

ENVIRONMENTAL PROTECTIVE MEASURES

The permittee shall comply with the following provisions:

1. The permittee will ensure that all aircraft used in support of their OCS operations maintain a minimum altitude of 2,000 feet over all national wildlife refuges and national park lands.
2. Transportation operations conducted through Aransas or Cavello Passes will avoid disturbance of the following islands used for nesting by the endangered brown pelican: Sundown Island in Matagorda Bay, Second Chain of Islands in San Antonio Bay, Long Reef in Aransas County, and Pelican Island in Nueces County, Texas.
3. This mitigation applies to all oil and gas related activities where the operator proposes to use a shore base south of the Suwannee River (Florida). Shore bases north of the Suwannee River do not need this mitigation. Shore bases other than Port Manatee/Tampa Bay area require a separate Endangered Species Section 7 Consultation.)

To protect the endangered Florida Manatee, onshore support activities are restricted to Tampa Bay (including Port Manatee). The following manatee protection measures will be used by all vessels associated with these OCS activities:

a. Permittees and their employees, contractors or subcontractors are to be advised of the possibility of the presence of manatees in inland and coastal waters of Florida and the Eastern Gulf of Mexico.

b. Permittees and their employees, contractors or subcontractors are to be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Endangered Species Act of 1973, as amended, the Marine Mammal Protection Act of 1972, and the Florida Manatee Sanctuary Act of 1978. The permittee may be held responsible for any manatee harmed, harassed, or killed as a result of their activities.

c. Permittees and their employees, contractors or subcontractor vessel operators are to be advised of the need to avoid collisions with the manatee and to stay within the existing channels. Vessels using Port Manatee should restrict travel to the extent possible to the deeper channels from Egmont Key to Port Manatee. While in Tampa Bay, vessels should obey all speed restrictions and operate at "no wake/idle" speeds at all times while in waters where the draft of the vessel provides less than a 4-foot clearance from the bottom. (Areas of manatee concentrations have been identified and speed zone signs erected in accordance with Federal, State, and local regulations.)

d. Vessels while berthed in port will use fenders between the dock and the vessel and/or between adjacent vessels berthed side-by-side. The fenders shall have a minimum clearance of 3-feet when compressed between dock and vessel.

e. Any collision with and/or injury to a manatee must be reported immediately to the "Manatee Hotline" (1-800-DIAL FMP) and to the U.S. Fish and Wildlife Service, Jacksonville Field Office (904/232-2580) for north Florida and to the Vero Beach Ecosystem Office (407/562-3909) for south Florida.

f. The permittees and their employees, contractors, or subcontractors must maintain a log detailing sightings, collisions, or injuries to manatees should they occur during the activity time.

g. Following activity completion, a report summarizing the above incidents and sightings must be submitted to the Florida Department of Natural Resources (FDNR), Marine Mammals Section, 100 Eighth Avenue, SE., St. Petersburg, Florida 33701-5095 and to the U.S. Fish and Wildlife Service, 6620 Southpoint Drive South, Suite 310, Jacksonville, Florida 32216 for north Florida and to the U.S. Fish and Wildlife Service Office, P.O. Box 2676, Vero Beach, Florida 32961-2676 for south Florida.

4. If the permittee discovers any archaeological resource (shipwreck/prehistoric site) while conducting activities, the company will report the discovery immediately to the Regional Director (RD) at the MMS. The company will make every reasonable effort to avoid disturbance to the archaeological resource until the RD informs the company as to what precautions must be taken to protect the resource from operational activities.

5. No bottom disturbing operations will be allowed for the proposed activities within the No Activity Zone(s) of the biologically sensitive feature(s) shown on the enclosed map.

6. It is recommended that the permittees use low sulfur fuel within 100 km of the Breton Sound National Wildlife Refuge.

7. The permittee will exercise precaution while conducting operations that involve bottom surface disturbance in blocks shown on the attached Ordnance Dumping Area map as portions of these areas possibly contain old ordnance and unexploded shells and depth charges dumped until 1970. In addition, the U.S. Air Force has released an indeterminable amount of unexploded ordnance in Water Test Areas 1-5 (most of the Eastern Planning Area).

