US Army Corps of Engineers®

PUBLIC NOTICE

Applicant:
Keith Crane
Neptune LNG, LLC

Published: June 9, 2025
Expires: July 9, 2025

New England District
Permit Application No. NAE-2005-00658

TO WHOM IT MAY CONCERN: The New England District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403). The purpose of this public notice is to solicit comments from the public regarding the work described below:

APPLICANT: Keith Crane
Neptune LNG, LLC
1360 Post Oak Boulevard
Houston, Texas 77056

AGENT: Monica Rudowski
Environmental Resources Management, Inc.
1 Beacon Street
5th Floor
Boston, Massachusetts 02108

WATERWAY AND LOCATION: The project would occur in the Atlantic Ocean in waters off Marblehead, Salem, Beverly, and Manchester, Massachusetts at Latitude 42.5280 and Longitude -70.6951.

EXISTING CONDITIONS: The existing Neptune Liquid Natural Gas (LNG) deepwater port (DPW) contains the following components:

1) There is one 13.2-mile long pipeline, consisting of a 24-inch outer diameter pipe with a 0.5-inch wall thickness and 2.25 inches of concrete weight coating. Approximately 10 miles of the pipeline is in navigable waters while 3.2 miles is on the outer continental shelf (OCS).

2) There are two submerged turret loading (STL) buoys approximately 2.3 miles apart and both located on the OCS. Each STL buoy is attached to a flexible riser and umbilical leading to a pipeline end manifold (PLEM).

3) Each STL buoy is held in place with eight mooring lines and eight anchors. Each mooring line is composed of 150 meter long sheathed wire rope at the upper end and

138-millimeter studless (R4/R3) chain link below. The mooring lines vary from 1,722 feet long to 4,003 feet long.

4) The anchors consist of steel suction caissons and each anchor has a pad eye on the outer diameter to which the mooring line is attached. The location of the pad eyes varies ranging from 6 to 11.6 meters below the seafloor.

5) There are four tie-in spools.

6) There is one transition manifold and one hot tap assembly fitted with a 30-inch by 20-inch clamp-on tee with a 20-inch flanged isolation valve and structural support brace.

7) There are concrete mattresses and sand/cement bags.

PROJECT PURPOSE:

Basic: Port decommissioning

Overall: The purpose of the project is to decommission the Neptune LNG DWP. The DWP installation proposed to deliver natural gas to the New England region year-round for an expected 20-year period. However when the DWP was commissioned, the use and availability of shale gas had increased making the DWP unnecessary. Decommissioning of the DWP was included in the Port License, Section 20 during the original licensing process. The current suspension of port operations from the Maritime Administration (MARAD) expires in June 2025.

PROPOSED WORK: The applicant is proposing the following work related to decommissioning of the port:

1) The applicant would remove the existing gas in the pipeline prior to the other decommissioning activities. Gas removal would be performed using a dynamically positioned (DP) construction vessel with a vertical hot flare stack positioned near the south STL buoy. A temporary hose would be used for flaring. The gas removal procedure is expected to take 12 hours and will be scheduled for daytime hours only. Afterwards, the pipeline would be cleaned, flushed, and filled with seawater.

2) The applicant would decommission most of the pipeline in place. The connections to other components would be severed and concrete mattresses at the transition manifold and north and south PLEM locations would be removed and recovered to the surface. Afterwards, about 1,759 feet of pipeline (500 feet at the transition manifold, 805 feet at the north PLEM, and 454 feet at the south PLEM) would be removed. The remaining pipeline ends would be plugged, covered with sand/cement bags, and buried with native sediments to a depth of about 3 feet below the seafloor.

3) The applicant would remove the transition manifold, tie-in spools, hot tap assembly, and north and south PLEMs. Currently these structures occupy 5,949 square feet of subtidal bottom.

4) The applicant would remove both STL buoys and all sixteen mooring lines.

5) The applicant would cut all sixteen steel caisson anchors to three feet below the mudline.

6) Upon completion of decommissioning activities, the applicant would conduct an as-left survey. The survey would confirm the removal and the status of the seafloor.

ESTIMATED PROJECT IMPACTS:

Temporary Impacts

Infrastructure		Authority	Impact (ft^2)	Impact Area (acres)	Impact Volume (yd^3) [a]
Debris baskets/ tooling laydown areas	Temporary placement of debris baskets and/or tooling	Section 10/ Section 404	5,632.00	0.13	730.07 [b]
Hot tap concrete mattresses	Temporary placement of five existing concrete mattresses next to hot tap assembly prior to return to original authorized placement over the hot tap assembly	Section 10/ Section 404	800.00	0.02	22.22 [b]
STL buoy clump weights	Temporary use of clump weight to hold STL buoy in place	Section 10	800.00	0.02	444.44 [b]
Anchors	Temporary placement of excavated sediment adjacent to each anchor pile	Section 10	59,699.36	1.37	4,422.18
Total temporary impacts		Section 10	66,931	1.54	5,618.92
		Section 404	6,432	0.15	752.3

ft^2 = square feet; PLEM = pipeline end manifold; STL = submerged turret loading; yd^3 = cubic yards
[a] Values incorporate area and volume of the infrastructure being removed and the associated sediment disturbance.
[b] Infrastructure is sitting on seafloor. Volume of sediment impact from removal is assumed to be insignificant.

