**OCS Report**
**BOEM 2025-040**

## Outer Continental Shelf

# Gulf of America OCS Regulatory Framework

August 2025

**US Department of the Interior**
**Bureau of Ocean Energy Management**
**Gulf of America OCS Region**
**New Orleans Office**

BOEM
BUREAU OF OCEAN ENERGY MANAGEMENT

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# ABBREVIATIONS AND ACRONYMS

| Short form | Long form |
|---|---|
| ac | acre |
| AQRV | Air Quality Related Values |
| BiOp | biological opinion |
| BOEM | Bureau of Ocean Energy Management |
| BSEE | Bureau of Safety and Environmental Enforcement |
| CAA | Clean Air Act |
| CEQ | Council on Environmental Quality |
| CERA | categorical exclusion review with analysis |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR | Code of Federal Regulations |
| CIAP | Coastal Impact Assistance Program |
| CPA | Central Planning Area |
| CPS | coastal political subdivisions |
| CWA | Clean Water Act |
| CZMA | Coastal Zone Management Act |
| DOCD | development operations coordination document |
| DOI | Department of the Interior (also USDOI) |
| DPP | development and production plan |
| E&P | exploration and production |
| EA | environmental assessment |
| EEZ | Exclusive Economic Zone |
| EFH | essential fish habitat |
| EIS | environmental impact statement |
| E.O. | Executive Order |
| EP | exploration plan |
| EPA | Eastern Planning Area |
| ESA | Endangered Species Act |
| FAA | Federal Aviation Administration |
| FLM | Federal Land Manager |
| FMP | Fishery Management Plan |
| FR | *Federal Register* |
| ft | feet |
| FWCA | Fish and Wildlife Coordination Act |
| FWS | U.S. Fish and Wildlife Service |
| G&G | geological and geophysical |
| GC | The Gulf Council |
| GHGs | greenhouse gases |
| GOA | Gulf of America (waterbody) |
| GOAR | Gulf of America OCS Region |
| GOM | Gulf of Mexico |

| Short form | Long form |
|---|---|
| GOMESA | Gulf of Mexico Energy Security Act of 2006 |
| HABs | harmful algal blooms |
| HABHRCA | Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014 |
| HAPs | hazardous air pollutants |
| IWG-HABHRCA | Interagency Working Group-Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014 |
| km | kilometer |
| m | meter |
| MARPOL | International Convention for the Prevention of Pollution from Ships Protocol |
| mi | mile |
| MMPA | Marine Mammal Protection Act |
| MMS | Minerals Management Service |
| MPPRCA | Marine Plastic Pollution Research and Control Act of 1987 |
| MPRSA | Marine Protection, Research, and Sanctuaries Act |
| MSA | Magnuson-Stevens Fishery Conservation and Management Act |
| NAAQS | National Ambient Air Quality Standards |
| NEPA | National Environmental Policy Act |
| NHPA | National Historic Preservation Act |
| NMFS | National Marine Fisheries Service |
| nmi | nautical miles |
| NMSA | National Marine Sanctuaries Act |
| NOAA | National Oceanic and Atmospheric Administration |
| NPDES | National Pollution Discharge Elimination System |
| NTL | Notice to Lessees and Operators |
| OCS | Outer Continental Shelf |
| OCSLA | Outer Continental Shelf Lands Act |
| ONMS | Office of National Marine Sanctuaries |
| OPA | Oil Pollution Act of 1990 |
| OSFR | oil-spill financial responsibilities |
| OSLFT | Oil Spill Liability Trust Fund |
| $PM_{10}$ | particulate matter less than or equal to 10 μm |
| $PM_{2.5}$ | particulate matter less than or equal to 2.5 μm |
| PSD | Prevention of Significant Determination |
| Pub. L. | Public Law |
| RCRA | Resource Conservation and Recovery Act |
| Secretary | Secretary of the Interior |
| SL | significance level |
| S.O. | Secretary's Order |
| sVGP | small Vessel General Permit |
| TSS | traffic separation schemes |
| U.S. | United States |
| U.S.C. | United States Code |

| Short form | Long form |
|---|---|
| UNESCO | United Nations Education, Scientific and Cultural Organization |
| USACE | U.S Army Corps of Engineers, U.S. Dept. of the Army |
| USCG | U.S. Coast Guard |
| USDOI | U.S. Department of the Interior (also DOI) |
| USEPA | U.S. Environmental Protection Act |
| VGP | Vessel General Permit |
| VIDA | Vessel Incidental Discharge Act |
| VOCs | volatile organic compounds |
| WPA | Western Planning Area |

# 1 OBJECTIVE

The objective of this document is to establish a current, comprehensive discussion describing the regulations that govern the environmental reviews for the Department of the Interior's (DOI) Bureau of Ocean Energy Management (BOEM) and Bureau of Safety and Environmental Enforcement (BSEE) offshore activities involving oil, natural gas, renewable energy, and marine minerals in the Gulf of America (GOA, formerly known as the Gulf of Mexico [GOM]). It will provide a framework of regulations and policies addressed in National Environmental Policy Act of 1969 (NEPA) documents required for the Outer Continental Shelf (OCS) oil and gas leasing program. Historically, these regulations and policies were discussed in past NEPA documents for BOEM's oil and gas lease sales, which contributed to lengthy documents.

# 2 INTRODUCTION

Federal laws mandate the OCS leasing program (i.e., the Outer Continental Shelf Lands Act [OCSLA]) and the environmental review process (i.e., NEPA). In implementing their responsibilities under OCSLA, BOEM and BSEE must consult with numerous Federal departments and agencies that have authority to govern and maintain ocean resources pursuant to other Federal laws. Among these Federal entities are the U.S. Coast Guard (USCG), U.S. Environmental Protection Agency (USEPA), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (FWS), and the National Oceanic and Atmospheric Administration (NOAA) through the National Marine Fisheries Service (NMFS) and Office of National Marine Sanctuaries [ONMS]). Several Federal regulations establish specific consultation and coordination processes with federal, state, tribal, and local agencies (i.e., the Coastal Zone Management Act of 1972 (CZMA), the Endangered Species Act of 1973 (ESA), the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the National Marine Sanctuaries Act (NMSA), the Marine Mammal Protection Act (MMPA), and the National Historic Preservation Act of 1966 (NHPA), as amended (54 U.S.C. 300101 et seq.).

On January 20, 2025, President Donald J. Trump issued Executive Order (E.O.) 14172, Restoring Names that Honor American Greatness, which includes changing the name of the GOM to the GOA. On February 7, 2025, Secretary of the Interior Burgum (Secretary) released Secretary's Order (S.O.) 3423, The Gulf of America, instructing the US Board of Geographic Names to implement E.O. 14172 by changing the name in the Geographic Names Information System. In documents and other materials, BOEM uses the new Gulf of America OCS Region (GOAR) and Gulf of America (GOA) names. However, before the E.O. and S.O., GOM had been the official name in BOEM materials; previously published materials remain the same. "GOM," "GOA," and "the Gulf" describe the same area of the U.S. Continental Shelf area bounded on the northeast, north, and northwest by the States of Texas, Louisiana, Mississippi, Alabama, and Florida and extending to the seaward boundary with Mexico and Cuba in the area formerly known as the Gulf of Mexico.

Chapter 3 of this document identifies and summarizes the major Federal laws that are relevant to the OCS oil and gas leasing process These regulations are intended to encourage orderly, safe,

and environmentally responsible development of oil, natural gas, renewable energy, and marine minerals on the OCS.

In addition to coordinating with Federal Government entities, BOEM and BSEE must coordinate and consult with any State governor or local government executives that may be affected by a particular lease, easement, or right-of-way. Each coastal state, with the exception of Alaska, has developed and implemented a federally approved coastal management program pursuant to the CZMA (16 United States Code [U.S.C.] 1451 et seq.). The boundaries of each State's coastal zone are available at https://coast.noaa.gov/czm/mystate/.

## 2.1 BOEM AND BSEE'S RESPONSIBILITIES AND REGULATIONS

The primary roles and responsibilities of BOEM include leasing, exploration and development administration, geological and geophysical permitting, environmental studies, NEPA analysis, resource evaluation, economic analysis, marine minerals, and renewable energy development. BOEM reviews and approves plans for OCS oil and gas exploration and development. BOEM's OCS regulations can be located at 30 CFR 550-553, 556, 560, 570, and 580-586. BOEM's regulations pertaining to oil, gas, and sulphur leasing are specifically found in 30 CFR 550, 551, and 556 (except those aspects that pertain to drilling). BOEM's regulations pertaining to renewable energy and alternate uses of existing facilities on the OCS are found in 30 CFR 585 and 586.

BSEE regulates oversight of worker safety, emergency preparedness, environmental compliance, regulatory oversight (operator compliance, lessee and operator obligations under OCS leases) and conservation of resources. BSEE inspectors issue Incidents of Non-Compliance and have the authority to impose sizeable civil penalties and, in some cases, criminal penalties for regulatory infractions. BSEE's OCS regulations are located at 30 CFR 250-252, 254, 256, 270, 280, 282, and 285. BSEE regulations for oil, gas, and sulphur operations are specified in 30 CFR 250 (Oil and Gas and Sulphur), 251 (Geological and Geophysical Explorations of the OCS) and 254 (Oil Spill Response Plan [OSRP]). Additional non-oil and gas BSEE regulations are found in 30 CFR parts 280 and 282 (Prospecting for Minerals and Operations in the OCS for Minerals), and 285 (Renewable Energy and Alternate Uses of Existing Facilities on the OCS). Regulations shared between BOEM and BSEE are under 30 CFR 251.

BSEE serves as a cooperating agency on most BOEM-initiated NEPA documents. Formal plans or applications must be submitted by operators to BOEM for review and approval before any project-specific, postlease activities can begin. BOEM performs NEPA analyses when operators submit permit applications for pipeline installations or modifications, structure removals (including pipelines), structure installations or modifications, and applications for permits to drill, and applies mitigations to the permit approvals to minimize impacts on OCS resources. BSEE then performs NEPA coordination activities, which involve reviewing the operators' permit applications and the associated BOEM's NEPA analyses to ensure that the OCS activities described in the permit applications match those described in the operators' associated plans, and that BOEM's NEPA analyses were properly

performed. If BOEM analyzed the proposed activities under a site-specific environmental assessment, BSEE would, if appropriate, generate a Finding of No Significant Impact.

# 3 REGULATORY FRAMEWORK

## 3.1 OUTER CONTINENTAL SHELF LANDS ACT

The Outer Continental Shelf Lands Act of 1953 (OCSLA) (43 U.S.C. 1331 et seq.), as amended, established Federal jurisdiction over submerged lands on the OCS seaward of State boundaries. OCSLA, as amended, provides the basis for implementing an OCS oil and gas exploration and development program and directs BOEM to study and consider coastal, marine, and human environmental impacts when making decisions on how to effectively promote economic development, promote environmental protection, and foster energy development and national security. The basic goals of OCSLA include the following:

- to establish policies and procedures for managing the oil and natural gas resources of the OCS that are intended to result in expedited exploration and development of the OCS in order to achieve national economic and energy policy goals, assure national security, reduce dependence on foreign sources, and maintain a favorable balance of payments in world trade;
- to preserve, protect, and develop oil and natural gas resources of the OCS in a manner that is consistent with the need;
  - to make such resources available to meet the Nation's energy needs as rapidly as possible;
  - to balance orderly resource development with protection of the human, marine, and coastal environments;
  - to ensure the public a fair and equitable return on the resources of the OCS; and
  - to preserve and maintain free enterprise competition;
- to encourage development of new and improved technology for energy resource production, which will eliminate or minimize the risk of damage to the human, marine, and coastal environments; and
- to ensure that affected States and local governments have timely access to information regarding OCS activities and opportunities to review, comment, and participate in policy and planning decisions.

Under OCSLA, the Secretary is responsible for the administration of mineral exploration and development of the OCS. Within DOI, BOEM is charged with the responsibility of managing and regulating the development of OCS oil and gas resources in accordance with the provisions of the

OCSLA. BOEM's operating regulations are in 30 CFR 550 and 551 for oil and gas; 30 CFR 585 for renewable energy; and 30 CFR 580 for minerals other than oil, gas, and sulfur. BSEE's operating regulations are in 30 CFR 250 and 254.

Enacted on August 8, 2005, the Energy Policy Act of 2005 amended Section 8 of OCSLA (43 U.S.C. 1337) to authorize the Secretary to issue a lease, easement, or right-of-way on the OCS for activities that are not otherwise authorized by OCSLA, or other applicable law, if those activities

- produce or support production, transportation, or transmission of energy from sources other than oil and gas; or
- use, for energy-related purposes or other authorized marine-related purposes, facilities currently or previously used for activities authorized under OCSLA, except that any oil and gas energy-related uses shall not be authorized in areas in which oil and gas preleasing, leasing, and related activities are prohibited by a moratorium.

Section 11(a)(1) of OCSLA states that, "[A]ny agency of the United States and any person authorized by the Secretary of the Interior may conduct geological and geophysical explorations in the Outer Continental Shelf, which do not interfere with or endanger actual operations under any lease maintained or granted pursuant to this Act, and which are not unduly harmful to aquatic life in such area." Section 11(g) specifies that permits for geological explorations shall be issued only if the Secretary of the Interior determines that "such exploration will not be unduly harmful to aquatic life in the area. . . ." BOEM regulations at 30 CFR 551.6 state that permit holders for oil and gas geological and geophysical activities must not "cause harm or damage to life (including fish and other aquatic life), property, or to the marine, coastal, or human environment."

Under Section 20 of OCSLA, the Secretary shall ". . . conduct such additional studies to establish environmental information as he deems necessary and shall monitor the human, marine, and coastal environments of such area or region in a manner designed to provide time-series and data trend information that can be used for comparison with any previously collected data for the purpose of identifying any significant changes in the quality and productivity of such environments, for establishing trends in the area studied and monitored, and for designing experiments to identify the causes of such changes." Through its Environmental Studies Program, BOEM conducts studies designed to provide information on the current status of resources of concern and notable changes, if any, resulting from OCS Program activities.

In addition, OCSLA provides a statutory foundation for coordination with the affected States and, to a more limited extent, local governments. At each step of the procedures that lead to lease issuance, participation from the affected States and other interested parties is encouraged and sought.

