

MINUTE ITEM

19. REQUEST FOR MODIFICATION OF SUBMARINE GEOPHYSICAL EXPLORATION PERMIT P.R.C. 2485.1 (A), (B) AND (C), SANTA BARBARA, VENTURA, LOS ANGELES, ORANGE AND SAN DIEGO COUNTIES, SHELL OIL COMPANY - W.O. 3326.

After consideration of Calendar Item 30 attached, and upon motion duly made and unanimously carried, the following resolution was adopted:

THE EXECUTIVE OFFICER IS AUTHORIZED TO ISSUE TO THE SHELL OIL COMPANY A MODIFICATION OF SUBMARINE GEOPHYSICAL EXPLORATION PERMIT P.R.C. 2485.1 (A), (B) AND (C) TO PERMIT THE DISCHARGE OF ALTERNATE SHOTS OF EXPLOSIVE NITRAMON WW, OR EQUIVALENT, WITH OTHER AUTHORIZED EXPLOSIVES, WITH NO SINGLE SHOT OF NITRAMON WW, OR EQUIVALENT, TO EXCEED 25 POUNDS. FIELD TESTING OF NITRAMON WW, OR EQUIVALENT, WILL BE PERMITTED ONLY IN WATERS IN EXCESS OF 600 FEET IN DEPTH AND AT DISTANCES IN EXCESS OF THREE MILES FROM ANY SHORE LINE OF THE MAINLAND OR ANY ISLAND. ALL OTHER TERMS OF PERMIT P.R.C. 2485.1 (A), (B) AND (C) ARE TO REMAIN UNCHANGED AND IN FULL FORCE AND EFFECT. MODIFICATION OF THE PERMIT IS TO BE EFFECTIVE ONLY AS LONG AS A CONCURRENT PERMIT FROM THE FISH AND GAME COMMISSION IS IN EFFECT FOR THE SAME PURPOSE AND FOR THE SAME AREA.

Attachment

Calendar Item 30 (2 pages)

CALENDAR ITEM

30.

MODIFICATION OF SUBMARINE GEOPHYSICAL EXPLORATION PERMIT, P.R.C. 2485.1 (A), (B) AND (C), SANTA BARBARA, VENTURA, LOS ANGELES, ORANGE AND SAN DIEGO COUNTIES, SHELL OIL COMPANY - W.O. 3326.

Pursuant to an application by the Shell Oil Company, the State Lands Commission on December 17, 1959 (Minute Item 14, page 5478), authorized the amendment of Permit P.R.C. 2485.1 (A), (B) and (C) to authorize the use of Hercules EP 198-B powder.

An application has been received from the Shell Oil Company requesting a further amendment of the permit to permit the use of Nitramon WW explosive, or equivalent, in limited amounts (not to exceed 25 pounds per shot) in water depths in excess of 600 feet and at locations more than three miles from the coast line of the mainland or offshore islands. In the region contemplated by this permit there are marine basins which have not been explored. The technology of seismic operations conducted in deep waters has been improved during the past ten years. With the increased ability of the industry to explore, drill and operate in deep water, the potential area for exploration and development is increased. The use of black powder (the only explosive authorized for general use heretofore) in deep water produces poor or in some cases no results.

Nitramon WW, like any explosive, can cause destruction to some marine animal life in close proximity. However, the Department of Fish and Game has granted permission to the applicant to use Nitramon WW, or equivalent, in the area included in Permit P.R.C. 2485.1 during the period January 15, 1960 to April 15, 1960, in water depths greater than 600 feet and more than three miles from mainland or island shore lines.

The proposed explosive compound is approximately 70% ammonium nitrate. It is very insensitive and cannot be detonated by blasting caps, impact, friction or fire. For these reasons it is an extremely safe product to use in contrast to the previously authorized black powder, which is one of the most hazardous explosives to handle known.

There is some question as to the precise attenuation rate of the pressure wave resulting from an underwater explosion. The operator proposes to use charges of 15 to 25 pounds each. Using the most conservative figure, the lethal range in depths of 600 feet of water commences with the use of 15-pound charges of Nitramon explosive.

At all times during the field testing of the explosive, the Fish and Game observer's boat will be equipped with a modern type of sonar or fish-finding equipment. The permittee will be required to initiate a series of tests of the effect of the explosive, using caged fish, such experiments to be under the supervision of the University of California.

CALENDAR ITEM 30. (CONTD.)

IT IS RECOMMENDED THAT THE COMMISSION AUTHORIZE THE EXECUTIVE OFFICER TO ISSUE TO THE SHELL OIL COMPANY A MODIFICATION OF SUBMARINE GEOPHYSICAL EXPLORATION PERMIT P.R.C. 2485.1 (A), (B) AND (C) TO PERMIT THE DISCHARGE OF ALTERNATE SHOTS OF EXPLOSIVE NITRAMON WW, OR EQUIVALENT, WITH OTHER AUTHORIZED EXPLOSIVES, WITH NO SINGLE SHOT OF NITRAMON WW, OR EQUIVALENT, TO EXCEED 25 POUNDS. FIELD TESTING OF NITRAMON WW, OR EQUIVALENT, WILL BE PERMITTED ONLY IN WATERS IN EXCESS OF 600 FEET IN DEPTH AND AT DISTANCES IN EXCESS OF THREE MILES FROM ANY SHORE LINE OF THE MAINLAND OR ANY ISLAND. ALL OTHER TERMS OF PERMIT P.R.C. 2485.1 (A), (B) AND (C) ARE TO REMAIN UNCHANGED AND IN FULL FORCE AND EFFECT. MODIFICATION OF THE PERMIT IS TO BE EFFECTIVE ONLY AS LONG AS A CONCURRENT PERMIT FROM THE FISH AND GAME COMMISSION IS IN EFFECT FOR THE SAME PURPOSE AND FOR THE SAME AREA.