8. Man-made structure(s) such as pipeline(s) or other potential hazard(s) may be located in the permitted work area; therefore, prior to performing operations that involve bottom surface disturbance (e.g., coring), all existing pipeline(s) or other potential hazard(s) within 150 meters (490) feet of the proposed work area will be buoyed. In areas highly congested with pipelines or debris, a safe working area large enough to accommodate the proposed operations may be outlined with buoys in lieu of marking each hazard.

9. Operations proposed in designated military warning and or test areas require compliance with the following requirement regarding boat and/or aircraft traffic:

(a) Hold and Save Harmless

Whether compensation for such damage or injury might be due under a theory of strict or absolute liability or otherwise, the company assumes all risks of damage or injury to persons or property, which occur in, on, or above the OCS, to any persons or employees, or invitees of the permittees, its agents, independent contractors or subcontractors doing business with the company in connection with any activities being performed by the company in, on, or above the OCS, if such injury or damage to such person or property occurs by reason of the activities of any agency of the U.S. Government, its contractors or subcontractors, or any of their officers, agents or employees, being conducted as a part of, or in connection with, the programs and activities of the command headquarters listed in the following listing.

The permittee assumes this risk whether such injury or damage is caused in whole or in part by any act or omission, regardless of negligence or fault, of the United States, its contractors, or subcontractors, or any of its officers, agents, or employees. The company further agrees to indemnify and save harmless the United States against all claims for loss, damage, or injury sustained by the company, and to indemnify and save harmless the United States against all claims for loss, damage, or injury sustained by the agents, employees, or invitees of the company, its agents, or any independent contractors or subcontractors doing business with the company in connection with the programs and activities of the appropriate military installation, whether the same be caused in whole or in part by the negligence or fault of the United States, its contractors or subcontractors, or any of its officers, agents, or employees and whether such claims might be sustained under a theory of strict or absolute liability or otherwise.

(b) Electromagnetic Emissions

The permittee agrees to control its own electromagnetic emissions and those of its agents, employees, invitees, independent contractors or subcontractors emanating from individual designated defense warning areas in accordance with requirements specified by the commander of the command headquarters listed to the degree necessary to prevent damage to, or unacceptable interference with, Department of Defense flight, testing, or operational activities conducted within individual designated warning areas. Necessary monitoring control and coordination with the company, its agents, employees, invitees, independent contractors subcontractors will be effected by the commander of the appropriate onshore military installation conducting operations in the particular warning area, provided, however, that control of such electromagnetic communication during any period of time between a company, its agents, employees, invitees, independent contractors or subcontractors, and onshore facilities.

(c) Operational

The permittee, when operating or causing to be operated on its behalf, boat or aircraft traffic in the individual designated warning areas, shall enter into an agreement with the commander of the individual command headquarters listed below, upon utilizing an individual designated warning area prior to commencing such traffic. Such an agreement will provide for positive control of boats and aircraft operating in the warning areas at all times.

Military Warning Area W-228: Chief, Naval Air Training, Naval Air Station, Office No. 206, Corpus Christi, Texas 78419-5100, telephone: (512) 939-3862/2621.

Military Warning Area W-602: Strategic Command Wing 1, Fleet Area Reconnaissance 4, Operations Dept., Tinker AFB, Oklahoma City, Oklahoma, 73145-8704 Telephone: (405) 739-5700/4527.

Military Warning Area W-147AB: Houston Air Route Traffic Control (ARTC) Center, 16600 John F. Kennedy Boulevard, Houston, Texas 77032, Telephone: (281) 230-5536/5630.

Military Warning Area W-155A, W-155B: Operations, Fleet Area Control & Surveillance Facility (FACSFAC), Operations, Naval Air Station, Pensacola, Florida 32508, telephone (904) 452-2735/4671.

Military Warning Area W-92: Naval Air Station, Air Operations Department, Air Traffic Division/Code 52, New Orleans, Louisiana 70146-5000, telephone: (504) 678-3100/3101.

