

3.9 HAZARDOUS MATERIALS/RISK OF UPSET

3.9.1 Affected Environment

The proposed Project is located within an offshore area that is utilized for recreational, industrial, and commercial purposes. As described in Section 3.7 (Transportation), much of the vessel traffic within the Project area can be attributed to commercial and recreational activities that originate from local ports, specifically the Port of Los Angeles (POLA) and Port of Long Beach (POLB). Additionally, the northbound coastwise shipping lanes are located within the western portion of the proposed survey area, approximately 0.5 miles west of Platforms Elly and Eureka (Figure 1-1).

The proposed Project survey is estimated to take approximately 6 weeks. During this time, two primary Project vessels (M/V *Clean Ocean* and M/V *Silver Arrow* or equivalent) as well as one support vessel (M/V *Jab*) will be mobilized from the POLA/POLB and transit to/from and within the Project survey area. Project vessels will refuel at the POLA/POLB and no offshore refueling would occur. During the survey, job-related equipment on the vessels may be required to utilize a limited amount of hazardous materials (limited to fuels, hydraulic fluids, and lubricants) associated with the operation of internal combustion engines and hydraulic equipment. Given the proximity of the Project survey area to the POLA/POLB and offshore vessel traffic lanes, a discussion of hazardous materials and potential risk of upset is provided below.

3.9.2 Regulatory Setting

3.9.2.1 Existing Beta Unit Platform Safety Zones

The USCG requires a safety zone around Platforms Edith, Ellen and Elly, and Eureka within Title 33 (Navigation and Navigable Waters), Part 147 (Safety Zones).

§ 147.1108. Platform EDITH safety zone: (a) Description: The area within a line 500 meters [1,640 feet] from each point on the structure's outer edge. The position of the center of the structure is 33°-35'-45" N. 118°-08'-27" W. (b) Regulations: No vessel may enter or remain in this safety zone except for the following: (1) An attending vessel, (2) a vessel under 100 feet [30.5 meters] in length overall not engaged in towing, or (3) a vessel authorized by the Commander, Eleventh Coast Guard District.

§ 147.1104. Platform ELLEN & ELLY safety zone: (a) Description: The areas within a line 500 meters [1,640 feet] from each point on the outer edge of each structure. The structures are approximately 120 meters [394 feet] apart. The position of the center of each structure is: Platform Ellen, 33°-34'-57" N, 118°-07'-42" W; and Platform Elly, 33°-35'-00" N, 118°-07'-40" W. (b) Regulations: No vessel may enter or remain in this safety zone except the following: (1) An attending vessel serving either structure, (2) a vessel under 100 feet [30.5 meters] in length overall not engaged in towing, or (3) a vessel authorized by the Commander, Eleventh Coast Guard District.



§ 147.1111. Platform EUREKA safety zone: (a) Description: The area within a line 500 meters [1,640 feet] from each point on the structure's outer edge. The position of the center of the structure is 33-33-50 N, 118-07-00 W. (b) Regulations: No vessel may enter or remain in this safety zone except the following: (1) An attending vessel, (2) a vessel under 100 feet [30.5 meters] in length overall not engaged in towing or (3) a vessel authorized by the Commander, Eleventh Coast Guard District.

3.9.2.2 International, Federal, and State Regulations Offshore

The primary statutes, regulations, plans, and policies relevant to the Project that address potential risk of upset related to hazardous materials is provided in Table 3.9-1 below.

