

**UNITED STATES DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
GULF OF MEXICO OCS REGION**

NTL No. 99-G016

Effective Date: July 8, 1999

NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL, GAS, AND SULPHUR
LEASES IN THE OUTER CONTINENTAL SHELF, GULF OF MEXICO OCS REGION

Live-Bottom Surveys and Reports

This Notice to Lessees and Operators (NTL) supersedes the Letter to Lessees and Operators dated January 31, 1989, on this subject. It makes minor technical amendments and includes a statement on the Paperwork Reduction Act of 1995.

Certain leases in the northeastern Central Gulf of Mexico Planning Area and the Eastern Gulf of Mexico Planning Area are located in areas characterized by the existence of live bottoms. Live-bottom areas are defined as seagrass communities; those areas (Pinnacle Trend) that contain biological assemblages consisting of sessile invertebrates living upon and attached to naturally occurring hard or rocky formations with rough, broken, or smooth topography; and areas where the lithotope favors the accumulation of turtles, fishes, or other fauna. These leases contain a Live-Bottom (Pinnacle Trend) Stipulation to ensure that impacts from nearby oil and gas activities on these live-bottom areas are mitigated to the greatest extent possible.

For each affected lease, the Live-Bottom (Pinnacle Trend) Stipulation requires that you prepare a live-bottom survey report containing a bathymetry map prepared by using remote-sensing techniques. This report must be submitted to the Gulf of Mexico OCS Region (GOMR) before you may conduct any drilling activities or install any structure, including lease term pipelines. You must conduct these live-bottom surveys and prepare these live-bottom survey reports according to the following:

Live-Bottom Surveys

A. The live-bottom survey is a photodocumentation survey designed to determine the presence and extent of live-bottom areas in the vicinity of your proposed activities, including anchor locations. You may conduct the photodocumentation survey to "clear" specific proposed activity locations (see Section B below) or to **Aclear@** an entire lease block (see Section C below). In either case, if you observe live-bottom areas during the photodocumentation survey, you must also survey the area(s) between transects where the live-bottom area is observed to determine the extent to which the live-bottom area(s) exist within the area you desire to **Aclear.@**

B. You must conduct the photodocumentation survey for a specific activity site or sites along at least 12 transects at approximately 30 degrees to each other radiating from the proposed activity site(s) out to at least 1,000 meters. You must position the radial design to correspond as much as

possible with any indications of suspected live-bottom areas obtained from any geophysical surveys you may have conducted prior to or during the photodocumentation survey, while ensuring that full coverage around the site(s) is accomplished.

Alternatively, with GOMR concurrence, you may concentrate the photodocumentation survey on live-bottom areas known or suspected from previously conducted studies or surveys. If this alternative is selected, you must run a grid pattern(s) of 200-meter line spacing to coincide with the shape/configuration of each known or suspected live-bottom area within 1,000 meters of the proposed activity site(s). Where separate live-bottom areas (patches) are located in proximity to each other, you must design one grid to include all of these areas (patches).

In either case above, if live-bottom areas are encountered during the photodocumentation survey, you must depart from the preplanned transects to document the extent of the live-bottom area within 1,000 meters of the proposed activity site.

C. You have the option to provide photodocumentation for the entire lease block or for a portion of a lease block or blocks instead of conducting site-specific photodocumentation surveys. If this option is selected, you must photodocument the lease block (or portion) and all areas out to at least 1,000 meters around the area to be cleared, including outside the lease block boundaries, if necessary, at 200-meter line spacing.

D. Photodocumentation consists of underwater television and color still photography. You must operate the television camera with a surface monitor and recorder, having an audio track on which navigation fix points are indicated, along the entire transect. You must ensure that the television photodocumentation is conducted under the proper conditions (e.g., tow speed, water clarity, height above the bottom) to enhance your ability to determine the presence or absence and characterization of any live-bottom areas. The still photography camera must have a surface-controlled shutter. You must mount the still photography camera in conjunction with the underwater television camera.

You must take still photographs of selected areas at such a frequency to determine the extent, type, and approximate coverage (i.e., percent biotic cover) of the live-bottom areas you encounter along the transect. (The GOMR anticipates that such live-bottom community areas will require a minimum of 100 photographs to provide sufficient data for proper characterization; it is recognized, however, that the number of photographs is a function of the size of the area. The professional judgment you use to establish the actual number of photographs taken must be well documented in the live-bottom report.) You must analyze a sufficient number of photographs, each encompassing a standard surface area (e.g., 0.5 meters²), for each live-bottom community area. This standard surface area allows for direct comparison with known data from live-bottom studies. You must identify visually dominant epibiota during each survey. In areas of no live bottom, you must take photographs at least every 200 meters to document that fact.

E. Please be advised that if you materially revise the proposed location(s) of activities after you have performed a photodocumentation survey under the provisions of Section B above, you may have to conduct a new survey to provide coverage of the revised location(s).

Live-Bottom Survey Reports

A. A copy of your live-bottom survey report must accompany each copy of the Exploration Plan, Development and Production Plan, or Development Operations Coordination Document that proposes activities on an affected lease.

B. The live-bottom survey report must include the following:

1. Introduction.
2. A brief description of the equipment you used.
3. A discussion of results including
 - a. A brief discussion of the substrate types observed in the survey area.
 - b. A figure showing any hard-bottom areas indicated by your geophysical survey(s).
 - c. A figure showing the extent and position of live-bottom areas as determined from the photodocumentation survey and the locations of where the representative photographs required by paragraph 6 below were taken.
 - d. A figure showing the television/still camera transects and the locations of where the representative photographs required by paragraph 6 below were taken.
 - e. A bathymetry map at a scale of 1:12,000 showing potential live-bottom areas; isobaths must be at appropriate intervals (i.e., 1, 2, or 5 meters).
 - f. A description of live-bottom assemblages. (Individual organisms need only be identified to the level necessary to determine the presence or absence of live bottoms and to characterize the live bottom, if present. As appropriate, you must classify each live-bottom type [biological assemblage]).
 - g. A discussion of the interpretation of the geophysical data as it relates to the actual live bottom determined through the photodocumentation survey, to include
 - 1) sediment types and thicknesses
 - 2) evidence of hard-bottom signature(s)
 - 3) correlation of geophysical data with photodocumentation data
 - h. A general discussion of the extent and percent cover of live bottom.
 - i. The figures and discussions above must show and relate to the site(s) of your proposed activities.
 - j. The figures and discussions above must be in terms of the actual geographical locations of the photographic subjects (i.e., you must make towed sled set-back corrections).
4. Conclusions.
5. References.
6. Representative photographs of each live-bottom community type and substrate type encountered.

C. The GOMR may require you to make formal presentation of your live-bottom survey report that includes the showing of representative television footage and slides.

D. The GOMR may require you to submit any of your original data, including photographs.

Paperwork Reduction Act of 1995 Statement

This NTL refers to the collection of information for requirements under 30 CFR 250, Subpart B. The Office of Management and Budget (OMB) approved this collection of information and assigned OMB control number 1010-0049. This NTL does not impose additional information collection requirements subject to the Paperwork Reduction Act of 1995.

Contact

Please address any questions you may have about this NTL to Dr. Ken Deslarzes, Environmental Sciences Section, at (504) 736-5705.

Chris C. Oynes
Regional Director

A handwritten signature in black ink that reads "Chris C. Oynes". The signature is written in a cursive, flowing style.