Why GAO Did This Study
The offshore oil and gas industry has installed approximately 40,000 miles of oil and gas pipelines in federal offshore waters since the 1940s. BSEE is responsible for enforcing standards and regulations for oil and gas operations—including the oversight of active pipelines and their decommissioning—to enhance environmental protection and safety. As pipelines age, they are more susceptible to damage from corrosion, mudslides, and seafloor erosion, which can result in leakage of oil and gas into the ocean. Additionally, hurricanes can move pipelines extensive distances, which may damage subsea habitat, impede access to sediment resources, and create navigational and trawling hazards.

GAO was asked to review BSEE’s management of offshore oil and gas pipelines. This report examines BSEE’s processes for (1) ensuring active pipeline integrity and (2) addressing safety and environmental risks posed by decommissioning. GAO reviewed regulations, procedures, and other documents and data related to BSEE’s pipeline management processes. GAO also interviewed BSEE officials and those from other agencies with offshore responsibilities.

What GAO Found
The Department of the Interior’s (Interior) Bureau of Safety and Environmental Enforcement (BSEE) does not have a robust oversight process for ensuring the integrity of approximately 8,600 miles of active offshore oil and gas pipelines located on the seafloor of the Gulf of Mexico. Specifically, BSEE does not generally conduct or require any subsea inspections of active pipelines. Instead, the bureau relies on monthly surface observations and pressure sensors to detect leaks. However, officials told us that these methods and technologies are not always reliable for detecting ruptures. In response to a pair of significant oil leaks in 2016 and 2017, BSEE partnered with industry to improve subsea leak detection, but the technologies identified remain relatively new and cannot be retrofitted to a majority of pipelines. According to BSEE, the bureau’s regulations are outdated and do not address how pipelines should be inspected, the complexities of deep water pipeline operations, and changes in technological standards. BSEE has long recognized the need to improve its pipeline regulations, and in 2007 issued a proposed rule that cited the need to enhance safety and protect the environment, but this effort stalled. The 2007 proposed rule addressed offshore pipeline integrity, including new requirements regarding pipeline inspection and subsea leak detection technologies. Since 2013, BSEE has noted plans to update its pipeline regulations but has made limited progress in the interim. Without taking actions to develop, finalize, and implement updated regulations to address identified oversight gaps, BSEE will continue to be limited in its ability to ensure the integrity of active pipelines.

BSEE does not have a robust process to address the environmental and safety risks posed by leaving decommissioned pipelines in place on the seafloor due to the cumulative effects of oversight gaps before, during, and after the decommissioning process. First, BSEE does not thoroughly account for such risks during the review of decommissioning applications. This has contributed to BSEE and its predecessors authorizing industry to leave over 97 percent (about 18,000 miles) of all decommissioned pipeline mileage on the Gulf of Mexico seafloor since the 1960s. Generally, pipelines must be removed from the seafloor. BSEE, however, may allow pipelines to be decommissioned-in-place if certain criteria are met. Such a high rate of approval indicates that this is not an exception, however, but rather that decommissioning-in-place has been the norm for decades. Second, BSEE does not ensure that operators meet decommissioning standards, such as cleaning pipelines, because they do not observe any pipeline decommissioning activities, inspect pipelines after their decommissioning, or verify most of the pipeline decommissioning evidence submitted. Third, BSEE does not monitor the condition and location of pipelines following their decommissioning-in-place, which reduces its ability to mitigate any long-term risks, such as pipeline exposure or movement. Additionally, if pipelines decommissioned-in-place are later found to pose risks, there is no funding source for removal. As discussed above, BSEE has made limited progress in updating what it acknowledges are outdated pipeline regulations. Without taking actions to develop, finalize, and implement updated pipeline regulations, BSEE will continue to be limited in its ability to ensure that its pipeline decommissioning process addresses environmental and safety risks.

What GAO Recommends
GAO recommends that BSEE take actions to further develop, finalize, and implement updated pipeline regulations to address long-standing limitations regarding its ability to (1) ensure active pipeline integrity and (2) address safety and environmental risks associated with pipeline decommissioning. Interior agreed with this recommendation.

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