### 3.1.1 Amendments to OCSLA

Recent changes to OCS jurisdiction include the extension of a portion of the continental shelf beyond 200 nautical miles (nm) from the coast known as the “extended continental shelf,” or ECS. On December 21, 2023, the U.S. Department of State published a *Federal Register* notice announcing the outer limits of the continental shelf of the United States. See *Public Notice 12244: Continental Shelf and Maritime Boundaries; Notice of Limits,* (88 FR 88470). The U.S. has identified seven ECS offshore areas: the Arctic, Atlantic (East Coast), Bering Sea, Pacific (West Coast), Mariana Islands, and two areas in the GOA. For more information, see the U.S. Extended Continental Shelf Project, led by the Department of State, the Department of the Interior, and NOAA.

The Inflation Reduction Act of 2022 (IRA; Pub. L. 117-169), amended the definition of the OCS in the OCSLA to include submerged lands within the exclusive economic zone (EEZ) adjacent to all U.S. Territories. The IRA also amended OCSLA by adding a definition of “State” to include each of the several 50 states, the Commonwealth of Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands. Though the IRA specifically provides that areas offshore these territories are not available for oil and gas leasing, the expanded definition of the OCS makes territorial submerged lands available for offshore wind and minerals leasing (BOEM 2025).

Additional amendments to OCSLA were included in the Infrastructure Investment and Jobs Act, authorized in November 2021, which granted the Secretary authority to issue leases, easements, or rights-of-way on the OCS for long-term carbon sequestration. This allows for the injection of carbon dioxide into sub-seabed geologic formations to permanently store it. Currently, the specific regulations governing its implementation are under development and haven't been promulgated.

## 3.2 ENERGY POLICY ACT OF 2005

The Energy Policy Act of 2005 (Pub. L. 109-58) encourages increased domestic production of oil and natural gas, granted BOEM authority for Federal offshore alternate energy uses, and requires a comprehensive inventory of oil and gas resources on the OCS.

The Energy Policy Act granted BOEM responsibilities over Federal offshore renewable energy and related uses on the OCS. Section 388 provides an initiative to facilitate increased renewable energy production on the OCS.

Section 388 gives the Secretary of the authority to:

- grant leases, easements, or rights-of way for renewable energy-related uses on Federal OCS lands,
- act as a lead agency for coordinating the permitting process with other Federal agencies,

- monitor and regulate those facilities used for renewable energy production and energy support services, and
- establish an interagency comprehensive digital mapping effort to assist in decision-making related to renewable energy activity.

Section 388 clarifies the Secretary's authority to allow an offshore oil and gas structure, previously permitted under OCSLA, to remain in place after OCS oil- and gas-related activities have ceased in order to allow the use of the structure for other energy and marine-related activities. This authority provides opportunities to extend the life of facilities for non-oil and gas purposes, such as research, renewable energy production, aquaculture, etc., before being removed.

Section 388 does not modify any leasing, exploration, or development activities for oil or natural gas. Congressional moratoria and administrative withdrawals in effect remain unchanged.

The Energy Policy Act of 2005 created the Coastal Impact Assistance Program (CIAP) by amending Section 31 of OCSLA. Under the provisions of the Act, the authority and responsibility for the management of CIAP is vested in the Secretary. The Secretary has delegated this authority and responsibility to FWS.

Under Section 384, FWS shall disburse $250 million for each Fiscal Year 2007 through 2010 to eligible producing States and coastal political subdivisions (CPSs). FWS shall determine CIAP funding allocations to States and CPSs using the formulas mandated by the Act (Section 31(b)), which requires a minimum annual allocation of 1 percent to each State and provides that 35 percent of each State's share shall be allocated directly to its CPSs. States eligible to receive funding are Alabama, Alaska, California, Louisiana, Mississippi, and Texas; 67 CPSs are eligible to receive CIAP funding.

The Energy Policy Act of 2005 (Section 31(d)(1)) stipulates that a State or CPS shall use CIAP funds only for one or more of the following authorized uses:

- projects and activities for the conservation, protection, or restoration of coastal areas, including wetland;
- mitigation of damage to fish, wildlife, or natural resources;
- planning assistance and the administrative costs of complying with CIAP;
- implementation of a federally approved marine, coastal, or comprehensive conservation management plan; and
- mitigation of the impact of OCS activities through funding of onshore infrastructure projects and public service needs.

To receive CIAP funds, States are required to submit a coastal impact assistance plan that FWS must approve before disbursing any funds; all funds shall be disbursed through a grant process. Pursuant to the Act, a State had to submit its coastal impact assistance plan no later than July 1, 2008.

Section 357, "Comprehensive Inventory of OCS Oil and Natural Gas Resources," calls for BOEM to conduct a comprehensive inventory of the estimated oil and natural gas resources on the OCS, including moratoria areas. The Act requires the use of "any available technology, except drilling, but including 3-D seismic surveys." The first report to Congress was required to be submitted within six months of enactment and will be publicly available and updated at least every five years. To respond to this statutory directive, the Minerals Management Service (MMS; BOEM and BSEE's predecessor) published *Report to Congress: Comprehensive Inventory of U.S. OCS Oil and Natural Gas Resources* in February 2006 (MMS 2006). BOEM updated the inventory in 2009 with the *Second Biennial Report to Congress: Estimates of Natural Gas and Oil Reserves, Reserves Growth, and Undiscovered Resources in Federal and State Waters off the Coasts of Texas, Louisiana, Mississippi, and Alabama, 2009* (MMS 2009) and in 2011 with the *Third Biennial Report to Congress: Estimates of Natural Gas and Oil Reserves, Reserves Growth, and Undiscovered Resources in Federal and State Waters off the coasts of Texas, Louisiana, Mississippi, and Alabama, 2011* (BOEM 2011). In 2013, BOEM published the *Fourth Biennial Report to Congress: Estimates of Natural Gas and Oil Reserves Growth, and Undiscovered Resources in Federal and State Waters Off the Coasts of Texas, Louisiana, Mississippi and Alabama; Energy Policy Act of 2005 – Section 965(c)* (BOEM 2013) per the requirements set forth in Section 357 of the Act. In 2017, BOEM published the *Fifth Biennial Report to Congress: Estimates of Natural Gas and Oil Reserves, Reserves Growth, and Undiscovered Resources in Federal and State Waters Off the Coasts of Texas, Louisiana, Mississippi and Alabama; Energy Policy Act of 2005 – Section 965(c)* (BOEM 2018) according to the requirements set forth in Section 357 of the Act.

## 3.3 GULF OF MEXICO ENERGY SECURITY ACT OF 2006

On December 20, 2006, President George W. Bush signed into law the Gulf of Mexico Energy Security Act of 2006 (GOMESA) (Pub. L. 109-432). GOMESA repeals the Congressional moratorium on certain areas of the GOA (previously the GOM), places a moratorium on other areas in the GOA, and increases the distribution of offshore oil and gas revenues to coastal states.

GOMESA defines two areas in the GOA—the 181 Area and the 181 South Area. Approximately 2 million acres (ac) of the 181 Area are located in the Central Planning Area (CPA). The 181 Area has been offered for lease since the Eastern Planning Area (EPA) Lease Sale 224 which occurred in March 2009.

The other area GOMESA defined is referred to as the 181 South Area. This area is located in what is now the CPA and is approximately 5.8 million ac. With the exception of 1.5 million ac beyond the U.S. EEZ, the CPA lease sale area was expanded to include the remaining 4.3 million ac of the 181 South Area for CPA Lease Sale 208, which was held in March 2009, and has been included in all CPA lease sales to the present. While GOMESA repealed the Congressional moratorium on the 181

South Area in December 2006, MMS decided, because of the limited geological and geophysical data available to industry and the limited environmental review for this area, it would have been premature to offer this area before CPA Lease Sale 208, which was held in March 2009.

GOMESA also established the Military Mission Line (a north-south line at 86°41' N. latitude) as the new administrative boundary between the CPA and EPA for the purposes of OCS oil, gas, and wind administration by the Federal Government. Areas east of this line are closed to offshore leasing until 2025, with the exception of the three EPA lease sales discussed above, which represent roughly 1.4 percent of the total acreage in the EPA.

GOMESA establishes a moratorium on leasing, preleasing, and other activities in the following areas until June 30, 2022:

- the area within 125 miles (mi) (201 km) of the State of Florida in the EPA;
- the 181 Area in the CPA that is within 100 mi (161 km) of the State of Florida; and
- the area east of the Military Mission Line (a north-south line at 86°41' N. latitude).

In a Presidential Memorandum for the Secretary of the Interior, dated September 8, 2020, President Trump extended a withdrawal of certain areas of the United States OCS from leasing. Under section 12(a) of OCSLA, the President withdrew from disposition by leasing for 10 years, beginning on July 1, 2022 until June 30, 2032 (The White House 2020):

- the areas of the OCS designated by section 104(a) of GOMESA, Pub. L.109-432
- the areas currently designated by BOEM as South Atlantic and Straits of Florida Planning Areas.

This withdrawal memorandum prevents consideration of these areas for any leasing for purposes of exploration, development, or production during the 10-year period specified. It does not apply to leasing for environmental conservation purposes, including the purposes of shore protection, beach nourishment and restoration, wetlands restoration, and habitat protection.

GOMESA also mandates that BOEM provide an option to exchange existing leases located in the unavailable areas listed above for leases in the available areas of the GOA.

Before GOMESA, the affected States received recurring annual disbursements of 27 percent of royalty, rent, and bonus revenues received within each State’s 8(g) zone. GOMESA created revenue sharing provisions for the four GOA oil- and gas- producing States of Alabama, Louisiana, Mississippi and Texas, and their CPSs. GOMESA funds are to be used for coastal conservation, restoration, and hurricane protection. There are two phases of GOMESA revenue sharing:

- **Phase I:** Beginning in Fiscal Year 2007, 37.5 percent of all qualified OCS revenues, including bonus bids, rentals, and production royalty, will be shared among the four States and their CPSs from those new leases issued in the 181 Area in the EPA (also known as the 224 Sale Area) and the 181 South Area. Additionally, 12.5 percent of revenues are allocated to the Land and Water Conservation Fund. The final regulations for Phase I revenue sharing were issued on December 23, 2008, and they specify that BOEM intends to disburse funds on or before March 31 of the fiscal year following the fiscal year to which the qualified OCS revenues were attributed.
- **Phase II:** The second phase of GOMESA revenue sharing began in Fiscal Year 2017. It expanded the definition of qualified OCS revenues to include receipts from Gulf leases issued either after December 20, 2006, in the 181 Call Area or in the 2002-2007 Gulf planning areas subject to withdrawal or moratoria restrictions. A revenue sharing cap of $500 million per year for the four GOA producing States, their CPSs, and the Land and Water Conservation Fund applies from Fiscal Years 2016 through 2055. The $500 million cap does not apply to qualified revenues generated in those areas associated with Phase I of the GOMESA program. The final regulations to implement Phase II of the GOMESA legislation were published in the *Federal Register* on December 30, 2015. The final rule was effective 30 days after its publication.

GOMESA revenue-sharing allocations and other statistical information can be found at https://revenuedata.doi.gov/how-it-works/gomesa/.

## 3.4 Submerged Lands Act of 1953

The Submerged Lands Act of 1953 (43 U.S.C. 1301-1315 et seq.) grants States title to all submerged navigable lands within their historical boundaries and the natural resources on or within those lands seaward to 3 nm (3.5 mi; 5.6 km) from the coastline. Texas and the Gulf Coast of Florida remain the only states to have boundaries that extend to 9 nm (10.36 mi; 16.67 km). In passing the Submerged Lands Act, Congress sought to return the title to submerged lands to the states and promote the exploration and development of petroleum deposits in coastal waters.

## 3.5 U.S.-Mexico Transboundary Hydrocarbons Agreement and H.R. 1613–Outer Continental Shelf Transboundary Hydrocarbon Agreements Authorization Act

The U.S.-Mexico Transboundary Hydrocarbons Agreement, signed on February 20, 2012, ratified by the Mexican Senate in April 2012, and entered into force, establishes a framework for the cooperative exploration and exploitation of hydrocarbon resources that cross the U.S.-Mexico maritime boundary in the GOA (excluding areas under the jurisdiction of Texas). It allows leaseholders on the U.S. side of the boundary to cooperate with the Mexican national oil company, Pemex, in the

joint exploration and exploitation of hydrocarbon resources. The Agreement also ends the moratorium on exploitation along the boundary in the Western Gap and provides U.S. leaseholders with legal certainty regarding the exploitation of transboundary reservoirs along the entire boundary so as to encourage investment.

House Resolution (H.R.) 1613, the OCS Transboundary Hydrocarbon Agreements Authorization Act, is a bill that would approve the agreement between the U.S. and Mexico regarding the development of oil and gas natural resources on the OCS in the area of the GOA where the two countries share a border. H.R. 1613 would amend OCSLA to authorize the Secretary to implement any agreement for the management of transboundary hydrocarbon reservoirs. H.R. 1613 passed in the House of Representatives on June 27, 2013, and moved to the Senate for consideration.

## 3.6 OUTER CONTINENTAL SHELF DEEP WATER ROYALTY RELIEF ACT

The Outer Continental Shelf Deep Water Royalty Relief Act of 1995 directs the Secretary to suspend royalties on existing leases in certain deepwater areas of the Gulf of America OCS when a specific set of conditions are met. Upon receipt of a complete application, the Secretary is to determine whether proposed new production would be economic while subject to the requirement to pay Federal royalties. The Outer Continental Deep Water Royalty Relief Act directs the Secretary to consider in the determination the increased risk of operating in deep water and costs associated with exploring, developing, and producing. Lessees are required to submit a complete application, which provides the necessary raw and interpreted data on the field so that such a determination can be made.

Two economic hurdles must be cleared for a field to be eligible for a royalty suspension. If, after reviewing the application, the Secretary determines that the new production would be economic while paying Federal royalties, then royalty obligations will not be suspended. Further, a determination that no amount of royalty-free production would make the new production economically viable also disqualifies the field from a royalty suspension. Alternatively, if the field would not be economical while paying Federal royalties but some amount of royalty-free production would make the new production economically viable, the field would qualify for at least the minimum suspension volume. Should production from a field not be economical with a royalty suspension volume equal to the mandated minimum, the Secretary must determine the precise volume of royalty-free production, which would make the production economic.

