

## **Liquid Fuel Off-Shore Unloading Facility. FAC: 1631**

CATCODE: 163311

OPR: AF/A4LE, AFPET/PTOT

OCR: AFCEC/COS

1.1. **Description.** This facility consists of a submerged sea unloading pipeline with tanker mooring facilities.

1.2. **Requirements Determination.** Under some circumstances, it may be advantageous to use an offshore unloading facility.

1.3. **Scope Determination.** See UFC 4-151-10, UFC 4-152-01, and UFC 4-159-03.

1.4. **Dimensions.** See UFC 3-460-01.

1.5. **Design Considerations.**

1.5.1. Securely anchor the underwater pipeline to the bottom and ensure it extends from the shore out to the mooring area. Size the pipeline according to the same conditions outlined above for piers and wharves.

1.5.2. Provide tanker mooring buoy(s) at the end of the pipeline in water deep enough for the safe maneuvering and berthing of the size tankers expected to use the facility.

1.5.3. A conventional five-point mooring is normally provided. The use of single point mooring buoys is not permitted without prior approval from AFCEC/COS.

1.5.4. Wherever waterfront fuel loading or unloading facilities are provided, facilities for control of fuel spills are necessary. This includes a storage building, approximately 93 m<sup>2</sup> (1,000 ft<sup>2</sup>), to store a small boat and fuel spill containment booms. Necessary quick boat launching capability is also required. Locate the storage structure as close to the fuel loading or unloading facilities as possible. Use Petroleum Operations Building (**CATCODE 121111**) for reporting purposes. Ensure the facilities comply with local, state, and federal requirements in respect to fuel vapor emissions, as required by AFI 32-7040, and other guidance as defined in paragraph 1.3.1 and 1.8.6.