Permanent Impacts

Infrastructure		Authority	Impact (ft^2)	Impact Area (acres)	Type of Permanent Impact	Impact Volume—Sediment and Infrastructure (yd^3)
Pipeline	Remove pipeline segments near transition manifold and north and south PLEMs and bury pipeline ends 3 feet below the mudline	Section 10 (four pipeline ends)	4,523.92	0.10	Removal	961.64
	Placement of sand/ cement bags over transition manifold pipeline end before covering with native sediment	Section 10/ Section 404 (one pipeline end)	45.00	0.00	Addition	3.11
	Placement of sand/ cement bags over pipeline ends before covering with native sediment	Section 404 (three pipeline ends)	135.00	0.00	Addition	9.33
Concrete mattresses and sand/cement bags	141 concrete mattresses and sand/cement bags removed from the hot tap assembly, spools, and pipeline	Section 10	22,560.00	0.52	Removal	626.67

Permanent Impacts (continued)

Infrastructure		Authority	Impact (ft^2)	Impact Area (acres)	Type of Permanent Impact	Impact Volume—Sediment and Infrastructure (yd^3)
Hot tap assembly	Hot tap assembly removal	Section 10	2,160.00	0.05	Removal	562.88
Transition manifold	Transition manifold and overtrawlable structure removal [d]	Section 10	1,681.00	0.04	Removal	747.11
	Tie-in spool removal [e,f]	Section 10	452.18	0.01	Removal	101.97
North PLEM	PLEM base and pipes	Section 10	1,600	0.04	Removal	829.63
	Tie-in spool removal [f]	Section 10	349.72	0.01	Removal	92.52
South PLEM	PLEM base and pipes	Section 10	1,600.00	0.04	Removal	829.63
	Tie-in spool removal [f]	Section 10	678.00	0.02	Removal	43.26
Risers and umbilicals	Risers and umbilicals	Section 10	NA [g]	NA [g]	Removal	52.38 [g]
Mooring lines	Mooring lines	Section 10	NA [g]	NA [g]	Removal	1,924.07 [g]
STL buoys	North STL buoy	Section 10	NA [g]	NA [g]	Removal	593.02 [g]
	South STL buoy	Section 10	NA [g]	NA [g]	Removal	593.02 [g]
Anchors	Cut all 16 anchors 3 feet below mudline	Section 10	67,400.64	1.55	Removal	8,844.35
	Backfill of excavated anchor pit with sand/ cement bags and sandbags	Section 10	NA [h]	NA [h]	Addition	5,878.93
	Backfill of excavated anchor pit with native sediment	Section 10	NA [h]	NA [h]	Addition	3,095.52
Total permanent additional impacts [h]		Section 10	180.00	<0.01	Addition	8,986.90
		Section 404	45.00	<0.01	Addition	3.11
Total permanent removal impacts [i]		Section 10	103,005.46	2.36	Removal	16,802.14

Note: NA = not applicable; PLEM = pipeline end manifolds; STL = submerged turret loading; yd^3 = cubic yards
[a] Values incorporate area and volume of the infrastructure being removed and the associated sediment disturbance.
[b] Concrete mattress dimensions are 20 feet by 8 feet by 9 inches.
[c] The transition manifold is located underneath the overtrawlable structure, which has a larger footprint. The larger footprint of the overtrawlable structure is used for the impact.
[d] Includes the 24-inch and 16-in transition tie-in spools.
[e] Width and height dimensions for tie-in spools represent the surface area they cover.
[f] Impact area for these components is not provided because they are floating structures. Impact volume only reflects infrastructure volume.
[g] Area of anchor excavation backfill is accounted for in initial excavation and is not included to avoid double counting of impact areas.
[i] Totals may not equal the addends due to rounding.

AVOIDANCE AND MINIMIZATION: The applicant has provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

1) The decommissioning methods, construction procedures, and schedules would be chosen to minimize the degree of impacts on protected resources to the maximum extent practicable while still meeting agency objectives.

2) On completion of each decommissioning activity, the project area would be surveyed to verify that all debris was removed or decommissioned as required. Debris would be transported to an appropriate onshore facility for disposal or recycling.

3) The applicant has outlined measures that would be taken if any unexpected sediment or seafloor contamination were found during the work.

4) The applicant has outlined measures that would be taken in the event of any inadvertent releases of petroleum products or hazardous substances.

5) Project vessels would adhere to appropriate wastewater management protocols.

COMPENSATORY MITIGATION: The applicant has provided the following explanation why compensatory mitigation should not be required: Project impacts have been avoided and minimized to the maximum extent practicable and no special aquatic sites would be impacted by the proposed work.

CULTURAL RESOURCES:
The Marine Administration (MARAD) of the U.S. Department of Transportation is the lead federal agency for consultations on this project. Therefore MARAD is evaluating the undertaking for effects to historic properties as required under Section 106 of the National Historic Preservation Act. Their final determination relative to historic resource impacts may be subject to additional coordination with the State Historic Preservation Officer, federally recognized tribes and other interested parties.

ENDANGERED SPECIES: The Corps has performed an initial review of the application using the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), National Marine Fisheries Service (NMFS) XXXX Section 7 Mapper, and the NMFS Critical Habitat Mapper to determine if any threatened, endangered, proposed, or candidate species, as well as the proposed and final designated critical habitat may occur in the vicinity of the proposed project. Based on this initial review, the Corps has made a preliminary determination that the proposed project may affect species and critical habitat listed below. No other ESA-listed species or critical habitat will be affected by the proposed action.

ESA-listed species and/or critical habitat potentially present in the action area.

Species Common Name and/or Critical Habitat Name	**Scientific Name**	**Federal Status**
Atlantic sturgeon	*Acipenser oxyrinchus oxyrinchus*	threatened
Shortnose sturgeon	*Acipenser brevirostrum*	endangered
Kemps ridley sea turtle	*Lepidochelys kempii*	endangered
Loggerhead sea turtle	*Caretta caretta*	threatened
Green sea turtle	*Chelonia mydas*	threatened
Leatherback sea turtle	*Dermochelys coriacea*	endangered
Fin whale	*Balaenoptera physalus*	endangered
North Atlantic right whale	*Eubalaena glacialis*	endangered
North Atlantic right whale critical habitat	*Eubalaena glacialis*	critical habitat
Roseate tern	*Sterna dougalli dougallii*	endangered
Monarch butterfly	*Danaus plexippus*	proposed threatened

Pursuant to Section 7 ESA, any required consultation with the Services will be conducted in accordance with 50 CFR part 402. MARAD is the lead federal agency for ESA consultation for the proposed action and will complete any required consultation before a permit decision is rendered.