A two-part evaluation process has been devised to direct royalty relief to fields that appear uneconomic with royalties but that are potentially viable with royalty suspensions. The first part of the process is conducted by the royalty relief applicant and the second part is performed by BOEM.

## 3.7 NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

The National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et seq.) provides a national policy that encourages “productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and

biosphere and stimulate the health and welfare of man. . . .” NEPA requires that all Federal agencies use a systematic, interdisciplinary approach to protection of the human environment; this approach will ensure the integrated use of the natural and social sciences in any planning and decision-making that may have an impact upon the environment. NEPA also requires Federal agencies to prepare an environmental impact statement (EIS) to evaluate the potential environmental impacts of any proposed major Federal action that would significantly affect the quality of the human environment and to consider alternatives to such proposed actions.

The intent of the NEPA process is to help public officials make decisions based on an understanding of environmental consequences and take actions that protect, restore, and enhance the environment. In 1979, the Council on Environmental Quality (CEQ) established uniform guidelines for implementing the procedural provisions of NEPA regulations. These regulations (40 CFR 1500-1508) provided for the use of the NEPA process to identify and assess the reasonable alternatives to proposed actions that avoid or minimize adverse effects of these actions on the quality of the human environment. The CEQ issued an interim final rule to remove the existing implementing regulations for the Act, which were effectively rescinded on April 11, 2025.

DOI’s regulations to implement NEPA can be found in 43 CFR 46, which was first published in the *Federal Register* (73 FR 61292) on October 15, 2008.. DOI’s NEPA implementing regulations were recently updated on June 30, 2025. The interim final rule was published in the *Federal Register* (90 FR 29498) on July 3, 2025. BOEM produces NEPA documents for major steps of oil and gas energy development planning, i.e., from the NEPA documents for the energy lease sales and the exploration, development, and production plans. BOEM completes a NEPA determination review to establish the level of NEPA analysis required on the activity being considered for approval. In some cases, a categorical exclusion review with analysis (CERA) may be used for the proposed activity. If the NEPA determination is a CERA, all applicable environmental reviews are completed and all applicable conditions of approval are applied, but an environmental assessment (EA) is not required. If an EA is triggered for the proposed activity, applicable environmental reviews are completed, and an EA is prepared. If the prepared EA does not reach a Finding of No Significant Impact, then an EIS will be required. Exploration plans (EPs) and development operations coordination documents (DOCDs) that are submitted for the Gulf of America’s Central and Western Planning Areas (CPA and WPA) may require either a CERA or an EA based on the NEPA determination. All EPs and development and production plans (DPPs) submitted for the Eastern Planning Area (EPA) will require, at a minimum, the preparation of an EA (a NEPA determination of CERA is not applicable in the EPA).

## 3.8 COASTAL ZONE MANAGEMENT ACT OF 1972

The Coastal Zone Management Act of 1972 (CZMA) (16 U.S.C. 1451 et seq.) was enacted by Congress in 1972 to develop a national coastal management program that comprehensively manages and balances competing uses of and impacts to any coastal use or resource. The national coastal management program is implemented by individual State coastal management programs in partnership with the Federal Government. The CZMA Federal consistency regulations require that Federal activities (e.g., OCS lease sales) be consistent to the maximum extent practicable with the

enforceable policies of a State's coastal management program. The Federal consistency regulations also require that other federally approved activities (e.g., activities requiring Federal permits, such as activities described in OCS plans) be consistent with a State's federally approved coastal management program. Non-Federal actions requiring the approval of a Federal agency (e.g., issuance of lease, easement, or right-of-way) also must be fully consistent with the enforceable policies of a State's coastal management program. The Federal consistency requirement is an important mechanism to address coastal effects, to ensure adequate Federal consideration of State coastal management programs, and to avoid conflicts between States and Federal agencies. The Coastal Zone Act Reauthorization Amendments of 1990, enacted November 5, 1990, and the Coastal Zone Protection Act of 1996, amended and reauthorized the CZMA. The CZMA is administered by the Office of Ocean and Coastal Resource Management within NOAA's National Ocean Service. NOAA's implementing regulations are found at 15 CFR 930, and the latest revision was published in the *Federal Register* on January 5, 2006.

## 3.9 ENDANGERED SPECIES ACT OF 1973

The Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 et seq.), as amended (43 U.S.C. 1331 et seq.), establishes a national policy designed to protect and conserve endangered and threatened species and their habitat. There are approximately 1,930 species listed under the ESA, which are found in part or entirely in the U.S. and its waters. NOAA's NMFS and DOI's FWS share responsibility for implementing the ESA, with NMFS generally managing marine and anadromous species and FWS managing land and freshwater species. Section 7 of the ESA mandates that BOEM and all other Federal agencies consult with the Secretary of Commerce (through NMFS) and/or the Secretary of the Interior (through FWS) to ensure that any "agency action" is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of an endangered or threatened species' critical habitat.

The consultation process begins when BOEM provides NMFS and/or FWS with details on the proposed activity, the ESA-listed species and designated critical habitat in the area, the best available information on the effects to species and habitat from the proposed action, and measures that will be required by BOEM to reduce or eliminate the potential for effects to occur (e.g., mitigation and monitoring measures). Formal consultation will occur for any activity that BOEM, NMFS, or FWS determine may adversely affect listed species or designated critical habitat. The consultation process ends with the issuance of a biological opinion (BiOp) by NMFS and/or FWS. This BiOp documents whether the action BOEM proposes to authorize is likely to jeopardize listed species or adversely modify critical habitat. It may also provide an exemption for the taking of listed species and may outline measures deemed necessary to minimize impacts.

The FWS and NMFS programmatic BiOps address all future lease sales and any approvals issued by BOEM and BSEE under both existing and future OCS oil and gas leases in the GOA over a 10-year period. The current FWS BiOp (and future updates) can be found at BOEM's GOA oil and gas ESA consultations and protocol website. The FWS BiOp also noted that any future consultations may be informal, dependent on the likelihood of take. The current NMFS BiOp and future updates can be

found at BOEM's GOA oil and gas ESA consultations and protocol website: https://www.boem.gov/regions/gulf-america-ocs-region/oil-and-gas-esa-consultations-and-protocols. Applicable terms and conditions and reasonable and prudent measures will be applied at the lease sale stage; other specific conditions of approval will also be applied to post-lease approvals.

## 3.10 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) of 1976 (16 U.S.C. 1801 et seq.) established and delineated an area from the States' seaward boundary outward 200 nm (230 mi; 370 km) as a fisheries conservation zone for the U.S. and its possessions. Among its goals, the MSA intended to end overfishing, help replenish the Nation's fish stocks, and advance international cooperation and ocean stewardship. The MSA established national standards for fishery conservation and management, and created eight Regional Fishery Management Councils to exercise sound judgment in the stewardship of fishery resources. These councils are responsible for the preparation, monitoring, and revision of fishery management plans (FMPs), which contain descriptions of fisheries and measures for their conservation and responsible management.

Congress amended the MSA through passage of the Sustainable Fisheries Act of 1996, which revised the standards for determining stock status within FMPs while strengthening requirements to prevent overfishing and rebuild overfished fisheries. It also required that the Councils identify essential fish habitat (EFH), which is habitat necessary for fish to spawn, breed, feed, or grow to maturity. The Sustainable Fisheries Act established the EFH consultation process, in which Federal agencies are required to consult on activities that may adversely affect EFH as designated in FMPs and their amendments. A 2002 update to EFH regulations allowed for further designation of EFH as Habitat Areas of Particular Concern, which are areas that are particularly vulnerable to degradation yet serve particularly important ecological functions.

In January 2007, President George W. Bush signed the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006. This Reauthorization Act further strengthened efforts to prevent overfishing, revised standards for determining stock status, refined EFH management, and advanced the concept of ecosystem-based management. It also promoted domestic commercial and recreational fishing under sound conservation and management principles, supported catch and release programs in recreational fishing, encouraged the development of currently underused fisheries, and supported stakeholder involvement and international cooperation.

In 2018, the MSA was amended by the Modernizing Recreational Fisheries Management Act, which addressed the need for improved accuracy of recreational catch data, revised recreational fisheries management, supported conservation initiatives for recreational fisheries, enhanced recreational fisher engagement in fisheries management decisions, and promoted sustainable recreational fishing practices.

### 3.10.1 Essential Fish Habitat in the Gulf of America

Currently, there are FMPs in the GOA for shrimp, red drum, reef fishes, coastal migratory pelagics, stone crabs, spiny lobsters, coral and coral reefs, and aquaculture, managed by the Gulf Council (formerly known as the Gulf of Mexico Fisheries Management Council). NOAA Fisheries manages the Atlantic Highly Migratory Species FMP, which includes species that use the GOA. The Gulf Council's 1998 *Generic Amendment for Addressing Essential Fish Habitat Requirements* (Gulf of Mexico Fishery Management Council 1998) amended the FMPs for shrimp, red drum, reef fishes, coastal migratory pelagics, stone crabs, spiny lobsters, and coral and coral reefs, identifying estuarine and/or inshore and marine and/or offshore EFH for the managed species. The 1998 Generic Amendment identified threats to EFH and made recommendations for pipeline and oil and gas exploration activities to minimize impacts to EFH. The 2005 *Generic Amendment Number 3 for Addressing Essential Fish Habitat Requirements, Habitat Areas of Particular Concern, and Adverse Effects of Fishing* (Gulf of Mexico Fishery Management Council 2005) revised the extent of EFH relative to the 1998 Generic Amendment by removing EFH designations from waters between 100 fathoms (183 m; 600 ft) and the seaward limit of the U.S. EEZ (as deep as 3,200 m; 10,499 ft). Only highly migratory fish species now have EFH identified in areas deeper than 100 fathoms (183 m; 600 ft) in the GOA.

### 3.10.2 Essential Fish Habitat Consultation

NOAA is responsible for administering the MSA. The Sustainable Fisheries Act requires that BOEM and other Federal agencies consult with NMFS with respect to any action authorized, funded, or undertaken by that agency that may adversely affect EFH. According to the final rule for the provisions (50 CFR 600), the Federal agency(s) must submit an EFH Assessment to NMFS as soon as practicable, but at least 60 days before a final decision on the action. The required components of an EFH Assessment are (1) a description of the proposed action; (2) an analysis of the effects, including cumulative effects, of the proposed action on EFH, managed species, and their affected life stages; (3) the Federal agency(s) views about the effects of the action on EFH; and (4) proposed mitigations, if applicable. NMFS will then respond to the EFH assessment and provide conservation recommendations to the Federal agency, pursuant to section 305(b)(4)(A) of the MSA. Any conservation recommendations provided by NOAA Fisheries to the consulting agency(s) are nonbinding. If the consulting agency chooses not to accept some or all of the conservation recommendations, it must provide an explanation to NMFS.

A Federal agency can initiate EFH consultation for a large number of individual actions (programmatic consultation) or for specific actions. The type of consultation and level of analysis in the EFH Assessment are commensurate with the degree of impact. As part of their response to a programmatic EFH Assessment, NMFS may identify conditions that would not be covered programmatically and require project-specific consultation, and discuss conditions that would warrant reinitiation of the EFH consultation.

BOEM, BSEE, and NMFS have entered into a programmatic EFH consultation for OCS oil- and gas-related activities in the GOA. This consultation covers reasonably foreseeable oil- and gas-related activities on the GOA OCS, including proposed lease sales and activities related to exploration, development, production, and decommissioning, including, but not limited to, geological and geophysical activities, drilling, construction, support, removal, and site clearance operations. The current oil and gas EFH consultations between BOEM and NMFS can be found at BOEM's GOA website (BOEM 2022).

## 3.11 MARINE MAMMAL PROTECTION ACT OF 1972

Congress enacted the Marine Mammal Protection Act of 1972 (MMPA; 16 U.S.C. 1361 et seq.) to prevent the decline of marine mammal species and populations. The MMPA specifically prohibits the "taking" of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. Additional information about the MMPA and incidental take provisions under the MMPA can be located at NOAA Fisheries' website.

BOEM petitioned NMFS for rulemaking under the MMPA to assist industry in obtaining incidental take coverage for marine mammals due to oil and gas deep-penetration seismic geological and geophysical (G&G) surveys in the GOA. As a result of this petition, NMFS published its final "Incidental Take Regulation on Geophysical Surveys Related to Oil and Gas Activities in the Gulf of Mexico" in the *Federal Register* (86 FR 5322) on January 19, 2021; the rule took effect on April 19, 2021. A draft revision to this regulation that corrects some calculation errors and adjusts taking allowable under the regulations was published on January 5, 2023 (88 FR 916). On April 24, 2024, NMFS reassessed and finalized the statutorily mandated findings supporting its January 19, 2021, final rule, with the publication of their "Final Rule for the Taking of Marine Mammals Incidental to Geophysical Surveys in the Gulf of Mexico" effective from May 24, 2024 through April 19, 2026. There are no changes to the specified activities or the specified geographical region in which those activities would be conducted, nor to the original five-year period of effectiveness. A new request for MMPA authorization was prepared and submitted by industry in March 2025. Additional information about current and future updates to current MMPA Incidental Take Authorizations about G&G surveys in the GOA may be found on the NOAA Fisheries website.

## 3.12 CLEAN AIR ACT AND AIR QUALITY JURISDICTION UNDER OCSLA

**Jurisdictional Overview and Division of Responsibility**

Responsibility for air quality in the GOA is shared between BOEM and the USEPA. Under the OCSLA, DOI was originally directed to enforce environmental laws on the OCS, including the Clean Air Act (CAA). Section 5(a)(8) of OSCLA requires the Secretary to promulgate regulations "for compliance with the National Ambient Air Quality Standards (NAAQS) pursuant to the CAA, to the extent that activities authorized under this Act significantly affect the air quality of any State."

In 1990, Section 328 of the CAA Amendments directed the USEPA to establish air pollution control requirements for OCS-related activities along the Pacific, Arctic, and Atlantic Coasts, and along the U.S Gulf Coast off the State of Florida, eastward of 87.5° W. longitude. Air quality responsibility for the portion of the GOA where OCS oil- and gas-related activities were already well established, west of 87.5° W. longitude, remained with DOI through BOEM under existing OCSLA authority (Ramseur 2012).

