3%). Complete economic projections, concurred in by lessee and staff, estimate the equivalent average royalty rate on remaining "primary" production at 18,356% (if secondary recovery operations are initiated during June 1967), which rate would be established for all "secondary" production.

The engineering and economic determinations required by Sections 6830.1, 6830.2, and 6830.3, Public Resources Code, have been made and incorporated in a proposed form of "Third Amendment and Modification of State Oil and Gas Lease P.R.C. 186.1" (Secondary Recovery). After a review as to the legality of the modification form, the Office of the Attorney General has advised that the proposed amendment and modification is in compliance with the applicable statutes of the Public Resources Code.

## CALENDAR ITEM 14. (CONFD.)

## IT IS RECOMMENDED THAT THE COMMISSION:

- 1. PURSUANT TO SECTION 6830.2 OF THE PUBLIC RESOURCES CODE, DETERMINE THAT IT IS IN THE BEST INTEREST OF THE STATE THAT THE PROPOSED AMENDATORY AGREEMENT BE ENTERED INTO; AND
- AUTHORIZE THE EXECUTIVE OFFICER TO EXECUTE AND ISSUE A "THIRD AMENDMENT AND MODIFICATION OF STATE OIL AND GAS LEASE P.R.C. 186.1" (SECONDARY RECOVERY) A COPY OF WHICH IS MADE A PART HEFEOF BY REFERENCE TO THE OFFICIAL FILES OF THE COMMISSION.

ALL OTHER TERMS AND CONDITIONS OF STATE OIL AND GAS LEASE P.R.C. 186.1 SHALL REMAIN IN FULL FORCE AND EFFECT.