ESSENTIAL FISH HABITAT: Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act 1996, the Corps reviewed the project area, examined information provided by the applicant, and consulted available species information.

MARAD is the lead federal agency for the Essential Fish Habitat (EFH) consultation. A separate EFH consultation package will be sent to the National Marine Fisheries Service (NMFS). The final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.
The Corps will not make a permit decision until the consultation process is completed by MARAD.

NAVIGATION: The proposed structure or activity is not located in the vicinity of a federal navigation channel.

SECTION 408: The applicant will not require permission under Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408) because the activity, in whole or in part, would not alter, occupy, or use a Corps Civil Works project.

WATER QUALITY CERTIFICATION: Water Quality Certification may be required from the Massachusetts Department of Environmental Protection.

NOTE: This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. The geographic extent of aquatic resources within the proposed project area that either are, or are presumed to be, within the Corps jurisdiction has been verified by Corps personnel.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated

by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

COMMENTS: The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The New England District will receive written comments on the proposed work, as outlined above, until July 9, 2025. Comments should be submitted electronically via the Regulatory Request System (RRS) at https://rrs.usace.army.mil/rrs or to cenae-r-pn-ma@usace.army.mil. Alternatively, you may submit comments in writing to the Commander, U.S. Army Corps of Engineers, New England District, Attention: Regulatory Division, 696 Virginia Road, Concord, MA 01742. Please refer to permit application number NAE-2005-00658 in your comments.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing will be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