The CAA clearly delineates GOA air quality jurisdictional boundaries between the USEPA and DOI. Operations on the Gulf of America OCS east of 87.5° W. longitude (off the coast of Florida) are subject to USEPA air quality regulations under Section 328 of the CAA (40 CFR 55), while those west of 87.5° W. longitude (off the coast of Texas, Louisiana, Mississippi, and Alabama) are regulated by BOEM (30 CFR 550.302-304).

BOEM and USEPA maintain coordination mechanisms to ensure consistency between their respective regulatory programs. This includes sharing technical information, methodologies, and monitoring data to support each agency's regulatory functions. Additionally, both agencies consult with affected states regarding potential air quality impacts from OCS activities, ensuring that state air quality concerns are addressed during permit reviews and plan approvals.

In December 2011, air quality jurisdiction on the Arctic OCS in the Chukchi Sea and Beaufort Sea Planning Areas adjacent to the North Slope Borough of Alaska was transferred from the USEPA to DOI when Congress revised Section 328 of the CAA through the Consolidated Appropriations Act, 2012. This transfer expanded BOEM's air quality regulatory jurisdiction beyond the GOA and required BOEM to incorporate Arctic-specific considerations into its regulatory framework to address the unique environmental conditions of that region.

**Clean Air Act National Program (USEPA and States)**

The 1970 CAA (42 U.S.C. 7401 et seq.) requires the USEPA to set NAAQS for widespread pollutants from numerous and diverse sources considered harmful to public health and the environment. NAAQS includes primary standards to protect public health, and the secondary standards to protect public welfare. The CAA requires periodic review of the science upon which the standards are based and the standards themselves. Currently, the USEPA has set NAAQS for six principal “criteria” pollutants. These criteria pollutants include carbon monoxide (CO), lead (Pb), nitrogen dioxide ($NO_2$), ozone ($O_3$), particulate matter (PM), and sulfur dioxide ($SO_2$). Although the CAA is a federal law covering the entire Nation, the states do much of the work to implement the Act. The law allows individual states to have more stringent pollution controls, but the states are not allowed to have less stringent pollution controls than those for the rest of the United States. The law recognizes that states should take the lead in carrying out the CAA because pollution control problems often require an in-depth understanding of local meteorology, industries, geography, housing patterns, etc.

If monitors in an area indicate a criteria pollutant is above the NAAQS, that area is designated as nonattainment and the state will be required to develop a State Implementation Plan (SIP) that explains how they will comply with the NAAQS. The states must involve the public, through hearings and opportunities to comment, in the development of the SIP. Usually in development of a SIP, the state will calculate emissions inventories for input into air quality photochemical modeling. The modeling will show what reductions or controls are needed to bring the area back into compliance with the NAAQS. The USEPA must approve the SIP, and if the SIP is not acceptable, the USEPA can take over enforcing the CAA in that state. The U.S. Government, through the USEPA, assists the states with air quality compliance by providing scientific research, expert studies, engineering designs, and money to support clean air programs.

**Prevention of Significant Deterioration Program**

The CAA established the Prevention of Significant Deterioration (PSD) program to preserve, protect, and enhance the air quality in special regions of the United States. Under the PSD program, these special air quality regions were designated as Class I areas. Class I areas are areas of special national or regional natural, scenic, recreational, or historic value, which the PSD regulations provide special protection. The Federal Land Manager (FLM) for a Class I area is responsible for defining specific Air Quality Related Values (AQRV) for the area and for establishing the criteria to determine any adverse impact on the area's AQRV. If an FLM determines that a source will adversely impact the AQRV in a Class I area, the FLM may recommend that the permitting agency deny issuance of the permit; however, the permitting authority has the final decision to issue or deny the permit. In the Gulf of America OCS region, FWS is the FLM for the Breton, St. Marks, Okefenokee, and Chassahowitzka Class I areas; NPS is the FLM for the Everglades Class I area.

**BOEM's Air Quality Regulations and OCSLA Authority**

BOEM's air quality regulations are codified in 30 CFR 550.C. These regulations are used to assess and control OCS emissions that may impact air quality in onshore areas. In accordance with BOEM's air quality regulations, BOEM applies defined criteria to determine which OCS plans require an air quality review and performs an impact-based exemption threshold analysis on the selected plans to determine whether the emission source could potentially cause a significant onshore impact. Exemption thresholds are calculated using formulas that consider the distance from the facility to shore and the corresponding emission rates. These thresholds, found in 30 CFR 550.303(d), help determine when a source's emissions would be significant enough to potentially impact onshore air quality.

BOEM also regulates volatile organic compounds (VOCs) because they are precursors to ground-level ozone formation, which is a criteria pollutant with established NAAQS. BOEM's regulation of VOCs is essential for ensuring that OCS activities do not contribute to onshore ozone nonattainment issues. Additionally, BOEM regulates hydrogen sulfide ($H_2S$) through 30 CFR 550.245(d). This regulation mandates that operators provide information concerning the concentration and areal extent of any $H_2S$ that may be encountered or handled during proposed drilling operations. This information

is critical for safety and environmental protection because $H_2S$ is a toxic gas that poses significant risks to human health and the environment, even though it is not regulated as a criteria pollutant under NAAQS.

In 2020, BOEM issued Notice to Lessees (NTL) No. 2020-N01, which provides guidance on approved air quality modeling approaches for criteria pollutants, (note that this excludes $H_2S$ which is covered under another regulation), and lists BOEM-approved dispersion models. Should the air emission source exceed the exemption threshold limits and require air quality modeling, either the Offshore and Coastal Dispersion, AERMOD, or CALPUFF model should be used, depending on the distance to the shoreline. The Offshore and Coastal Dispersion (OCD) model is typically used for sources within 50 km of shore because it better accounts for the complex atmospheric interactions in coastal environments. AERMOD is USEPA's preferred regulatory model and may be used for near-shore facilities where complex terrain effects need to be considered. The CALPUFF model is preferred for sources beyond 50 km from shore, because it better handles long-range transport and the effects of complex terrain on pollutant dispersion. Modeling determines if a source would significantly impact the air quality of any state, and at that time, Best Available Control Technology would then need to be applied.

Compliance with air quality requirements is monitored through required recordkeeping, reporting, and potential inspections. Operators must maintain records of emissions monitoring and control equipment maintenance. BSEE conducts inspections to verify compliance with air quality provisions specified in approved plans.

### *Air Quality Final Rule*

BOEM issued a final rule updating its air quality regulations on May 14, 2020. The rule adopted several notable changes, listed below.

- **Compliance with NAAQS**. The updated final rule added a definition of the NAAQS and clarified that DOI's reporting and compliance requirements apply to the emissions of all pollutants on the OCS for which a national ambient air quality standard has been defined.
- **Updating Significance Levels (SLs)**. The final rule replaced the table of SLs in BOEM's regulations which had previously dated back to 1980) with a revised table based on values in USEPA's regulations (40 CFR 51.165(b)(2)).
- **New Requirements for $PM_{2.5}$ and $PM_{10}$**. The final rule replaced the former criteria air pollutant "total suspended particulates (TSP)" modeling requirements with new modeling requirements for "particulate matter less than or equal to 10 μm" ($PM_{10}$) and "particulate matter less than or equal to 2.5 μm" ($PM_{2.5}$). BOEM has also updated its forms to enable lessees and operators to identify, report, and evaluate $PM_{2.5}$ and $PM_{10}$ pollution in air quality spreadsheets submitted with exploration and development plans.

- **Emissions Exemption Thresholds**. The final rule clarified that emissions exemption thresholds formulas apply equally to DPPs and DOCDs.
- **Clarifying Terminology**. The final rule updated various terms to better clarify the regulations' intent. For example, it replaced "air pollutant" with "criteria air pollutant" to reflect that BOEM, under OCSLA, regulates the emissions of criteria air pollutants for which the USEPA has defined NAAQS. BOEM regulates only those emissions that could affect BOEM's obligation to ensure compliance of State air quality with the NAAQS; therefore, using the term "air pollutant" was not appropriate.
- **Air Quality Spreadsheets**. BOEM updated the Office of Management and Budget-approved air quality spreadsheets and forms BOEM-0138 (for exploration plans) and BOEM-0139 (for DOCDs and DPPs). Lessee or designated operators must use these forms for proposed operations in areas under BOEM's air quality regulatory jurisdiction. BOEM has also phased out including emissions from transiting support vessels in emissions exemption thresholds calculations, consistent with BOEM's statutory mandates. Air quality modeling is now only required when a regulated facility, exclusive of support vessels, exceeds the relevant emissions exemption thresholds. Though emissions from transiting support vessels are no longer included in exemption threshold calculations, these emissions are still considered in the broader environmental analysis conducted under NEPA to ensure comprehensive assessment of potential environmental impacts.

**BOEM's Air Quality Studies**

The CAA Amendments of 1990 (Pub. L. 101-549) required BOEM to conduct a study to evaluate cumulative, onshore, air quality nonattainment area impacts from OCS petroleum resource development in the GOA. This requirement was satisfied with the publication of "Gulf of Mexico Air Quality Study: Final Report" (Systems Applications International et al. 1995). Following the completion of this air quality impacts study in 1995, the Secretary consulted with the USEPA Administrator and determined that no new air quality requirements were necessary for the area under BOEM's jurisdiction.

Recognizing that the report was over 25 years old, BOEM commissioned and completed a new study, *Air Quality Modeling in the Gulf of Mexico Region* (Wilson et al. 2019).This study that reevaluated the cumulative impacts of OCS oil- and gas-related activities on onshore air quality in the GOA, using updated modeling techniques and data to ensure BOEM's regulatory framework remains effective in protecting air quality while allowing for responsible resource development. While BOEM's primary regulatory focus is on criteria pollutants affecting NAAQS compliance, the agency also considers greenhouse gas emissions in its environmental impact assessments under NEPA. However,

greenhouse gases (GHGs) and hazardous air pollutants (HAPs) are not currently regulated under the OCSLA air quality program in the same manner as criteria pollutants, though they are evaluated as part of BOEM's consideration of long-term atmospheric effects and global environmental conditions.

## 3.13 CLEAN WATER ACT

The Clean Water Act (CWA), enacted in 1972 as a major amendment to the Federal Water Pollution Control Act of 1948, is the primary federal law governing water pollution in the U.S. The CWA is the principle law governing pollution control and water quality of the Nation's waterways. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (33 U.S.C. 1251), and it provides standards and enforcement, a number of regulatory programs with permits and licenses, and grants and revolving funds, as well as general provisions and provisions for research and related programs. The regulatory framework extends to facilities in coastal waters, territorial seas, and onshore areas, all of which must comply with CWA provisions to safeguard the marine environment. The CWA establishes conditions and permitting for discharges of pollutants into the waters of the United States under the National Pollutant Discharge Elimination System (NPDES) and gave the USEPA the authority to implement pollution control programs such as setting wastewater standards for industry and to set water quality standards for all contaminants in surface waters. The CWA made it unlawful for any person to discharge any pollutant from a point source into waters of the United States, unless an NPDES permit was obtained under its provisions.

Under Sections 301, 302, 304, and 306 of the CWA, the USEPA issues technology-based effluent guidelines that establish discharge standards based on treatment technologies that are available and economically achievable. Each USEPA region issues permits that meet or exceed the guidelines and standards. The CWA also funded the construction of sewage treatment plants under the construction grants program and recognized the need for planning to address the critical problems posed by nonpoint-source pollution.

### 3.13.1 National Pollutant Discharge Elimination System

All waste streams generated from offshore oil and gas activities are regulated by the USEPA, primarily through general NPDES permits. The USEPA may not issue a permit for a discharge into ocean waters unless the discharge complies with the guidelines established under Section 403(c) of the CWA. These guidelines are intended to prevent degradation of the marine environment and require an assessment of the effect of the proposed discharges on sensitive biological communities and aesthetic, recreational, and economic values.

Direct dischargers (i.e., an OCS operator) must comply with the effluent limitation guidelines and the new source performance standards in the NPDES permits; indirect dischargers must comply with the pretreatment standards. The most recent effluent limitation guidelines for the oil and gas extraction point-source category were published in 1993. The USEPA also published new guidelines for the discharge of synthetic-based drilling fluids on January 22, 2001.

Existing point-source dischargers (i.e., exploratory wells and grandfathered development and production facilities) are regulated using technology-based effluent limitations guidelines (40 CFR 435). Regulated wastes include drilling fluids and cuttings, produced water, sanitary wastes, and deck drainage among others. Three broad categories of pollutants, which are described below, are identified in the guidelines: conventional; toxic; and nonconventional. The level of required discharge control is dependent on the category of the pollutant.

Conventional pollutants are contained in the sanitary wastes of households, businesses, and industries. These pollutants include fecal coliform, total suspended solids, biochemical oxygen demand, pH, and oil and grease (e.g., hydrocarbons, fats, oils, waxes, and high-molecular fatty acids).

Toxic pollutants are pollutants or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the USEPA Administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), or physical deformations in such organisms or their offspring. Toxic pollutants also include those pollutants listed by the USEPA Administrator under Section 307(a)(1) of the CWA or any pollutant listed under Section 405(d) of the CWA, which relates to sludge management.

Nonconventional pollutants are all pollutants that are not included in the list of conventional or toxic pollutants in 40 CFR 401, such as chemical oxygen demand, total organic carbon, nitrogen, and phosphorus.

New point sources and existing point sources of pollutants have different NPDES regulations. New sources are subject to more rigorous effluent limits than existing sources based on the idea that it is cheaper to minimize effluent pollutants if environmental controls are considered during plant design than if an existing facility is retrofitted. New source discharges must comply with standards based on the performance of demonstrated technology with the greatest degree of effluent reduction. These new source performance standards should represent the most stringent numerical values attainable. The new source performance standards are based upon the best available demonstrated control technology and are at least as stringent as best available technology.

NPDES guidelines define a new source as any area in which significant site preparation work is done. The USEPA interprets “significant site preparation” for offshore effluent guidelines as “the process of clearing and preparing an area of the ocean floor for purposes of constructing or placing a development or production facility on or over the site.” Thus, development and production facilities at a new site would be new sources. Development and production facilities are existing sources if significant site preparation work took place before the new source performance standards became effective. Exploratory wells are generally not considered new sources because site preparation is not considered significant.