Agency or Regulation		
International		
International Convention for the Prevention of Pollution from Ships (MARPOL)	These regulations contain measures to prevent accidental and operational causes of marine pollution	
International Convention on Standards of Training, Certification, and Watchkeeping 78	These regulations set forth training, certification, and qualification requirements for senior ship personnel, including officers in charge of a navigational or engineering watch, and set ratings forming part of a navigational or engineering watch.	
Convention on the International Regulations for Preventing Collisions at Sea (COLREGS) (1972)	This convention governs the actions of all vessels in international waters. These rules determine the actions a vessel must take to avoid collision, and include rules for following, joining, and crossing traffic separation lanes; actions to be taken in conditions of reduced visibility; required lights and sound signals; and other applicable rules.	
International Navigational Rules Act of 1977	This act established The Navigation Rules, enforced by the USCG, which identify actions to be taken by vessels to avoid collision. The Navigation Rules require vessels restricted in their ability to maneuver to display appropriate day shapes or lights.	
Federal		
National Oil and Hazardous Substances Pollution Contingency Plan	This plan outlines requirements for responding to both oil spills and releases of hazardous substances, and provides for a comprehensive system for reporting, spill containment, and cleanup.	
Clean Water Act (CWA)	This act sets water quality standards for contaminants in surface waters, and makes it unlawful to discharge any pollutant from a point source into navigable waters without a permit.	
Act of 1980 to Prevent Pollution from Ships	The project vessels would be required to comply with MARPOL (see above) under this act.	
	Certain requirements are as follows:	
Navigation and Navigable Waters (33 CFR, Parts 151, 155, 160)	 Part 151 - Shipboard Oil Pollution Emergency Plans. This part requires that vessels carrying oil, noxious liquid substances, garbage, municipal or commercial waste, and ballast water develop and implement shipboard oil pollution emergency plans. Plans must be written in 	

Table 3.9-1. Regulations Considered for Proposed Project Area



Agency or Regulation	
	 accordance with MARPOL, as modified by Protocol of 1978 (MARPOL 73/78). Part 155 - Vessel Response Plans. This part requires that certain vessels develop and implement oil spill response plans and that resources needed to respond to an oil spill are identified in the planning process, and applies to any vessel that is constructed or adapted to carry (or that carries) oil in bulk as cargo or cargo residue, and that is a: United States (U.S.) vessel, a vessel that operates in the navigable waters of the U.S., or a vessel that transfers oil in a port or place subject to the jurisdiction of the U.S.; or Self-propelled vessel of 400 gross tons or greater, other than a tank vessel, that carries oil of any kind as fuel for main propulsion and that is a vessel of the U.S. or that operates on the navigable waters of the U.S. Part 160 - Port and Waterways Safety. This part authorizes the USCG Captain of the Port to regulate nearly all vessel traffic within U.S. waters in his/her jurisdiction, for safety and environmental reasons. Captain of the Port authority includes forbidding a vessel's entry into port or operation in U.S. waters, holding a vessel in port for repairs, forbidding cargo transfers, or restricting all vessel operations due to weather, port congestion, or other safety reasons.
Inspection and Regulation of Vessels (46 United States Code, Subtitle II, Part B)	These regulations provide that all vessels operating offshore, including those under foreign registration, are subject to requirements applicable to vessel construction, condition, and operation. All vessels (including motorboats) operating in commercial service (e.g., passengers for hire, transport of cargoes, hazardous materials, and bulk solids) on specified routes (inland, near coastal, and oceans) are subject to requirements applicable to vessel construction, condition, and operation. These regulations also allow for inspections to verify that vessels comply with applicable international conventions and with all U.S. laws and regulations.
State	
Lempert-Keene Seastrand Oil Spill Prevention and Response Act	This act requires immediate cleanup of spills following approved contingency plans and fully mitigating spills' impacts on wildlife.
California Code of Regulations (CCR), Title 14, Chapter 3	These regulations require specific oil spill prevention measures for non- tank vessels of more than 300 gross tons.
Porter-Cologne Water Quality Control Act of 1969 (California Water Code §§13000-13999.10)	The State Water Resources Control Board has the authority to review any proposed federally permitted or federally licensed activity that may impact water quality and to certify, condition, or deny the activity if it does not comply with state water quality standards. If the Board imposes a condition on its certification, those conditions must be included in the Federal permit or license.
California Coastal Act (CCA) of 1976	This act includes a requirement that protection against the spillage of crude oil, gas, petroleum, products, or hazardous substances be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures must be provided for accidental spills that do occur.