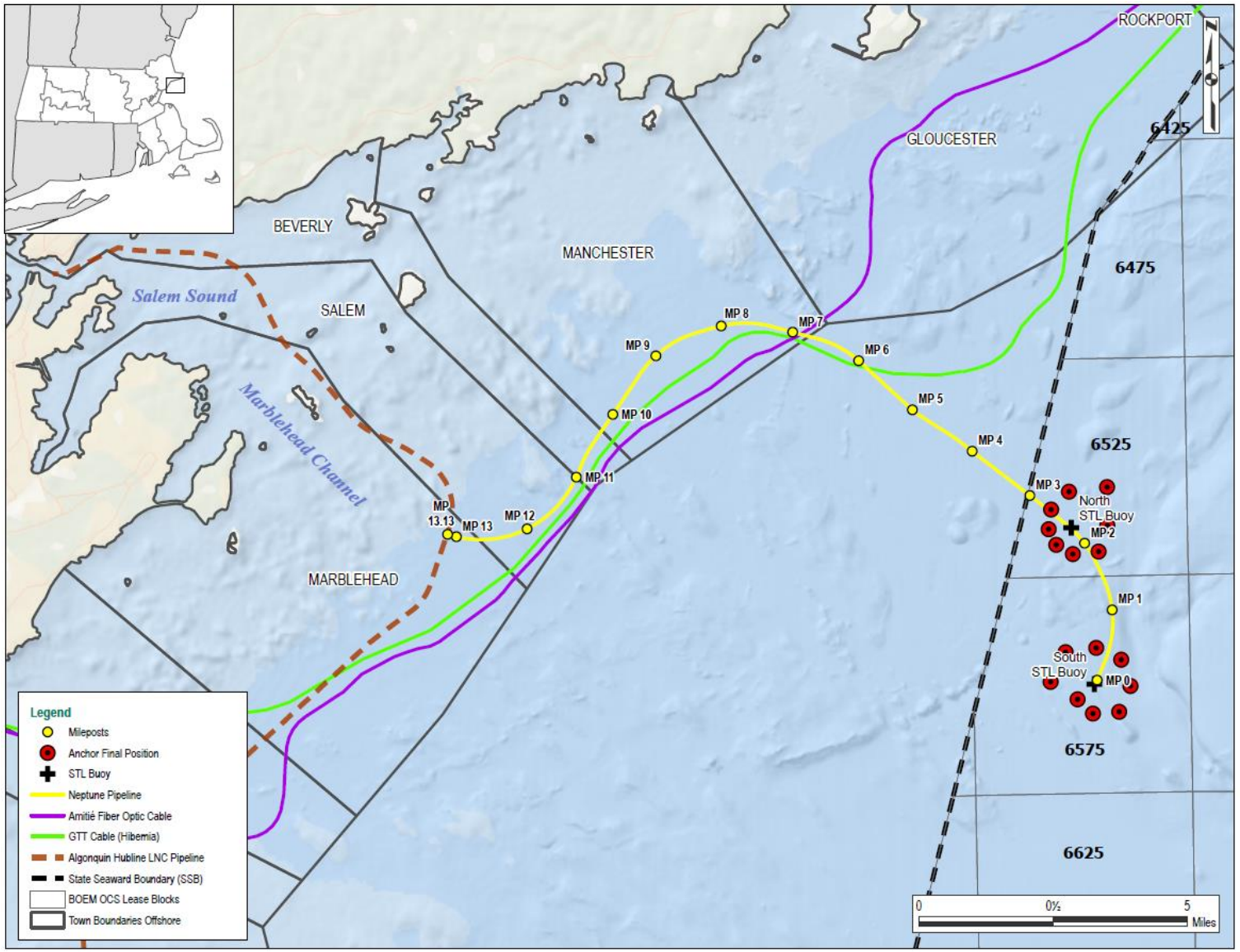


Figure 2-1: Location of the Neptune Deepwater Port, Pipeline, Buoys and Anchors