Section 316(b) of the CWA requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact. The regulations are designed to minimize harmful impacts on aquatic life caused by cooling water intake structures. In Phase III implementation of the new standards, certain existing facilities and new offshore and coastal oil and gas extraction facilities are included. The USEPA published the third and final part of this rule, which establishes categorical requirements under Section 316(b) of the CWA for new offshore oil and gas extraction facilities that have a design intake flow threshold of greater than two million gallons per day and that withdraw at least 25 percent of the water exclusively for cooling purposes. The USEPA Administrator signed this rule on June 1, 2006, and it was published in the *Federal Register* on June 16, 2006 (71 FR 35006). Liquefied natural gas facilities, which use seawater for warming rather than cooling, are not included in Phase III. The requirements were incorporated into the Region 6 permit upon reissuance on October 1, 2012, and will be incorporated into the Region 4 permit when it is reissued.

The USEPA issues general and individual NPDES permits for a five-year period. These permits are subject to renewal for subsequent five-year periods. General permits are written for a specific industrial category within a limited geographic area. The general permit allows for streamlining of the permitting process for similar activities. Individual permits enhance the protection of sensitive resources while still allowing the development of energy resources. Individual permits provide more opportunity for USEPA evaluation and input to OCS oil and gas facility developments.

Within the GOA, USEPA Region 6 has jurisdiction over Louisiana and Texas (i.e., all of the WPA and the majority of the CPA). The Region 6 general permit implements comprehensive toxicity testing requirements for well treatment, completion, and workover fluids. These include both specific acute toxicity limits and chronic monitoring protocols designed to assess long-term impacts on water quality and aquatic life in the GOA. These science-based requirements ensure that all discharges undergo proper testing and monitoring. The USEPA Region 4 has jurisdiction over the eastern portion of the GOA, including all of the EPA and part of the CPA off the coasts of Alabama and Mississippi. Each region promulgates general permits for discharges that incorporate established effluent guidelines as a minimum. While general permits cover most operations, a site-specific permit may be requested by operators in either Region 4 or Region 6 when their activities require specialized considerations outside the scope of the general permit

The general NPDES permits for offshore oil and gas in the GOA were recently updated. The current Region 6 NPDES General Permit for offshore oil and gas in the central to western portions of the GOA (GMG290000) can be found at https://www.epa.gov/npdes-permits/western-and-central-gulf-america-offshore-oil-gas-npdes-program (USEPA 2023). A clarification in the reissued permit is that "operators must flush and capture the materials contained in pipelines, umbilicals, and other equipment prior to disconnection. No releases or discharges of fluid from pipelines, umbilicals, and/or other equipment that have not been fully flushed prior to being disconnected or cut from the facility are authorized under this NPDES permit." The current Region 4 NPDES permit for offshore oil and gas in the eastern portion of the GOA (GEG460000) can be located at https://www.epa.gov/npdes-

permits/eastern-gulf-america-offshore-oil-gas-npdes-permits. Most facilities on the Gulf of America OCS are covered by general NPDES permits; however, individual NPDES permits may be required for operations with unique environmental concerns, often necessitating more detailed monitoring and stricter adherence to environmental protection standards.

### 3.13.2 Management of Vessel Generated Wastes

The USEPA initially issued the final 2013 Vessel General Permit (VGP) (USEPA 2013) to regulate the 26 specific discharge categories from vessels. This permit includes numeric ballast water discharge limits for most vessels and more stringent effluent limits for oil-to-sea interfaces and exhaust gas scrubber washwater (USEPA 2013). The permit generally aligns with requirements contained within the 2012 USCG ballast water rulemaking. Additionally, the final VGP contains requirements to ensure that ballast water treatment systems are functioning properly. The USEPA published the small Vessel General Permit (sVGP) in 2014 (79 FR 53702), with an effective date of December 19, 2014, to provide NPDES permit coverage for discharges incidental to the normal operation of nonmilitary, nonrecreational (commercial) vessels less than 79 ft (24 m) (i.e., “small vessels”) operating in a capacity as a means of transportation.

The Vessel Incidental Discharge Act (VIDA), a new regulatory framework under Section 312(p) of the CWA, mandates that the USEPA develop national performance standards for vessel incidental discharges. The USEPA was required to promulgate these standards within two years of VIDA's enactment, with the USCG tasked to develop the implementation, compliance, and enforcement regulations.

On December 4, 2018, U.S. Congress passed the Frank LoBiondo Coast Guard Authorization Act, which incorporated VIDA under Title IX. On October 26, 2020, the USEPA, in coordination with the USCG, proposed a rule under VIDA (85 FR 67818). The proposed rule would establish national standards of performance for marine pollution control devices for discharges incidental to the normal operation of primarily non-military and non-recreational vessels 79 ft (24 m) or greater in length into the waters of the United States or the waters of the contiguous zone. These standards cover 20 different discharge types, with requirements based on best available technology economically achievable, best conventional pollutant control technology, and best practicable technology, alongside best management practices to prevent or reduce pollution. These standards, once finalized and enforced through corresponding USCG regulations, aim to reduce pollution from vessels and streamline the fragmented federal, state, and local vessel discharge requirements.

Under VIDA, all provisions of the VGP remain in effect until the USCG finalizes the necessary regulations. As such, commercial vessels (nonmilitary, nonrecreational) greater than 79 ft (24 m) in length must continue to comply with the VGP’s requirements, including submission of a Notice of Intent or retention of a Permit Authorization and Record of Inspection form and annual reports. Additionally, VIDA repeals the sVGP, so any nonmilitary, nonrecreational vessels less than 79 ft (24 m) in length, such as commercial fishing vessels, will no longer follow the sVGP but instead be subject to the new VIDA regulations when they are finalized (USEPA 2024). Once VIDA regulations are fully

implemented, they will replace both the VGP and sVGP frameworks, streamlining the regulatory process and unifying vessel discharge requirements under a single, consistent set of standards for all vessels in U.S. waters.

### 3.13.3 Other CWA Permits Applicable to OCS Oil and Gas Activities

Other sections of the CWA also apply to offshore oil and gas activities. Section 404 of the CWA requires a USACE permit for the discharge or deposition of dredged or fill material in all waters of the U.S., including ocean areas, estuaries, streams, ponds, rivers, lakes, and wetlands. Approval by USACE, with consultation from other Federal and State agencies, is also required for installing and maintaining pipelines in coastal areas of the GOA. Section 303 of the CWA provides for the establishment of water quality standards that identify a designated use for waters (e.g., fishing/swimming). States have adopted water quality standards for ocean waters within their jurisdiction (waters of the territorial sea that extend out to 3 nm (3.5 mi; 5.63 km) off Louisiana, Mississippi, and Alabama, and 3 leagues (9 nm; 10.36 mi; 16.67 km) off Texas and Florida). Section 401 of the CWA gives authority to the States and Tribes to review and approve, condition, or deny all Federal permits or licenses that might result in a discharge to State or Tribal waters, including wetlands. Section 402(b) of the CWA authorizes USEPA approval of State permit programs for discharges from point sources.

### 3.13.4 National Pollutant Discharge Elimination System for Onshore OCS-Related Infrastructure

The USEPA is responsible for implementing certain provisions of the CWA regulations, i.e., 40 CFR 122-125. The NPDES stormwater permit program requires operators of construction sites that are 1 acre (ac) (0.4 hectare [ha]) or larger to obtain authorization to discharge stormwater under an NPDES Construction Stormwater Permit. The primary goal of this permit is to prevent pollution in stormwater runoff from construction activities, thereby protecting the quality and beneficial uses of the surface water resources. This is accomplished through the development and implementation of a Storm Water Pollution Prevention Plan and associated Best Management Practices.

Installation of any proposed onshore transmission lines and associated components would require an NPDES General Stormwater Construction Permit. A Notice of Intent (NOI) for construction activities that includes general project information and certification that the activity would not affect endangered or threatened species would be submitted to the appropriate NPDES permitting authority. The NOI for coverage under an NPDES General Stormwater Construction Permit would be filed prior to commencement of construction.

## 3.14 Harmful Algal Bloom and Hypoxia Research and Control Act and Related Working Group and Task Force

The Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA) was originally enacted in 1998, embedded in Title VI of Pub. L. 105-383, the Coast Guard Authorization Act of 1998. It was passed in response to a national increase in harmful algal blooms (HABs) and hypoxia events,

which caused extensive fish kills, marine mammal deaths, and the closure of beaches and shellfish beds. HABHRCA established a framework for federal coordination and scientific research to better understand and manage these threats. HABHRCA was reauthorized through the Harmful Algal Bloom and Hypoxia Amendments Act of 2004 (Pub. L. 108-456) and again in 2014 (Pub. L. 113-124). These amendments reaffirmed and expanded the mandate of (NOAA to detect, monitor, assess, and predict HAB and hypoxia events. They also required an assessment of the causes and consequences of hypoxia in the GOA and the development of a plan to reduce it. This assessment included six reports commissioned by the White House Committee on Environment and Natural Resources.

Most recently, Congress reauthorized HABHRCA in 2019 through the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2017, enacted as Title II of the National Integrated Drought Information System (NIDIS) Reauthorization Act of 2018 (Pub. L. 115-423). Although the HABHRCA reauthorization was part of the same legislation as NIDIS, it remains a distinct program. The 2017 amendments introduced requirements for periodic review and evaluation of program effectiveness to ensure that scientific and management goals are being met. Additionally, the South Florida Clean Coastal Waters Act of 2021 (Pub. L. 117-144) amended HABHRCA by requiring the Interagency Working Group on HABHRCA (IWG-HABHRCA) to conduct an integrated assessment of HABs and hypoxia in the South Florida Water Management District and its connected freshwater, estuarine, and marine systems. The law also mandated a follow-up action plan and biennial progress reports to track mitigation efforts.

The IWG-HABHRCA, co-chaired by NOAA and the USEPA, is responsible for coordinating federal agency actions related to HAB and hypoxia research and response. Member agencies include the U.S. Food and Drug Administration, U.S. Department of Agriculture, Centers for Disease Control and Prevention, USACE, NPS, USGS, BOEM, U.S. Navy, National Institute of Environmental Health Sciences, and the National Science Foundation.

Separately, the Mississippi River-Gulf of America Watershed Nutrient Task Force (HTF), established in 1997, is dedicated to addressing nutrient pollution and the seasonal development of a hypoxic zone in the GOA (Mississippi River/Gulf of Mexico Watershed Nutrient Task Force 2001). The HTF aims to understand the causes and effects of nutrient over-enrichment, reduce the size and severity of the hypoxic zone, and mitigate its impacts through nutrient management practices, habitat restoration, and science-based decision-making. The HTF includes Federal, State, and Tribal representatives, providing leadership to coordinate actions across the Mississippi River Basin and GOA. It engages a broad range of stakeholders, including private sector and non-governmental organizations, and collaborates to implement nutrient reduction strategies. These efforts are supported by federal, state, tribal, and private sector funding mechanisms.

The HTF operates under long-term nutrient reduction goals, employing adaptive management strategies to improve water quality in the Mississippi-Atchafalaya River Basin and the GOA. It is committed to reducing the hypoxic zone's size by 2035, with interim targets for reducing nutrient loads.

Progress is tracked through regular reports submitted to Congress, which assess the effectiveness of management actions and help guide future efforts to address hypoxia and nutrient pollution.

## 3.15 OIL POLLUTION ACT OF 1990

The Oil Pollution Act of 1990 (OPA) (33 U.S.C. 2701 et seq.) is comprehensive legislation that includes, in part, provisions to (1) improve oil-spill prevention, preparedness, and response capability; (2) establish limitations on liability for damages resulting from oil pollution; and (3) implement a fund for the payment of compensation for such damages.

OPA, in part, revised Section 311 of the CWA to expand Federal spill-response authority; increase penalties for spills; establish a USCG prepositioned, oil-spill-response equipment site; require vessel and facility response plans; and provide for interagency contingency plans. Many of the statutory changes required corresponding revisions to the National Oil and Hazardous Substances Pollution Contingency Plan.

In October 1991, E.O. 12777 delegated the provisions of OPA to various departments and agencies within the U.S. Government, including the USCG, USEPA, U.S. Department of Transportation, and DOI. In addition, Section 4 of E.O. 12777, as amended, directed the President's authority to implement OPA provisions to the Department of Homeland Security, under which the USCG operates. Accordingly, this authority was redelegated by the Secretary of Homeland Security to the USCG. In March 2013, E.O. 12777 was further amended by striking and replacing Section 4 in its entirety.

The Secretary was delegated Federal Water Pollution Control Act authority over offshore facilities and associated pipelines (except deepwater ports) for all Federal and State waters. The Secretary's functions under the E.O. include spill prevention, oil-spill contingency plans, equipment, financial responsibility certification, and civil penalties. Under S.O. 3299, BOEM and BSEE exercise this authority on behalf of DOI.

If a spill or substantial threat of a spill of oil or a hazardous substance from a vessel, offshore facility, or onshore facility is considered to be of such a size or character to be a substantial threat to the public health or welfare of the U.S., under provisions of OPA, the President (through the USCG) now has the authority to direct all Federal, State, and private actions to remove a spill or to mitigate or prevent the threat of the spill. Potential impacts from spills of oil or a hazardous substance to fish, shellfish, wildlife, other natural resources, or the public and private beaches of the U.S. would be an example of the degree or type of threat considered to be of such a size or character to be a substantial threat to the U.S. public health or welfare. In addition, the USCG's authority to investigate marine accidents involving foreign tankers was expanded to include accidents in the U.S. EEZ. OPA also established USCG oil-spill, district response groups (including equipment and personnel) in each of the 10 USCG districts, with a national response unit, the National Strike Force Coordination Center, located in Elizabeth City, North Carolina.

OPA strengthened spill planning and prevention activities by providing for the establishment of interagency, spill contingency plans for areas of the U.S. To achieve this goal, Area Committees composed of qualified Federal, State, and local officials were created to develop Area Contingency Plans. OPA mandates that contingency plans address the response to a "worst-case" spill or a substantial threat of such a spill. It also required that vessels and both onshore and offshore facilities have response plans approved by the President. These plans were required to adhere to specified requirements, including demonstration that they had contracted with private parties to provide the personnel and equipment necessary to respond to or mitigate a "worst-case" spill. In addition, OPA provided for increased penalties for violations of statutes related to oil spills, including payment of triple costs by persons who fail to follow contingency plan requirements.