Agency or Regulation	
California Harbors and Navigation Code	This code includes requirements concerning vessel operations (including activities that are precluded during vessel operation), which are implemented by local city and county governments for the protection of public safety.
Hazardous Waste Control Act (Cal. Code Regs., tit. 26)	This act defines requirements for proper management of hazardous materials.

3.9.3 Impact Assessment

Project vessels will transit to/from the POLA/POLB area and within the Project survey area for approximately 42 days (six weeks), including node placement/recovery and survey operations. The offshore survey area is commonly utilized by recreational, industrial, and commercial vessels. The western portion of the proposed survey area is located within the northbound coastwise shipping lane. As such, a slight potential for release due to equipment failure or vessel contact would exist. Additionally, a limited volume of hazardous materials such as fuels, hydraulic fluids, and oils may also be used during construction activities.

The Beta Unit has been recently surveyed to map existing seafloor features (pipelines, cables, and hardbottom). Seafloor autonomous node deployment will avoid these features to the extent feasible to obtain the best quality imagery and fulfill the Project objectives. The proposed Project has been designed to minimize potential risk to the greatest extent feasible. Projectincorporated measures to reduce potential impacts are summarized below. As indicated, appropriate notices will be posted through the USCG and harbor master's office to provide advanced notice to vessels regarding Project timing and the Exclusion Zone for avoidance of Project activities. No anchoring is proposed during any Project activity, as node deployment/recovery will be conducted via "live-boating" and no anchoring is required during the Project activities. Additionally, seafloor node locations have been selected based upon a multitude of seafloor surveys and would avoid hard-bottom areas to the extent feasible and existing seafloor features such as pipelines and/or power cables within the survey area. The geophysical survey would be conducted 24/7 to shorten the timeframe required to complete the survey and minimize potential impacts. Further, during construction, construction BMP's as well as the Beta Unit Oil Spill Response and Prevention Plan (OSPRP) (Beta, 2016) (Appendix H) will be followed to prevent or immediately respond to any unauthorized release of hazardous materials to the marine environment. Based on these preventative measures, the short-term duration of Project activities, as well as the fact that equipment will be fueled prior to site mobilization; no impact is expected.

Project Incorporated Measures to Reduce Potential Impacts:

• Notice to Mariners. At least 15 days prior to in-water activities, Beta's contractor will submit a Local Notice to Mariners (NTM) to the 11th District, U.S. Coast Guard and, as required, to the Captain of the Port. This notification will specify vessel and personnel contact information, scope of the proposed actions, location, and the anticipated duration of the activities.



- **Posting of Notices.** A document that shows and describes the proposed activities will be posted at the Harbor Master's office at the Port of Los Angeles (POLA), Port of Long Beach (POLB), Long Beach Marina area, Anaheim Bay/Huntington Harbor, and Newport Bay. That document will provide information on the proposed activities, contact information for all Project vessels and personnel, and will have a map depicting the ocean area affected.
- Live Boating. The Project has been designed to avoid anchoring and protect existing seafloor features (pipelines, cables, and hardbottom) to the extent feasible. "Live boating" would be conducted during the autonomous node deployment/recovery procedures. No anchoring is required during survey operations.
- Vessel Specific Oil Spill Response Plan. The Geophysical Survey will occur via the use of the M/V *Silver Arrow* or equivalent and will be subject to the requirements and guidelines included within the vessel-specific Oil Spill Response Plan.
- Beta Unit Oil Spill Prevention and Response. All Project activities will be subject to the requirements and guidelines included within the "Beta Unit Complex (Platforms Elly, Ellen & Eureka, Beta Pipeline and Beta Pump Station) Oil Spill Prevention and Response Plan (OSPRP) Revision 3" (2016), (Appendix H).
- **Construction Best Management Practices (BMPs).** Throughout the Project, BMPs will be employed to prevent unauthorized releases.



3.9.4 References

Beta Operators, LLC. 2016. Beta Unit Complex (Platforms Elly, Ellen & Eureka, Beta Pipeline and Beta Pump Station) Oil Spill Prevention and Response Plan (OSPRP) - Revision 3.