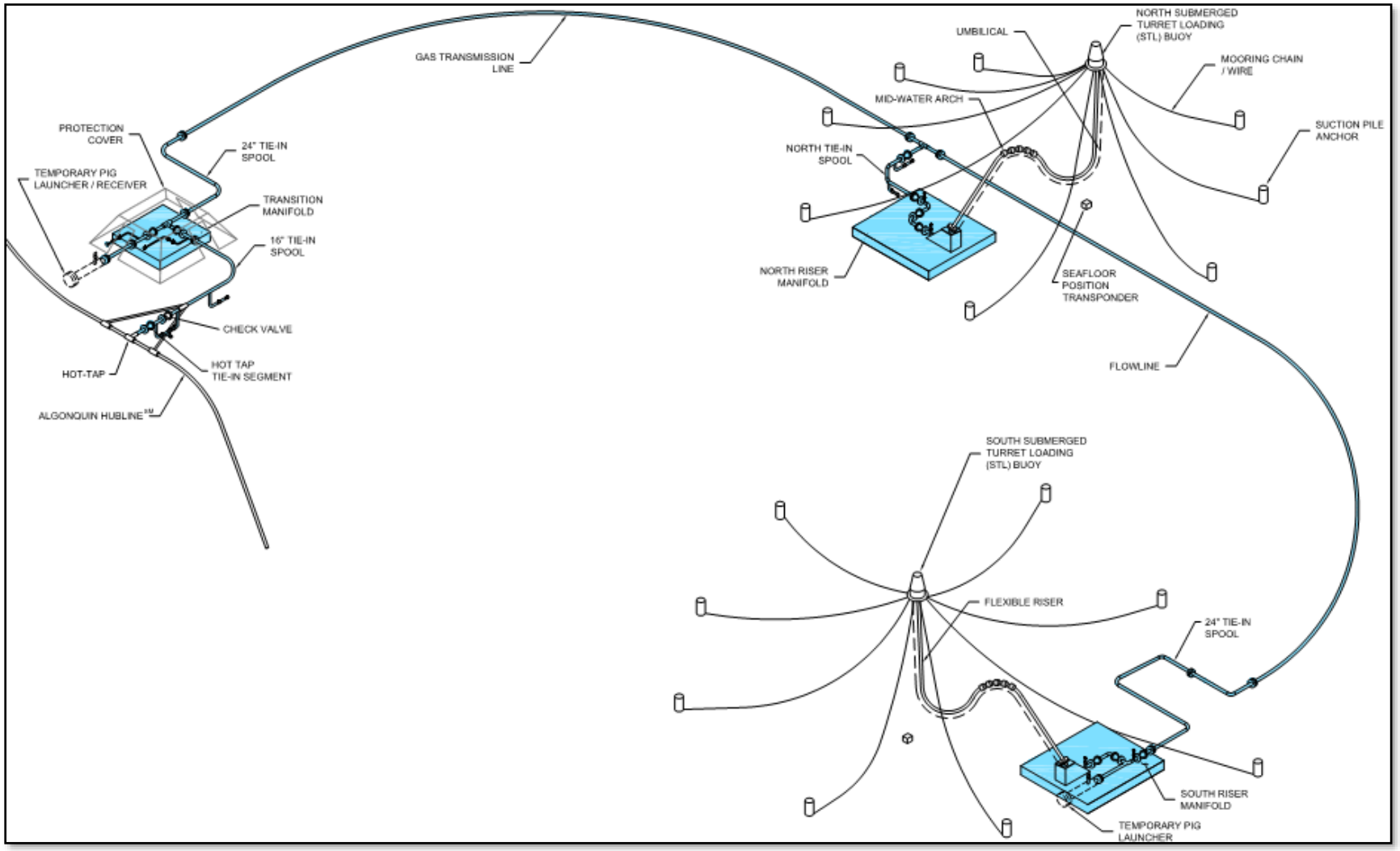
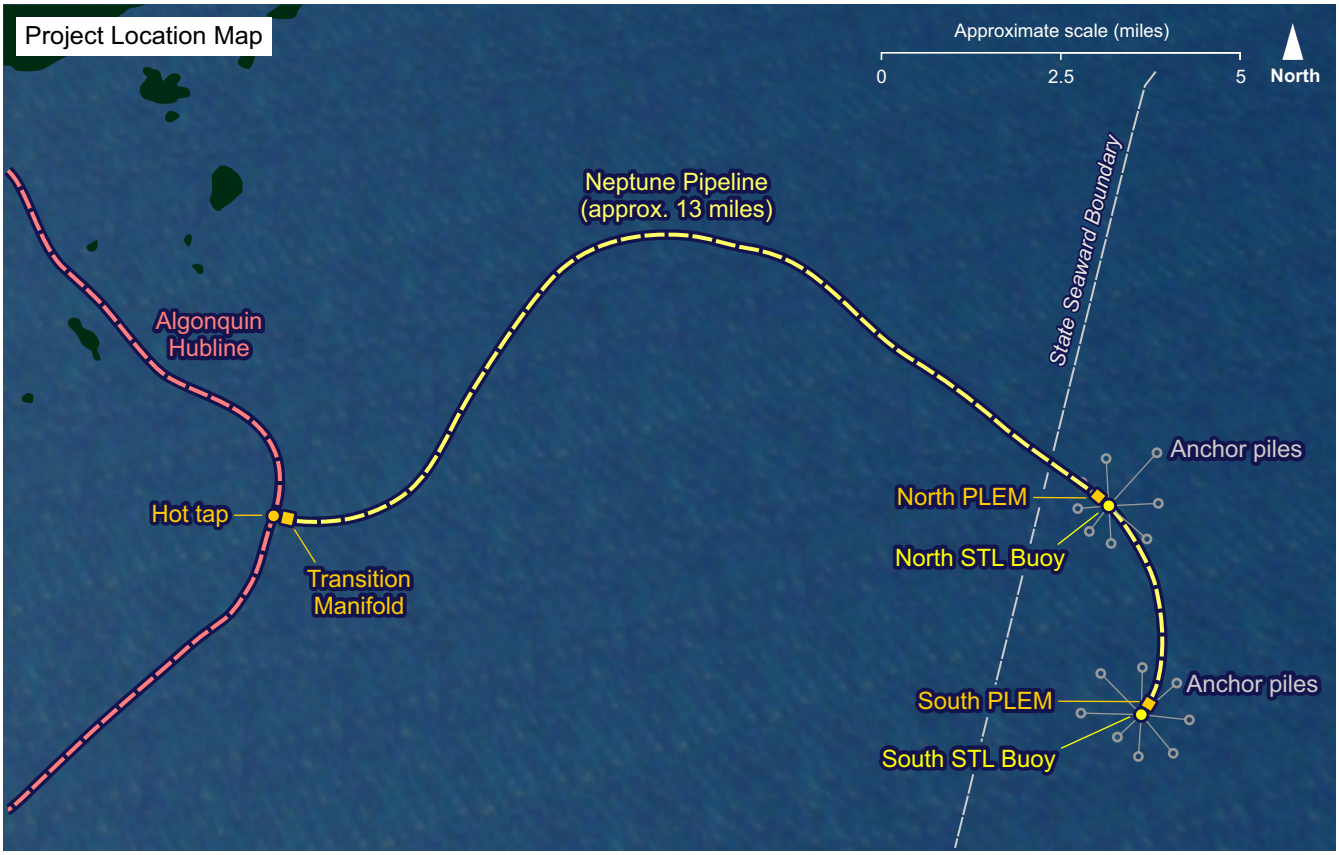
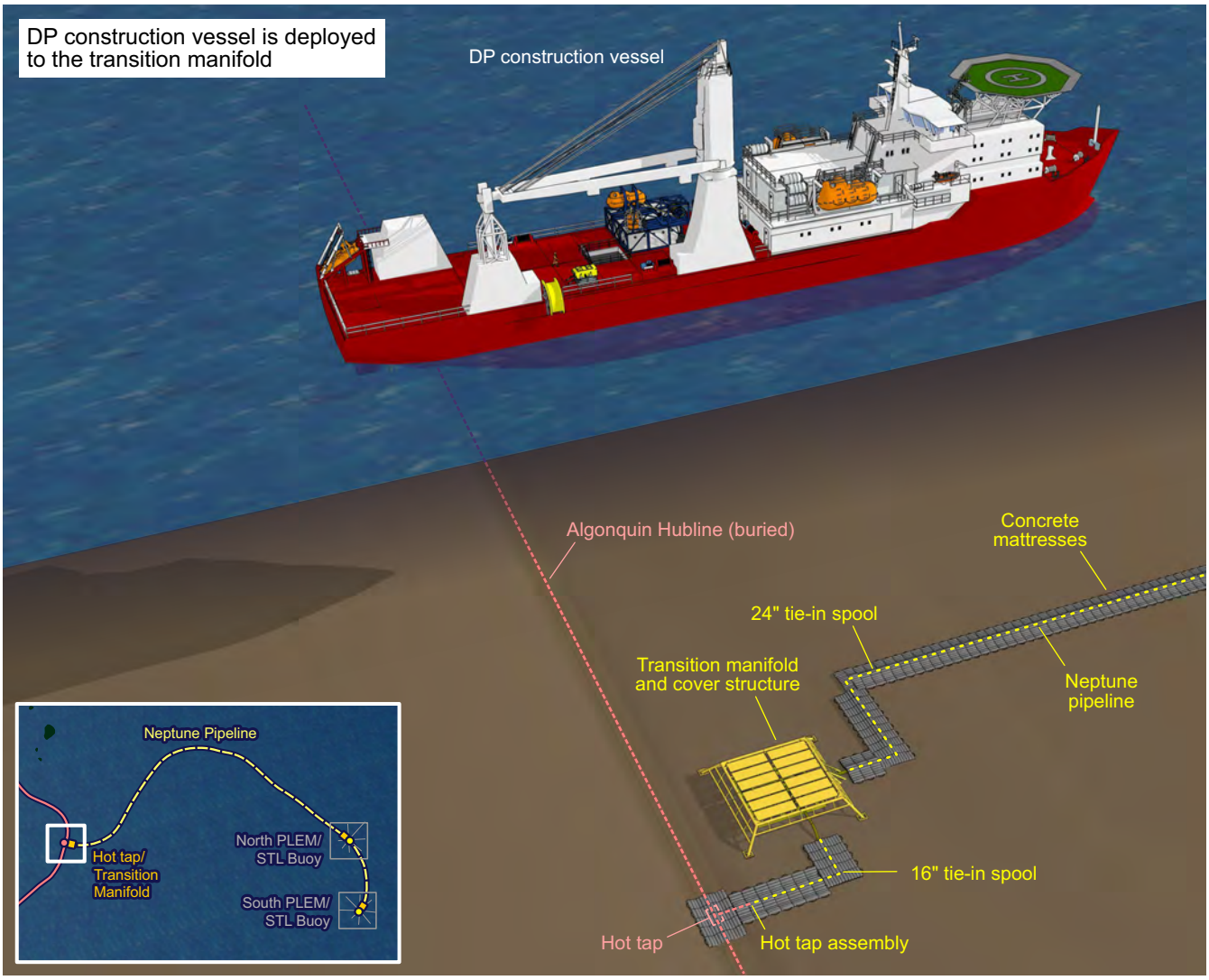