Pursuant to OPA, double hulls are required on all newly constructed tankers. Double hulls or double containment systems are required on all tank vessels less than 5,000 gross tons (i.e., barges). In the U.S., the use of single-hull tankers began being phased out in compliance with OPA since 1995. As of January 1, 2015, the U.S. will have phased out all single-hull tank vessels and all single-hull tank vessels with double sides or double bottoms that would operate by carrying bulk oil in both U.S. territorial waters, as well as the U.S. EEZ.

The Oil Spill Liability Trust Fund (OSLTF), authorized under OPA and administered by the USCG, is available to pay for removal costs and damages not recovered from responsible parties. The Fund provides up to $1 billion per incident for cleanup costs and other damages. The OSLTF was originally established under Section 9509 of the Internal Revenue Code of 1986. It was one of several similar Federal trust funds funded by various levies set up to provide for the costs of water pollution. OPA generally consolidated the liability and compensation schemes of these previous Federal oil-pollution laws and authorized the use of the OSLTF, which consolidated the funds supporting those regimes. Those previous laws included the Federal Water Pollution Control Act, Trans-Alaska Pipeline Authorization Act, Deepwater Port Act, and OCSLA. On February 20, 1991, the National Pollution Funds Center was commissioned to serve as fiduciary agent for the OSLTF.

OPA further specifies that vessel owners, not cargo owners, are liable for spills. OPA establishes certain dollar amounts above which a responsible party is not liable for paying for the costs of an oil spill. These limits are based on the type and tonnage of a vessel. If a responsible party pays or incurs removal costs or damages in excess of an applicable liability limit, the responsible party may present a claim for compensation of the excess amount. The limits of liability for oil removal costs and damages that result from discharges or substantial threats of discharge of oil from vessels, under OPA (33 U.S.C. 2704), were amended by the Consumer Price Index Adjustments of Oil Pollution Act of 1990 Limits of Liability—Vessels and Deepwater Ports. The new amended limits are summarized below.

(1) For an oil cargo tank vessel greater than 3,000 gross tons with a single hull, including a single-hull tank vessel fitted with double sides only or a double bottom only, the liability limit is the greater of $3,200 per gross ton or $23,496,000.

(2) For a tank vessel greater than 3,000 gross tons, other than a vessel referred to in (1), the liability limit is the greater of $2,000 per gross ton or $17,088,000.

(3) For an oil cargo tank vessel less than or equal to 3,000 gross tons with a single hull, including a single-hull tank vessel fitted with double sides only or a double bottom only, the liability limit is the greater of $3,200 per gross ton or $6,408,000.

(4) For a tank vessel less than or equal to 3,000 gross tons, other than a vessel referred to in (3), the liability limit is the greater of $2,000 per gross ton or $4,272,000.

(5) For any other vessel, the liability limit is the greater of $1,000 per gross ton or $854,400.

(6) For a deepwater port, other than a deepwater port with a limit of liability established by regulation under 33 U.S.C. 2704(d)(2), the liability limit is $373,800,000.

(7) For the Louisiana Offshore Oil Port, the liability limit is $87,606,000.

Offshore facilities are unique among the vessels and facilities covered under OPA. OPA, at 33 U.S.C. 2704(a), assigns unlimited liability to the responsible parties for removal costs resulting from an offshore facility oil-spill incident, and only limits their liability for the damages that result from such a spill and that are covered by OPA. The offshore facility limit of liability for OPA damages was raised on February 20, 2018, to $137.65 million (83 FR 2540). Under OPA, the responsible parties' liability for removal costs resulting from an offshore facility oil-spill incident remains unlimited.

In addition, willful misconduct, violation of any Federal operating or safety standard, failure to report an incident, or refusal to participate in a cleanup subjects the spiller to unlimited liability under provisions of the OPA. OPA also provides that parties responsible for offshore facilities demonstrate, establish, and maintain oil-spill financial responsibility (OSFR) for those facilities. OPA replaced and rescinded the OCSLA oil-spill financial responsibility requirements. E.O. 12777 assigned the OSFR certification function to DOI; the Secretary, in turn, delegated this function to BOEM. The minimum amount of OSFR that must be demonstrated is $35 million for covered offshore facilities located on the OCS and $10 million for covered offshore facilities located in State waters as specified in 30 CFR 250 and 253. A covered offshore facility is any structure and all of its components, equipment, pipeline, or device (other than a vessel or other than a pipeline or deepwater port licensed under the Deepwater Port Act of 1974) used for exploring for, drilling for, or producing oil, or for transporting oil from such facilities. OPA provides an exemption for persons responsible for facilities having a potential worst-case oil spill of 1,000 barrels or less, unless the risks posed by a facility justify a lower threshold volume.

Certain types of vessels must also have a Certificate of Financial Responsibility before they can enter U.S. waters. The Department of Homeland Security now has the authority for vessel oil-pollution financial responsibility, and the USCG regulates the oil-spill financial responsibility

program for vessels. A mobile offshore drilling unit is classified as a vessel. However, a well drilled from a mobile offshore drilling unit is classified as an offshore facility under OPA and financial responsibility requirements as specified in 33 CFR 138.2(b).

An Interagency Coordinating Committee on Oil Pollution Research was established by the provisions of OPA and tasked with submitting a plan for the implementation of an oil-pollution research, development, and demonstration program to Congress. The plan was submitted to Congress in April 1992. This program addressed, in part, an identification of important oil-pollution research gaps, an establishment of research priorities and goals, and an estimate of the resources and timetables necessary to accomplish the identified research tasks. In 1992, the program plan was also provided to the Marine Board of the National Research Council for review and comment as required by OPA. Upon review, the Marine Board recommended that the plan be revised using a framework that addresses spill prevention, human factors, and field testing demonstration of developed response technology. This was accomplished in April 1997. The Chairman of the Interagency Committee is required, under Section 7001 of OPA, to submit to Congress every two years on October 30, a report on the activities carried in the preceding two fiscal years and on activities proposed to be carried out in the current two fiscal-year period. The last available report that tracks many of the lessons learned after the *Deepwater Horizon* explosion, oil spill, and response was published on June 12, 2012.

## 3.16 Comprehensive Environmental Response, Compensation, and Liability Act of 1980

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 U.S.C. 9601 et seq.), modified by the 1986 Superfund Amendments and Reauthorization Act and Section 1006 of OPA, required the promulgation of regulations for the assessment of natural resource damages from oil spills and hazardous substances. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions: short-term removals where actions may be taken to address releases or threatened releases requiring prompt response; and long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious but not immediately life threatening. These actions can be conducted only at sites listed on USEPA's National Priorities List.

CERCLA also enabled the revision of the National Contingency Plan. The National Contingency Plan provided the guidelines and procedures needed to respond to releases and

threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List.

DOI was given the authority under CERCLA to develop regulations and procedures for the assessment of damages for natural resource injuries resulting from the release of a hazardous substance or oil spills (Natural Resource Damage Assessment regulations). These rulemakings are all codified at 43 CFR 11. CERCLA specified two types of procedures to be developed: type “A” procedures for simplified, standard assessments requiring minimal field observations in cases of minor spills or releases in certain environments; and type “B” site-specific procedures for detailed assessments for individual cases.

## 3.17 Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6901 et seq.) establishes a framework for the safe disposal and management of hazardous and non-hazardous wastes. While OCS wastes brought onshore are generally regulated under RCRA, many oil and gas exploration and production (E&P) wastes are exempt from RCRA's hazardous waste regulations (Subtitle C). These exemptions apply to wastes directly related to hydrocarbon exploration, drilling, and production. Although exempt from federal hazardous waste regulations, E&P wastes are still subject to state waste management programs, particularly in Gulf Coast states, such as Louisiana, Texas, and Alabama, which regulate the disposal, treatment, and storage of these wastes under RCRA Subtitle D or through more stringent state requirements. RCRA also requires that hazardous waste treatment, storage, and disposal facilities (TSDFs) obtain permits and demonstrate compliance with design and operational standards established by the USEPA or an authorized state. If E&P wastes are determined to be non-exempt and hazardous, they must be managed in accordance with RCRA Subtitle C, including transportation to a permitted hazardous waste facility for proper disposal.

## 3.18 Marine Plastic Pollution Research and Control Act

The Marine Plastic Pollution Research and Control Act of 1987 (MPPRCA) (33 U.S.C. 1901 et seq.) implements Annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL). Under MPPRCA, the discharge of plastics or any garbage containing plastics into the sea is strictly prohibited from all ships and watercraft, including commercial and recreational fishing vessels. The law also imposes significant restrictions on the disposal of other types of vessel-generated garbage and solid waste, both in U.S. navigable waters and in the open sea. The USCG is responsible for enforcing the provisions of this law and has developed final rules for its implementation (33 CFR 151, 155, and 158), which require the provision of adequate trash reception facilities at all ports, docks, marinas, and boat-launching facilities.

The GOA is part of the Wider Caribbean Region, which has been designated a “Special Area” under MARPOL Annex V. In Special Areas, the discharge of all solid waste into the marine environment is prohibited. Accordingly, fixed and floating offshore platforms, drilling rigs, manned production platforms, and support vessels operating under a federal oil and gas lease must develop

and implement waste management plans. These plans must describe procedures for collecting, processing, storing, and discharging garbage, and must identify the person responsible for carrying out the plan. Additionally, placards reflecting discharge limitations and restrictions must be posted on board.

BOEM regulations (30 CFR 250) specifically prohibit the disposal of equipment, cables, chains, containers, or any other materials into offshore waters. Items such as portable equipment, spools, reels, drums, pallets, and other loose materials must be durably marked with the owner's name prior to use or transport over offshore waters. Smaller objects must be stored in a marked container when not in use. These rules also apply to all oceangoing U.S.-documented or State-numbered vessels 12 m (39 ft) or longer that are equipped with a galley and berthing. Such vessels must have onboard waste management plans. Additionally, all vessels 8 m (26 ft) or more in length must prominently display placards informing the crew of discharge limitations and the penalties for noncompliance. The Shore Protection Act of 1988 (33 U.S.C. 2601 et seq.) further requires that any vessel transporting garbage or refuse ensure that waste is properly secured to prevent it from being lost overboard due to wind or weather conditions.

## 3.19 NATIONAL FISHING ENHANCEMENT ACT OF 1984

The National Fishing Enhancement Act of 1984 (NFEA) (33 U.S.C. 2101 et seq.), also known as the Artificial Reef Act, establishes broad artificial reef development standards and a national policy to encourage the development of artificial reefs that will enhance fishery resources and commercial and recreational fishing. It mandated that a long-term artificial reef plan be developed. The Secretary of Commerce provided leadership in developing the National Artificial Reef Plan that identifies the roles of Federal, State, local, and private agencies in the development of artificial reefs. It provides national guidelines on the siting, materials, design, regulatory requirements, construction, management, and liability of artificial reefs. The National Artificial Reef Plan cites key documents, provides the best existing information, and lists future research needs. The Secretary of the Army issues permits under Section 10 of the Rivers and Harbors Act and Section 404 of the CWA to responsible applicants for reef development projects in accordance with the National Artificial Reef Plan, as well as regional, State, and local criteria and plans. The law also limits the liability of reef developers complying with permit requirements and includes the availability of all surplus Federal ships for consideration as reef development materials. BSEE's regulations (30 CFR 250.1730) allow retired platforms to be used for reefs when such platforms are permitted and designated for use by a State's artificial reef program and within areas established for the receipt of platforms for the enhancement of habitat for fish and other aquatic life.

### 3.19.1 Fishermen's Contingency Fund

Final regulations for implementing Title IV of OCSLA, as amended (43 U.S.C. 1841-1846), were published in the *Federal Register* on January 24, 1980 (50 CFR 296). OCSLA, as amended, established the Fishermen's Contingency Fund (not to exceed $2 million) to compensate commercial fishermen for actual and consequential damages, including loss of profit, due to damage or loss of

fishing gear by various materials and items associated with oil and gas exploration, development, or production on the OCS. This fund, administered by the Financial Services Division of NMFS, mitigates most losses suffered by commercial fishermen due to OCS oil- and gas-related activities.

As required in the OCSLA, nine area accounts have been established—five in the GOAR, one in the Pacific, one in Alaska, and two in the Atlantic. The five GOAR accounts cover the same areas as the five BSEE Gulf of America OCS Region Districts. Each area account is initially funded at $100,000 and cannot exceed this amount. The accounts are initiated and maintained by assessing holders of leases, pipeline rights-of-way and easements, and exploration permits. These assessments cannot exceed $5,000 per operator in any calendar year.

The claims eligible for compensation are generally contingent upon the following: (1) damages or losses must be suffered by a commercial fisherman; and (2) any actual or consequential damages, including loss of profit, must be due to damages or losses of fishing gear by items or obstructions related to OCS oil- and gas-related activities. Damages or losses that occur in non-OCS waters may be eligible for compensation if the item(s) causing damages or losses are associated with OCS oil- and gas-related activities.

Ineligible claims for compensation are generally (1) damages or losses caused by items that are attributable to a financially responsible party; (2) damages or losses caused by negligence or fault of the commercial fishermen; (3) occurrences before September 18, 1978; (4) claims of damages to, or losses of, fishing gear exceeding the replacement value of the fishing gear; (5) claims for loss of profits in excess of 6 months, unless supported by records of the claimant's profits during the previous 12 months; (6) claims or any portions of damages or losses claimed that will be compensated by insurance; (7) claims not filed within 60 days of the event of the damages or losses; and (8) damages or losses caused by natural obstructions or obstructions unrelated to OCS oil- and gas-related activities.

There are several requirements for filing claims, including one that a report stating, among other things, the location of the obstruction, must be made within five days after the event of the damages or losses; this five-day report is required to gain presumption of causation. A detailed claim form must be filed within 60 days of the event of the damages or losses. The specifics of this claim are contained in 50 CFR 296. The claimant has the burden of establishing all the facts demonstrating eligibility for compensation, including the identity or nature of the item that caused the damages or losses and its association with OCS oil- and gas-related activity.

