FACT SHEET



Offshore Hydraulic Fracturing Q&A

1. Is offshore hydraulic fracturing the same procedure as operations conducted onshore?

The basic operation of hydraulic fracturing is similar but the scale is significantly different than onshore operations due in large part to the geologic formations and the cost and logistical constraints that occur with offshore platforms. Typical water usage for offshore hydraulic fracturing is 2% of the liquids that is used routinely for onshore hydraulic fracturing (like those used in the Marcellus shale play, for example).

2. How are hydraulic fracturing permits reviewed?

BSEE closely examines each and every drilling permit that is submitted to the Bureau by a team of subject matter experts that examine all proposed activities for safety, environmental, geohazard or related concerns. Hydraulic fracturing is not a drilling method but rather one of the many operations that an operator can propose to use on an Application for Permit to Drill or Modify. As such, and to the limited extent that it is used offshore, each application is unique and receives a thorough examination by trained experts.

BSEE coordinates with the U.S. Environmental Protection Agency (EPA) to ensure that chemicals used in hydraulic stimulation of wells are covered under the EPA's Authorization to Discharge under the National Pollutant Discharge Elimination System (NPDES) for Oil and Gas Exploration, Development, and Production Facilities. The EPA has deemed that the discharges related to hydraulic fracturing are authorized subject to the requirements of the general permit for discharge, and that no additional requirements or approvals are needed.

3. How are discharges regulated?

All discharges are regulated by the EPA under the general NPDES permit for offshore oil and gas operations, which addresses the chemical constituents that are allowable for overboard discharge of treated water.

4. Why is hydraulic fracturing happening offshore?

Hydraulic fracturing is utilized offshore primarily during the well completion phase of developing a well for production to enhance safety and security of the well, while optimizing production. This constitutes the majority of hydraulic fracturing activities that are conducted offshore. Hydraulic fracturing can also be used to prepare a well for enhanced oil recovery or to work over the well to increase production when the well has been under production for some time.

5. How does BSEE track hydraulic fracturing activities?

Hydraulic fracturing is not a drilling method but rather one of the many operations that an operator can propose to use on an Application for Permit to Drill or Modify. As such, and to the limited extent that it is used offshore, each application is unique and receives a thorough examination by trained experts. If an application includes hydraulic fracturing as one of the requested operations, a description of the operation is included in the proposed operations section of the application. Recently, BSEE added a separate box to mark which gives operators the ability to indicate whether hydraulic fracturing is being requested <u>in addition</u> to including a description in the proposed operations section. This new application feature will allow BSEE to quickly identify which applications include hydraulic fracturing without having to review each individual applications proposed operations section.