Figure 2-2: Additional View of Neptune Deepwater Port Configuration

Project Neptune: Mobilization to Site

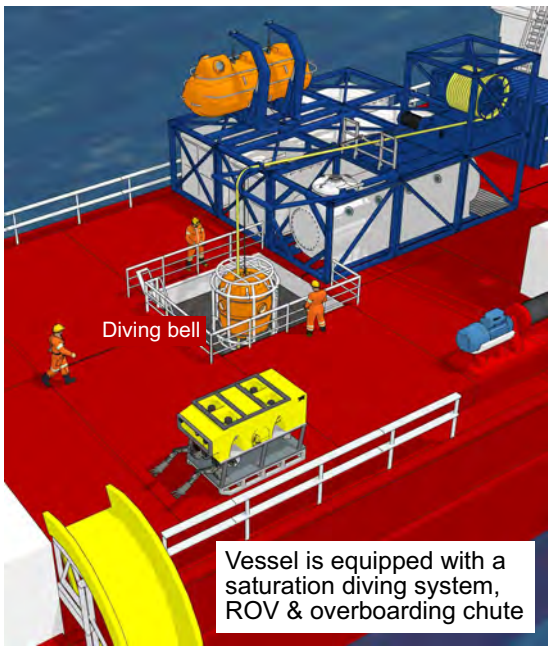
Introduction

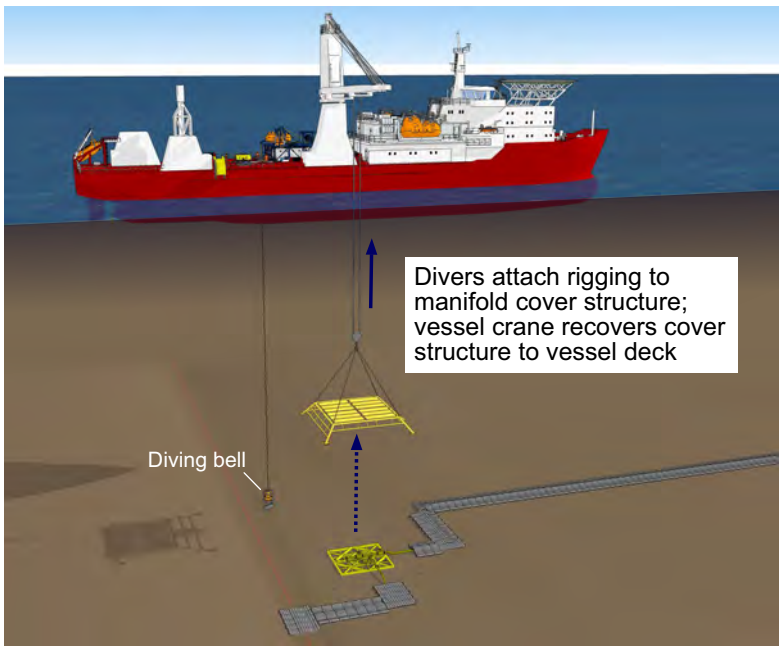


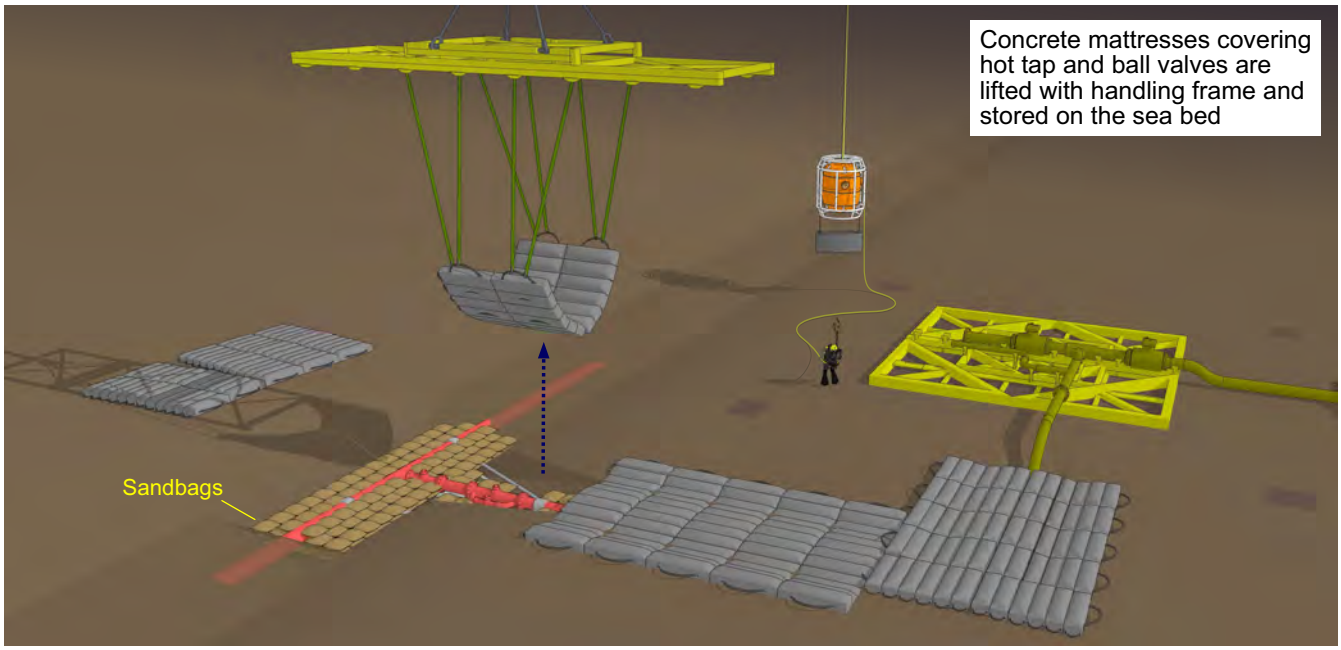


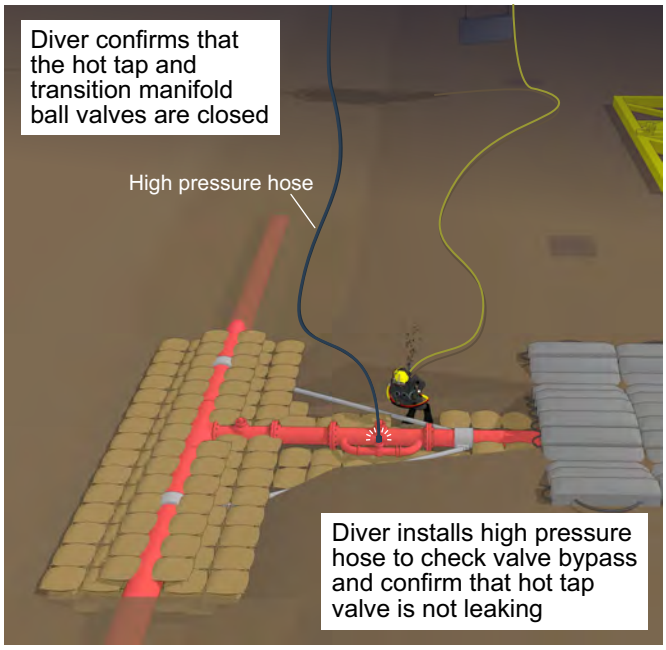
Project Neptune: Gas Removal and (Hot) Flaring