Damages or losses are presumed to be caused by items associated with OCS oil- and gas-related activities provided the claimant establishes that (1) the commercial fishing vessel was being used for commercial fishing and was located in an area affected by OCS oil- and gas-related activities; (2) the five-day report was filed; (3) there is no record in the most recent U.S. Department of Commerce's NOAA, National Ocean Service nautical charts or weekly USCG Notice to Mariners of an obstruction in the immediate vicinity; and (4) no proper surface marker or lighted buoy marked the

obstruction. Damages or losses occurring within a one-quarter-mile radius of obstructions recorded on charts, listed in the Notice to Mariners, or properly marked are presumed to involve the recorded obstruction.

## 3.20 PORTS AND WATERWAYS SAFETY ACT OF 1972

The Ports and Waterways Safety Act of 1972 (33 U.S.C. 1221 et seq.) authorizes the USCG to implement, in waters subject to the jurisdiction of the U.S., measures for controlling or supervising vessel traffic or for protecting navigation and the marine environment. Such measures may include, but are not limited to, reporting and operating requirements, surveillance and communication systems, routing systems, and fairways.

The Ports and Waterways Safety Act authorizes the USCG to designate safety fairways, fairway anchorages, and traffic separation schemes (TSSs) to provide unobstructed approaches through oil fields for vessels using GOA ports. The USCG provides listings of designated fairways, anchorages, and TSSs in 33 CFR 166 and 167, along with special conditions related to oil and gas production in the GOA. In general, no fixed structures, such as platforms, are allowed in fairways. Temporary underwater obstacles such as anchors and attendant cables or chains attached to floating or semisubmersible drilling rigs may be placed in a fairway under certain conditions. Fixed structures may be placed in anchorages, but the number of structures is limited by spacing.

A TSS is a designated routing measure that is aimed at the separation of opposing streams of traffic by appropriate means and by the establishment of traffic lanes (33 CFR 167.5). The Galveston Bay TSS and Port Arthur TSS are the only two TSSs established in the WPA. The Lower Mississippi River TSS and Berwick Bay TSS are the only TSSs established in the CPA. The Tampa TSS is the only TSS located in the EPA.

## 3.21 MARINE AND ESTUARINE PROTECTION ACTS

The Sanctuaries and Reserves Division of NOAA's National Ocean Service administers the National Marine Sanctuary and National Estuarine Research Reserve Programs. The marine sanctuary program was established by the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA), and the estuarine research reserve program was established by the CZMA of 1972.

Marine sanctuaries and estuarine research reserves are designed and managed to meet the following goals, among others:

- enhance resource protection through the implementation of a comprehensive, long-term management plan tailored to the specific resources;
- promote and coordinate research to expand scientific knowledge of sensitive marine resources and improve management decision-making;

- enhance public awareness, understanding, and wise use of the marine environment through public interpretive and recreational programs; and
- provide for optimum compatible public and private use of special marine areas.

### 3.21.1 Marine Protection, Research, and Sanctuaries Act of 1972

The Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA) (33 U.S.C. 1401 et seq.) established the National Marine Sanctuary Program, which is administered by NOAA. The MPRSA, also known as the Ocean Dumping Act, regulates ocean dumping in territorial seas or the contiguous zone of the United States. Most of the dredged material disposed in the ocean is disposed at ocean dumping sites specifically designated by the USEPA for dredged material under Section 102 of the MPRSA. All ocean dumping sites are required to have a site management and monitoring plan. Appropriate management of ocean dumping sites is aimed at assuring that disposal activities will not unreasonably degrade or endanger human health, welfare, the marine environment, or economic potentialities. The EISs on these disposal sites describe impacts that are expected to occur over a period of 25 years. Under 40 CFR 228, pursuant to Section 103 of the MPRSA, sites and times for ocean dumping of dredged and nondredged materials are issued by the USACE subject to USEPA approval. Under 33 U.S.C. 1413 (33 CFR 324), USACE reviews applications for permits to transport dredged and nondredged materials for the purpose of dumping it in ocean waters. On December 31, 1981, 33 U.S.C. 1412(a) mandated the termination of ocean dumping of sewage sludge and industrial waste.

### 3.21.2 National Estuarine Research Reserves

The National Estuarine Research Reserve System is a network of protected areas established for long-term research, education, and stewardship. This partnership program between NOAA and coastal states has established five reserves in the GOA: Mission-Aransas Reserve in Texas, Grand Bay National Estuarine Research Reserve in Mississippi, Weeks Bay National Estuarine Research Reserve in Alabama, and Rookery Bay National Estuarine Research Reserve and Apalachicola National Estuarine Research Reserve in Florida.

The Mission-Aransas National Estuarine Research Reserve protects 186,189 ac (75,153 ha) in Aransas and Refugio Counties, 30 mi (48 km) northeast of Corpus Christi, Texas. It is a contiguous complex of wetland, terrestrial, and marine environments. The land is mostly coastal prairie with unique oak motte habitats. The wetlands include riparian habitat and fresh and saltwater marshes. Within the water areas, the bays are large, open, and include extensive tidal flats, seagrass meadows, mangroves, and oyster reefs. These unique and diverse estuarine habitats in the western GOA support a host of endangered and threatened species, including the endangered whooping crane.

Grand Bay National Estuarine Research Reserve protects about 18,049 ac (7,304 ha) in Jackson County, Mississippi. Located between Pascagoula and the Alabama State line, it contains diverse habitats that support several rare or endangered plants and animals. The Grand Bay National

Estuarine Research Reserve's fishery resources include oysters, fish, and shrimp. The area also has recreational resources and archaeological sites.

Weeks Bay National Estuarine Research Reserve protects a small estuary of approximately 9,317 ac (3,770 ha) in Baldwin County, Alabama. Weeks Bay is a shallow open bay with an average depth of less than 4.9 ft (1.5 m) and extensive vegetated wetland areas. The Bay receives waters from the spring-fed Fish and Magnolia Rivers and connects with Mobile Bay through a narrow opening.

Rookery Bay National Estuarine Research Reserve, at more than 110,000 ac (44,515 ha), protects a large mangrove-filled bay and two creeks, along with their drainage corridors. Management of the sanctuary is performed by the Florida Department of Environmental Protection's Coastal Office in cooperation with NOAA. A myriad of wildlife, including 150 species of birds and many threatened and endangered animals, thrive in the estuarine environment and surrounding upland hammocks and scrub found within the reserve.

The Apalachicola National Estuarine Research Reserve, at about 234,715 ac (94,985 ha), is one of the largest remaining naturally functioning ecosystems in the Nation, and it is also the first sanctuary on the mouth of a major navigable river. Its establishment served to promote improved cooperation concerning river navigation among the States of Florida, Alabama, and Georgia. The oyster industry is the major business activity of the Apalachicola National Estuarine Research Reserve, which is located adjacent to the sanctuary. It is expected that the sanctuary will benefit this and other fishing industries by protecting the environment and by providing research information that will help assure the continued productivity of the bay/river ecosystem.

### 3.21.3 National Estuary Program

In 1987, an amendment to the CWA, known as the Water Quality Act (Pub. L. 100-4), established the National Estuary Program. The purpose of the National Estuary Program is to identify nationally important estuaries, to protect and improve their water quality, and to enhance their living resources. Under the National Estuary Program, which is administered by the USEPA, the comprehensive management plans are generated to protect and enhance environmental resources. The governor of a state may nominate an estuary for the Program and request that a Comprehensive Conservation and Management Plan be developed for an estuary. Representatives from Federal, State, and interstate agencies; academic and scientific institutions; and industry and citizen groups work during a three- to five-year period to define objectives for protecting the estuary, to select the chief problems to be addressed in the Plan, and to ratify a pollution control and resource management strategy to meet each objective. Strong public support and subsequent political commitments are needed to accomplish the actions called for in the Plan; hence, the three- to five-year time period to develop the strategies. A total of 28 estuaries have been selected for the Program, seven of which are in the GOAR: Sarasota Bay, Charlotte Harbor, and Tampa Bay in Florida; Mobile Bay in Alabama; the Barataria-Terrebonne Estuarine Complex in Louisiana; and Galveston Bay and Coastal Bend Bay and Estuaries in Texas.

### 3.21.4 National Marine Sanctuaries Act

The National Marine Sanctuaries Act (NMSA) (16 U.S.C. 1431 et seq.) was enacted in 1972 and is the legislative mandate that governs NOAA's Office of National Marine Sanctuaries (ONMS) and the National Marine Sanctuary System. Under the NMSA, the Secretary of Commerce is authorized to designate and manage areas of the marine environment as National Marine Sanctuaries. Such designation is based on attributes of special national significance, including conservation, recreational, ecological, historical, scientific, cultural, archaeological, educational, or aesthetic qualities. Day-to-day management of National Marine Sanctuaries has been delegated by the Secretary of Commerce to NOAA's Office of National Marine Sanctuaries.

The primary mandate of the NMSA is resource protection. The NMSA provides several tools for protecting designated National Marine Sanctuaries. It provides the authority to issue regulations for each sanctuary and the system as a whole. ONMS regulations, codified at 15 CFR 922, prohibit specific kinds of activities, describe and define the boundaries of the national marine sanctuaries, and set up a system of permits to allow the conduct of certain types of activities. Permits are required for any action that includes activities otherwise prohibited by sanctuary regulations.

Section 304(d) of the NMSA requires that Federal agencies consult with ONMS for any Federal action internal or external to a National Marine Sanctuary that is "likely to destroy, cause the loss of, or injure any sanctuary resource." The purpose of the consultation is to prevent or minimize potential injury to any sanctuary resource by requiring assessment of the proposed Federal action before the initiation of any such action and allowing the ONMS the opportunity to recommend alternatives that would protect sanctuary resources. To streamline the sanctuary consultation process, ONMS may combine the process with environmental reviews required by other laws, such as NEPA.

The Flower Garden Banks National Marine Sanctuary, the only sanctuary in the GOA, was designated to project the northernmost Atlantic coral reefs, which provide critical habitat for recreationally and commercially important fish and threatened and endangered species of manta rays, sea turtles, and corals. First designated in 1992, the sanctuary consisted of East and West Flower Garden Banks. Stetson Bank was added in 1996. In 2021, portions of 14 more banks were added to the sanctuary including Horseshoe, MacNeil, Rankin, 28 Fathom, Bright, Geyer, Elvers, McGrail, Bouma, Sonnier, Rezak, Sidner, Parker, and Alderdice Banks, and the boundaries of the existing banks were adjusted. NOAA's Final Rule for the 2021 sanctuary expansion (86 FR 4937) applied existing sanctuary regulations to all new areas.

DOI has taken action to protect the biological resources of the sanctuary from damage due to oil and gas exploration and development activities. BOEM has established a "No Activity Zone" around

the shallow water coral cap of each bank within the sanctuary[1] and has established other operational restrictions as described in the Topographic Features Stipulation. Additionally, there is a Presidential Memorandum (The White House 2008) that prohibits leasing in OCS areas designated as National Marine Sanctuaries as of July 14, 2008. This applied to East and West Flower Garden Banks and Stetson Bank. This memorandum does not include any of the banks incorporated into the sanctuary in the 2021 expansion.

## 3.22 COASTAL BARRIER RESOURCES ACT

The Coastal Barrier Resources Act (16 U.S.C. 3501 et seq.) of 1982 established that undeveloped coastal barrier islands, per the Act's definition, may be included in a Coastal Barrier Resource System. The Coastal Barrier Resources Act prohibits all new Federal expenditures and financial assistance within the Coastal Barrier Resource System, with certain specific exceptions, including energy development. The purpose of this legislation was to end the Federal Government's encouragement for development on barrier islands by withholding Federal flood insurance for new construction of or substantial improvements to structures on undeveloped coastal barriers.

## 3.23 NATIONAL HISTORIC PRESERVATION ACT

The National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. 300101 et seq.), recognizes that the preservation of historic properties is in the public interest and identifies Federal agencies' responsibilities towards the preservation and use of historic properties. The NHPA also provides for a National Register of Historic Places to include districts, sites, buildings, structures, and objects noteworthy in American history, architecture, archaeology, and culture. These items may bear national, State, or local significance. The NHPA provides funding for the State Historic Preservation Officers and their staff to conduct surveys and comprehensive preservation planning, establishes standards for State programs, and requires States to establish mechanisms for certifying local governments to participate in the National Register nomination and funding programs.

Section 106 of the NHPA (54 U.S.C. 306108), as implemented in the Advisory Council on Historic Preservation regulations at 36 CFR 800, "Protection of Historic Properties," as amended, requires that Federal agencies having direct or indirect jurisdiction over a proposed Federal, federally assisted, or federally licensed undertaking, before approval of the expenditure of funds or the issuance of a license, take into account the effect of the undertaking on any district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places. 36 CFR 800.4 lays out the process for the identification of historic properties, including setting the standard as, "The agency official shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field

1 Horseshoe Bank, a mesophotic bank, does not contain a "No Activity Zone" or a Topographic Features Stipulation.

investigation, and field survey." The head of any Federal agency shall afford the Advisory Council on Historic Preservation a reasonable opportunity to comment about federal undertakings. If any undertaking may affect historic properties that are of significance to Native American tribal communities, then Federal agencies are required to consult with Native American tribes on a government-to-government basis in a manner that is respectful of tribal sovereignty. The regulations require Federal agencies to acknowledge the special expertise of Native American tribes in determining which historic properties are of religious and cultural significance to them. Section 106 of the NHPA complements Section 101(b)(4) of NEPA, which states that it is the continuing responsibility of the Federal Government to preserve important historic and cultural aspects of our natural heritage, and Section 11(g)(3) of the OCSLA, as amended, which states that "exploration (oil and gas) will not . . . disturb any site, structure, or object of historical or archaeological significance."

According to 36 CFR 800.5, an undertaking has an effect on a historic property when that undertaking has the potential to alter the characteristics of the property that qualified the property for inclusion in the National Register of Historic Places. The effects generally include physical disturbance, noise, or visual effects. If an adverse effect on historic properties is found, BOEM would notify the Advisory Council on Historic Preservation, consult with the State Historic Preservation Office, when appropriate, and encourage the applicant to avoid, minimize, or mitigate adverse effects. Ground-disturbing activities associated with construction or decommissioning, as well as viewshed effects of OCS energy infrastructure (e.g., wind turbine generators), are subject to Section 106 review.