Military Warning Area W-453: ANG CRTC, Gulfport/ACTS, 4715 Hewes Ave., Bldg. 1, Scheduling Office, Gulfport, Mississippi 39507-4324, telephone: (601) 867-2433.

Military Warning Area W-151, W-168, W-470, and Eglin Water Test Area 1-5: Air Force Development Test Center, Strategic Plans Division, Directorate of Requirements, 101 West D Avenue, Suite 129, Eglin AFB, Florida 32542-5495, telephone: (904) 882-3899/4188.

Military Warning Area W-174: Naval Air Training Command, Military Radar Unit, Naval Air Station, Air Operations/Tarpon, Key West, Florida 33040, telephone: (305) 293-2430.

Naval Coastal Systems Center Area: Naval Coastal Systems Center Area, (NCSC)Coastal System Station/Code 330, Coastal Test and Evaluation Division, Panama City, Florida 32407, telephone: (904) 234-4895/4280.

10. Artificial reef material may be located in the area of the permittee's proposed activities. The permittee should coordinate with the respective State's artificial reef coordinator

for specific data regarding the location of reefal material. The following are the respective coordinators and their phone numbers: Louisiana, Mr. Rick Kasprzak (504) 765-2375, Texas, Ms. Jan Coulbertson (713) 474-1418, Mississippi, Mr. Mike Buchanan, (601) 385-5860, Alabama, Mr. Walter M. Tatum (334) 968-7578, and Florida, Mr. John Dodrill (850) 922-4340.

11. When operations extend south of approximately 26 degrees North Latitude in the Western Gulf of Mexico or 24 to 25 degrees North Latitude in the Eastern Gulf (the 200 nautical mile provisional maritime also called the Exclusive Economic Zone Conservation Zone Limit), the permittee should notify the Department of State:

Mr. Tom Cocke, Room 5801, OES/OA
Department of State
Director, Office of Ocean Affairs
Washington, D.C. 20520
Phone: (202) 647-0240

12. Under the Magnuson Fisheries Management Act, 50 CFR 641.22(a) prohibits the use of explosives to take reef fish in the Exclusive Economic Zone. Consequently, permittees/contractors should not take stunned or killed fish on board their vessels. Should this happen the permittee/contractor could be charged by the National Marine Fisheries Service with violation of the Act. If, you have any questions, contact Mr. Robert Sadler with the National Marine Fisheries Service. His telephone number is (813) 570-5305.

13. The following OCS lease blocks possibly contain a biologically sensitive area known as the "Pinnacle Trend": Main Pass Area, South and East Addition, Blocks 190, 194, 198, 219-226, 244-266, 276-290; Viosca Knoll Area, Blocks 473-476, 521, 522, 564-566, 609, 610, 654, 692-698, 734, and 778. The use of anchors may cause physical damage to the pinnacles. When operations are proposed on any of the above blocks, the permittee must submit anchor plats or other data to demonstrate that pinnacle areas will not be physically impacted by anchoring activities. Anchor locations may be surveyed with an echo sounder prior to anchoring to determine if there is any topographic relief indicative of pinnacle reefs. If pinnacles are discovered, anchors must be set in locations which will not impact the pinnacles. Echo sounder or other data and anchor locations must be submitted to MMS for review upon completion of operations in this Pinnacle Trend area.

14. The permittee shall contact Steve Gittings, Sanctuary Manager of the Flower Gardens Banks National Marine Sanctuary when conducting operations within the Flower Gardens Marine Sanctuary or the Stetson Bank Sanctuary. Mr. Gittings' address is : Flower Gardens Banks National Marine Sanctuary, 216 W. 26th St., Suite 104, Bryan, Texas, 77803.