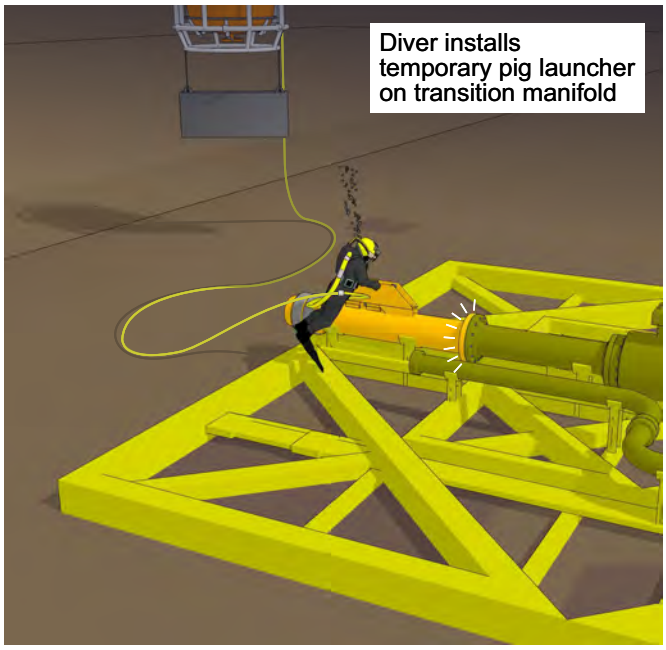
Hot Tap Isolation





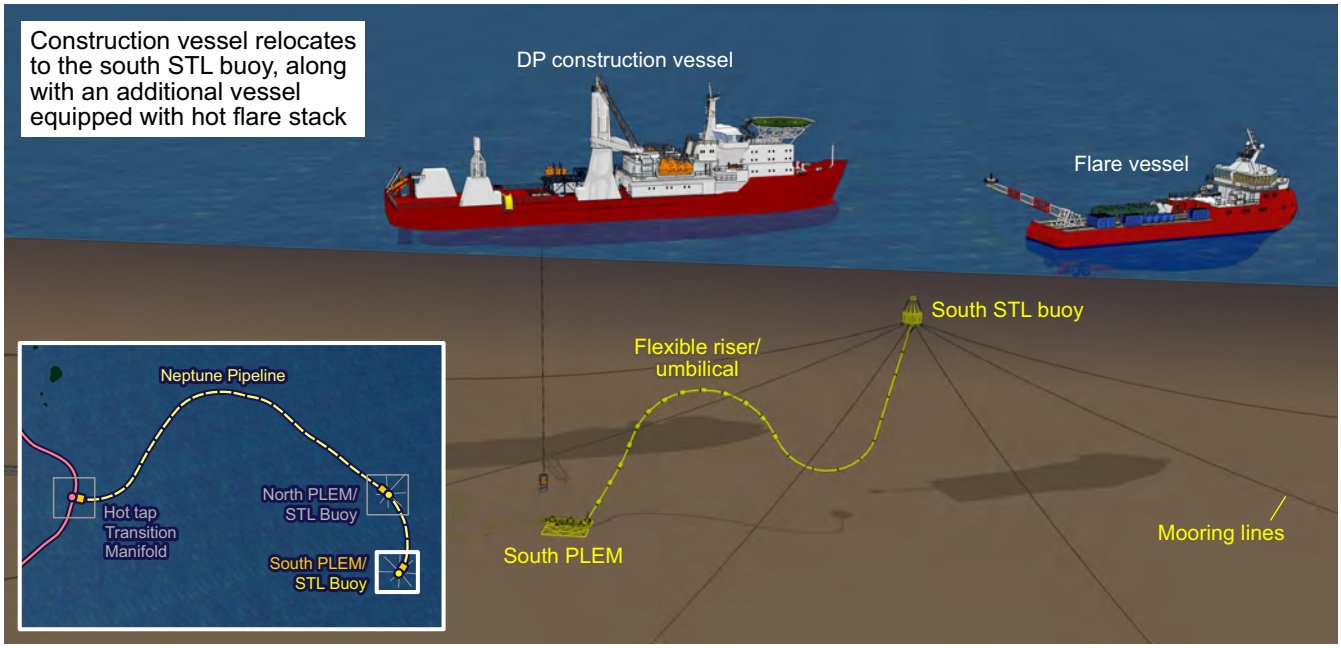


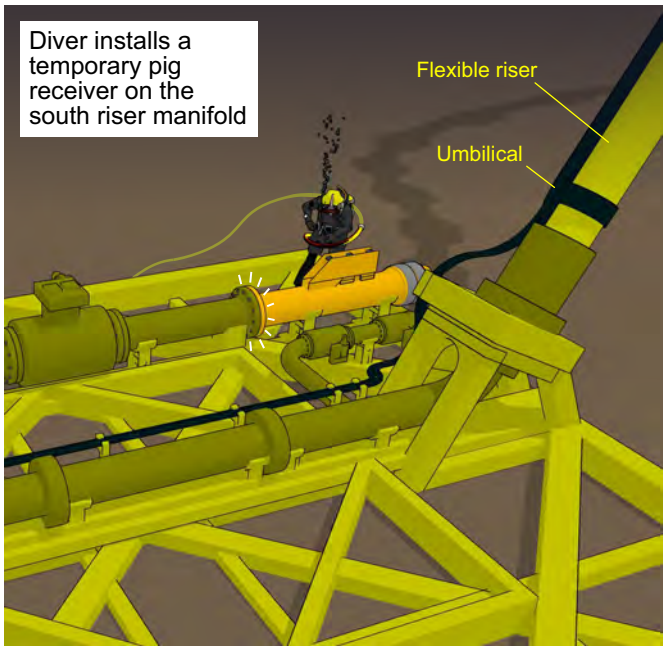