A Section 106 review is the Federal review process designed to ensure that historic properties are considered during Federal project planning and execution. The process is conducted on proposed activities by BOEM archaeologists, in consultation with State and Tribal Historic Preservation Offices, where appropriate.

Historic properties (i.e., archaeological resources) on the OCS include historic shipwrecks, sunken aircraft, lighthouses, and prehistoric archaeological sites that have become inundated as a result of the 394-ft (120-m) rise in global sea level since the height of the last Ice Age (circa 19,000 years ago). Though the U.S. has exclusive access to mineral resources within the EEZ, the OCS is not federally owned land and the Federal Government has not claimed direct ownership of historic properties on the OCS (with the exception of U.S. Navy craft as defined in the Sunken Military Craft Act [10 U.S.C. 113 et seq.]). Therefore, BOEM has the authority only under Section 106 of the NHPA to ensure that our funded and permitted actions do not adversely affect significant historic properties. This authority includes requiring industry to conduct surveys to locate, identify and, if necessary, investigate known or potential historic properties that may be or have been affected by their actions (30 CFR 550.194). BOEM's authority to manage historic properties on the OCS, however, does not extend to entities other than those operating under a BOEM-issued lease, permit, or BOEM funding.

Section 110 of NHPA (54 U.S.C. 306101(a) and 306102) directs the heads of all Federal agencies to assume responsibility for the preservation of National Register listed or eligible historic properties owned or controlled by their agency, as well as those not under agency jurisdiction and

control but that are potentially affected by agency actions. Federal agencies are directed to locate, inventory, and nominate properties to the National Register, to exercise caution to protect such properties, and to use such properties to the maximum extent feasible. Other major provisions of Section 110 include documentation of properties adversely affected by Federal undertakings (54 U.S.C. 306103), the establishment of trained Federal preservation officers in each agency (54 U.S.C. 306104), and the inclusion of the costs of preservation activities as eligible agency project costs (54 U.S.C. 306109).

## 3.24 Annex Rules to the United Nations Education, Scientific and Cultural Organization's Convention on the Protection of Underwater Cultural Heritage

The United Nations Education, Scientific and Cultural Organization's (UNESCO) Convention on the Protection of Underwater Cultural Heritage was adopted in 2001 by UNESCO's General Conference and entered into force on January 2, 2009. The Convention is based on recognition of the international responsibility for States to protect underwater cultural heritage; to follow established policies and scientific standards for research, recovery, and preservation; to prohibit commercial exploitation of underwater cultural heritage; and to cooperate with other States to protect underwater cultural heritage through training, education, and outreach (86 FR 4937). The 2001 UNESCO Convention achieves these objectives by restricting activities that may directly or indirectly harm underwater cultural heritage and by authorizing activities directed at underwater cultural heritage only when they are compliant with the Annex Rules. For activities and investigations directed at underwater cultural heritage, the Annex Rules establish standards and practices for the following: project design; preliminary assessments; project objectives, methods, and techniques; funding; project duration; personnel qualifications; site conservation and management; documentation; safety; environment; reporting; curation; and dissemination. There are currently over 40 parties to the 2001 UNESCO Convention, and, though the United States is not one of them, it does support the Convention's underlying purpose and the Annex Rules. Additionally, the United States enforces several laws and policies that are consistent with the obligations described in the 2001 UNESCO Convention (Varmer 2014).

## 3.25 Rivers and Harbors Act of 1899

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403 et seq.) prohibits the unauthorized obstruction or alteration of any navigable water of the U.S. The construction of any structure in or over any navigable water of the U.S., the excavating from or depositing of dredged material or refuse in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters is unlawful without prior approval from the USACE. The legislative authority to prevent inappropriate obstructions to navigation was extended to installations and devices located on the seabed to the seaward limit of the OCS by Section 4(e) of OCSLA of 1953, as amended.

Operators planning to install structures for the exploration, production, and transportation of oil, gas, and minerals on the OCS must apply for a Section 10 Permit. USACE can authorize these activities by a standard individual permit, letter-of-permission, general permit, nationwide permit, or regional permit, and makes this determination at the time of application. Typically, USACE authorizes the installation of these OCS structures under Nationwide Permit 8. Under a Nationwide Permit 8, such structures shall not be placed (1) within the limits of any designated shipping safety fairway or traffic separation scheme, except temporary anchors that comply with the fairway regulations in 33 CFR 322.5(l), (2) within established danger zones or restricted areas as designated in 33 CFR 334, or (3) within USEPA- or USACE-designated dredged material disposal areas.

## 3.26 Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act of 1970 (29 U.S.C. 651-678) was enacted to assure, to the extent possible, safe and healthful working conditions and to preserve our human resources. The Act encourages employers and employees to reduce occupational safety and health hazards in their places of employment and stimulates the institution of new programs and the perfection of existing programs for providing safe and healthful working conditions. The Act established the National Institute for Occupational Safety and Health, the Occupational Safety and Health Administration (OSHA), and the National Advisory Committee on Occupational Safety and Health. The National Institute for Occupational Safety and Health is responsible for conducting research and making recommendations for the prevention of work-related injury and illness. OSHA is responsible for developing and enforcing workplace safety and health regulations. The National Advisory Committee on Occupational Safety and Health advises the Secretaries of Labor and Health and Human Services on occupational safety and health programs and policies.

The Act empowers the Secretary of Labor or his representative to enter any factory, plant, establishment, workplace, or environment where work is performed by employees and to inspect and investigate during regular working hours and at other reasonable times any such place of employment and all pertinent conditions and equipment therein. If, upon inspection, the Secretary of Labor or authorized representative believes that an employer has violated provisions of the Act, the employer shall be issued a citation and given 15 days to contest the citation or proposed assessment of penalty.

## 3.27 Marine Debris Research, Prevention, and Reduction Act

The Marine Debris Research, Prevention, and Reduction Act (Pub. L. 109-449) was enacted in December 2006. The purposes of this Act are (1) to help identify, determine sources of, assess, reduce, and prevent marine debris and its adverse impacts on the marine environment and navigation safety; (2) to reactivate the Interagency Marine Debris Coordinating Committee; and (3) to develop a Federal marine debris information clearinghouse. The Act established, within NOAA and USCG, a Marine Debris Prevention and Removal Program to reduce and prevent the occurrence and adverse impacts of marine debris on the marine environment and navigation safety.

Under NOAA's program, the Administrator shall (1) in consultation with relevant Federal agencies, undertake marine debris mapping, identification, impact assessment, prevention, and removal efforts, with a focus on marine debris posing a threat to living marine resources and navigation safety; (2) improve efforts to reduce adverse impacts of lost and discarded fishing gear on living marine resources and navigation safety; (3) undertake outreach and education of the public and other stakeholders (such as the fishing industry, fishing gear manufacturers, other marine-dependent industries, and the plastic and waste management industries) on sources of marine debris, threats associated with marine debris and its adverse impacts on the marine environment, and navigational safety, including outreach and education activities through public-private initiatives; and (4) acting through the Program, enter into cooperative agreements and contracts and provide financial assistance in the form of grants for projects to accomplish the purpose set forth in the Act.

Under the USCG's program, the Commandant, in consultation with the Interagency Committee, shall (1) take action to reduce violations of and to improve implementation of MARPOL Annex V and the Act to Prevent Pollution from Ships (33 U.S.C. 1901 et seq.) with respect to the discard of plastics and other garbage from vessels; (2) take actions to cost-effectively monitor and enforce compliance with MARPOL Annex V and the Act to Prevent Pollution from Ships (33 U.S.C. 1901 et seq.), including through cooperation and coordination with other Federal and State enforcement programs; (3) take actions to improve compliance with requirements under MARPOL Annex V and Section 6 of the Act to Prevent Pollution from Ships (33 U.S.C. 1905) that all U.S. ports and terminals maintain and monitor the adequacy of receptacles for the disposal of plastics and other garbage, including through promoting voluntary government-industry partnerships; (4) develop and implement a plan, in coordination with industry and recreational boaters, to improve ship-board waste management, including recordkeeping, and access to waste reception facilities for ship-board wastes; (5) take action to improve international cooperation to reduce marine debris; and (6) establish a voluntary reporting for commercial vessel operators and recreational boaters to report incidents of damage to vessels, disruption of navigation caused by marine debris, and observed violations of laws and regulations relating to the disposal of plastics and other marine debris.

Nothing in this Act supersedes or limits the authority of the Secretary under OCSLA (43 U.S.C. 1331 et seq.).

## 3.28 American Indian Religious Freedom Act of 1978

The American Indian Religious Freedom Act of 1978 (42 U.S.C. 1996) establishes the policy of the Federal Government "to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including, but not limited to, access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites."

## 3.29 Federal Aviation Act of 1958

The Federal Aviation Act of 1958 (49 U.S.C. 44718, 14 CFR 77) requires that, when construction, alteration, establishment, or expansion of a structure is proposed, adequate public notice be given to the Federal Aviation Administration, as necessary, to promote safety in air commerce and the efficient use and preservation of the navigable airspace.

## 3.30 Migratory Bird Treaty Act of 1918

The Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703-712), provides that it is unlawful to pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg of any such bird, unless authorized under a permit issued by the Secretary. Some regulatory exceptions apply. Take is defined in regulations as "pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect." The Migratory Bird Treaty Act protects over 800 species of birds that occur in the United States. Where BOEM actions affect migratory birds, BOEM may coordinate with FWS to develop best management practices to reduce impacts or mitigate for negative impacts from OCS activities and/or structures. Efforts to improve migratory bird conservation in the GOA region continue through BOEM's Environmental Studies Program by contributing data from scientific research about the Nation's marine and coastal environment.

## 3.31 49 U.S.C. 44718: Structures Interfering with Air Commerce

The Federal Aviation Administration's (FAA's) authority to promote the safe and efficient use of the navigable airspace, whether concerning existing or proposed structures, is predominately derived from 49 U.S.C. 44718. The regulations at 14 CFR 77, "Objects Affecting Navigable Airspace," were adopted to establish notice criteria for proposed construction or alteration that would protect aircraft from encountering unexpected structures. These regulations apply to structures located within any state, territory, or possession of the U.S., within the District of Columbia, or within territorial waters (13.8 mi; 22.2 km) surrounding such states, territories, or possessions.

Any vertical structure greater than 200 ft (61 m) in height must have FAA approval to avoid or minimize obstruction to navigable airspace. The height of individual wind turbine generators would exceed this 200-ft (61-m) threshold (overall height of 440 ft [134 m] mean sea level) and, therefore, would require FAA-approved lighting and/or marking.

## 3.32 U.S. Coast Guard Regulations

Pursuant to 33 CFR 66.01 and under provisions of 46 U.S.C. and 33 U.S.C. 30, USCG has safety and regulatory jurisdiction over projects located in navigable waters of the United States. The proposed wind turbine generators constitute a fixed structure in navigable waters of the U.S., which requires private aids to navigation marking. All wind turbine generators and the electrical service platforms are subject to USCG review for authorization to mark and light wind turbine generators and electrical service platforms.

## 3.33 MARKING OF OBSTRUCTIONS

The Marking of Obstructions (14 U.S.C. 86) was enacted in January 2004. The USCG may mark, for the protection of navigation, any sunken vessel or other obstruction existing on the navigable waters or waters above the continental shelf of the U.S. in such a manner and for so long as, in his judgment, the needs of maritime navigation require. The owner of such obstruction shall be liable to the U.S. for the cost of such marking until such time as the obstruction is removed or its abandonment legally established or until such earlier time as USCG may determine.

## 3.34 FISH AND WILDLIFE COORDINATION ACT

The Fish and Wildlife Coordination Act (FWCA) (16 U.S.C. 661-666c), enacted March 10, 1934, is intended to protect fish and wildlife when Federal actions result in the control or modification of a natural stream or body of water. FWCA provides the basic authority for the involvement of FWS in evaluating impacts to fish and wildlife from proposed water resource development projects. FWCA requires that all Federal agencies consult with FWS, NMFS, and State wildlife agencies for activities that affect, control, or modify waters of any stream or bodies of water. NEPA was initially proposed as an amendment to the FWCA, but it was enacted as an independent directive.

## 3.35 MERCHANT MARINE ACT OF 1920 (JONES ACT)

The Merchant Marine Act of 1920, or Jones Act, regulates coastal shipping between ports and inland waterways. The Jones Act provides that “no merchandise shall be transported by water, or by land and water … between points in the United States … in any other vessel than a vessel built in and documented under the laws of the United States and owned by persons who are citizens of the United States….” That is, the Jones Act requires that all goods shipped between different ports in the United States or its territories must be carried on vessels built and documented (flagged) in the U.S.; crewed by U.S. citizens or legal aliens licensed by the USCG; and owned and operated by U.S. citizens.

The rationale behind the Jones Act and earlier sabotage laws was that the United States needed a merchant marine fleet to ensure that its domestic waterborne commerce remained under government jurisdiction for regulatory, safety, and national defense considerations. The same general principles of safety regulations are applied to other modes of transportation in the United States. While other modes of transportation can operate foreign-built equipment, these units must comply with U.S. standards. However, many foreign-built ships do not meet the standards required of U.S.-built ships and so are excluded from domestic shipping.

The U.S. Customs Service has determined that facilities fixed or attached to the OCS used for the purpose of oil exploration are considered points within the United States. The OCS oil facilities are considered U.S. sovereign territory and fall under the requirements of the Jones Act; therefore, all shipping to and from these facilities related to OCS oil exploration can be conducted only by vessels meeting the requirements of the Jones Act. Shuttle tankering of oil that is produced at OCS facilities can be legally provided only by U.S.-registered vessels and aircraft that are properly endorsed for coastwise trade under the laws of the United States.

# 4 CONCLUSIONS

BOEM consults with Federal departments and agencies that have authority to govern and maintain ocean resources pursuant to other Federal laws. The OCS leasing process for oil, natural gas, or renewable energy can be complex. Federal laws mandate the OCS leasing program (e.g., OCSLA) and the environmental review process (i.e., NEPA). Regulatory requirements are coordinated with Federal, State, and local agencies to encourage orderly, safe, and environmentally responsible development of energy sources on the OCS.

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