His phone number is (409) 779-2334. The permittee should also arrange for any possible buoy removal and subsequent replacement, and exercise caution regarding any geophysical or navigational activities that may endanger any other users of the aforementioned Sanctuary. The Flower Gardens' buoys are located at:

East Flower Garden Bank

EFG Buoy #1	27°54' 35.9"N, 93°35' 49.7"W
EFG Buoy #2	27°54' 31.9"N, 93°35' 49.0"W
EFG Buoy #3	27°54' 27.0"N, 93°35' 57.4"W
EFG Buoy #4	27°54' 33.0"N, 93°35' 59.7"W
EFG Buoy #5	27°54' 38.7"N, 93°36' 00.5"W
EFG Buoy #6	27°54' 39.9"N, 93°35' 55.6"W
EFG Buoy #7	27°54' 32.8"N, 93°35' 55.1"W

West Flower Garden Bank

WFG Buoy #1	27°52' 35.1"N, 93°48' 54.1"W
WFG Buoy #2	27°52' 31.3"N, 93°48' 51.3"W
WFG Buoy #3	27°52' 27.5"N, 93°49' 00.4"W
WFG Buoy #4	27°52' 29.4"N, 93°49' 04.1"W
WFG Buoy #5	27°52' 30.6"N, 93°48' 54.7"W

Stetson Bank

Buoy #1	28°09' 57.4"N, 94°17' 51.5"W
Buoy #2	28°09' 59.1"N, 94°17' 50.5"W
Buoy #3	28°09' 59.2"N, 94°17' 47.5"W

15. All permits using explosives or involving surface disturbing activities must comply with the following special provisions:

The MMS has determined that bottom disturbing activities and/or the use of explosives for geophysical survey operations conducted under 30 CFR 251 may potentially harm marine mammals, endangered sea turtles, and other indigenous marine life. The use of explosives represents a "may effect" situation under Section 7 of the Endangered Species Act of 1973, as amended. Section 7 Consultation between the MMS and the National Marine Fisheries Service will be conducted on these applications. Specific information needed to support MMS evaluations of applications proposing the use of explosives and seafloor disturbing operations is listed below:

- a. Purpose of the survey.
- b. Description of operations to be conducted.

- c. Proposed starting date and duration of the proposed operation.
- d. Name, title, and telephone number of contact person.
- e. Name, registration number, registered owner, and home port of vessel(s) to be used.
- f. A sketch which schematically illustrates the configuration of the vessel(s) to be used.
- g. The anticipated number, if any, of trips to be made by vessel(s) to shore base for food, fuel, and supplies. Location of shore base.
- h. A legible map of the area(s) of proposed operations, showing shore base and travel routes.
- I. Will operation be supported by aircraft? If yes, name of operations base, distance from base to area of operations, and anticipated number of trips to be made between them.
- j. Lease number(s), area(s), block(s), and the range of water depths and the average water depth in area of planned activity.
- k. A preplot map, preferably at a scale 1" : 4000', with the area name and block number(s) and boundaries indicated as follows:
 - (1) for ***explosives*** - showing the proposed grid pattern and shot point interval to be used; or
 - (2) for ***surface disturbing activities*** - showing location of the proposed operations indicated in feet from the nearest block lines, and showing anchor pattern, if any, of the vessel(s) to be used.
- l. If ***soil samples*** will be obtained by drilling or coring, provide the following:
 - (1) An evaluation, referencing supporting information, of the potential for encountering shallow hazards; and
 - (2) A plan for dealing with the shallow gas should it be encountered while drilling.
- m. If ***explosives*** are used, provide the following:
 - (1) briefly state why explosives were selected over nonexplosive seismic energy sources;
 - (2) type of explosive, number of charges, maximum charge size, and identification (manufacturer and lot number, serial number, etc.) of charges;

- (3) will charges be detonated below the mudline? If no, why not?
- (4) depth in water column where charge is to be detonated and method of detonation;
- (5) will detonations be sequential? If yes, time delay between detonations;
- (6) will explosives be used continuously?
- (7) will explosives be detonated during hours of darkness?
- (8) briefly describe plan for retrieval and/or disposal of unexploded charges.

As these seafloor disturbing and explosives permit applications require more time to process, more advance notice by the applicant will be required.

If explosives are used, it may be required that an MMS representative witness the detonations. Upon such notification by MMS, provisions shall be made to accommodate the representative.