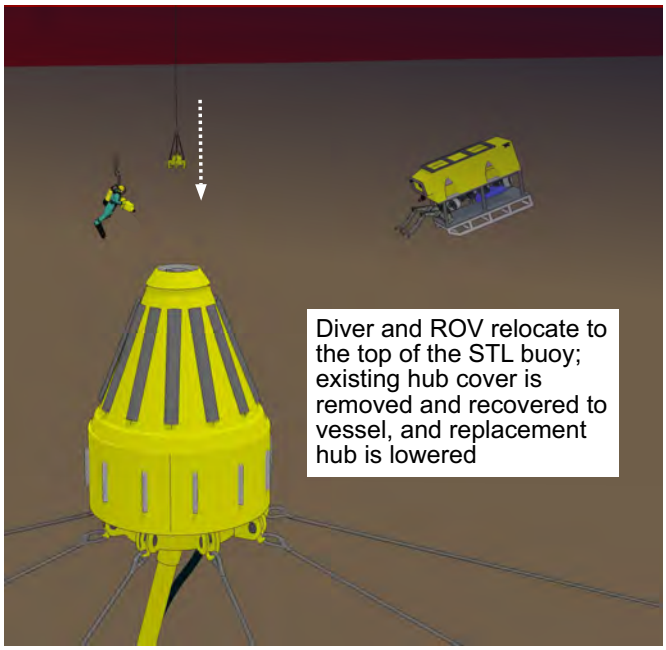


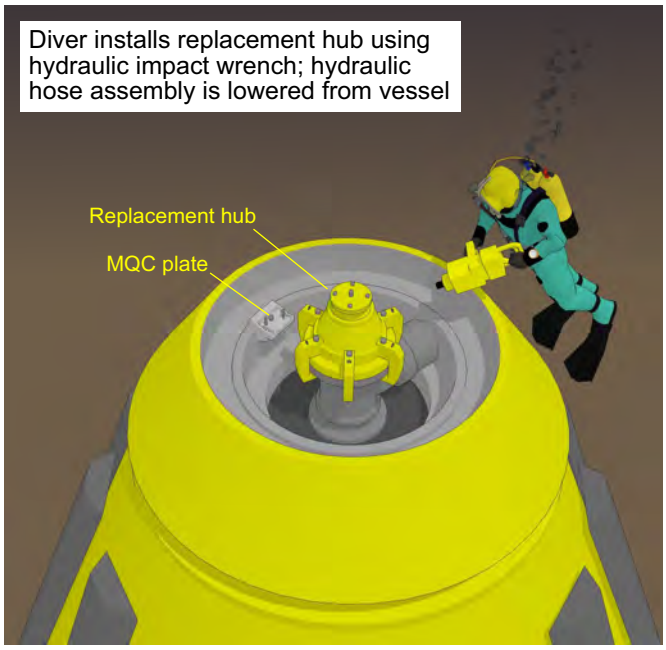
Project Neptune: Gas Removal and (Hot) Flaring

Gas Flaring



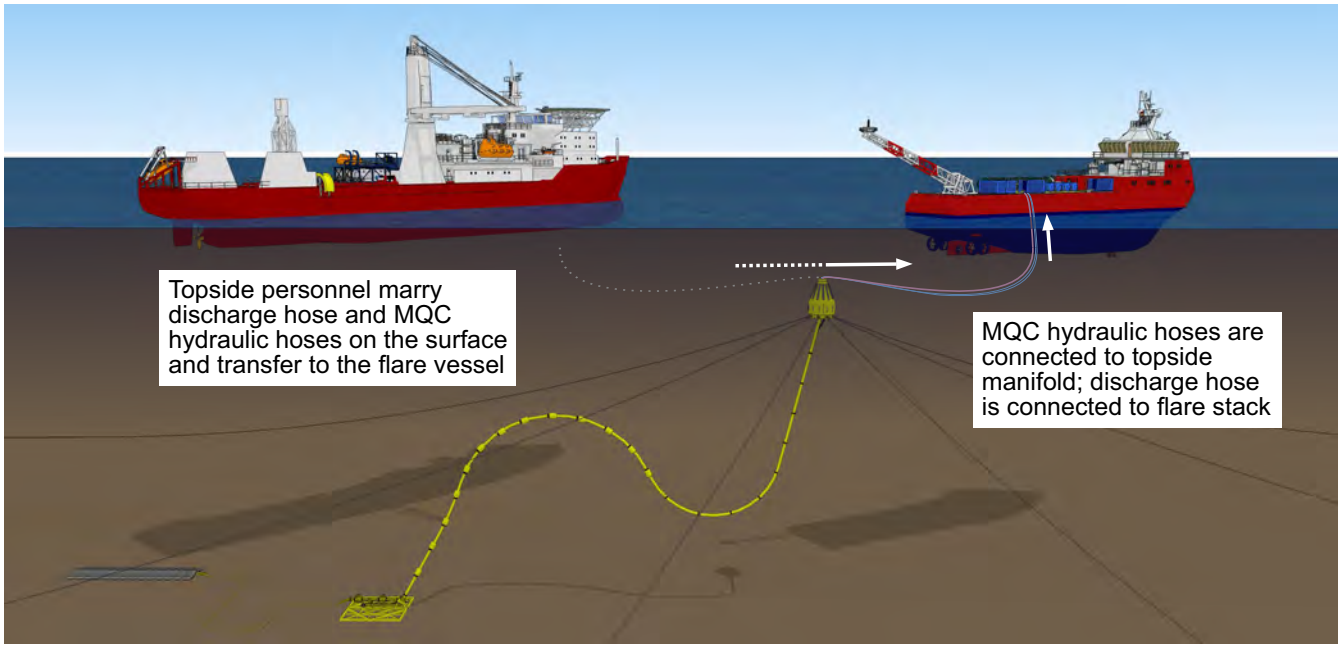


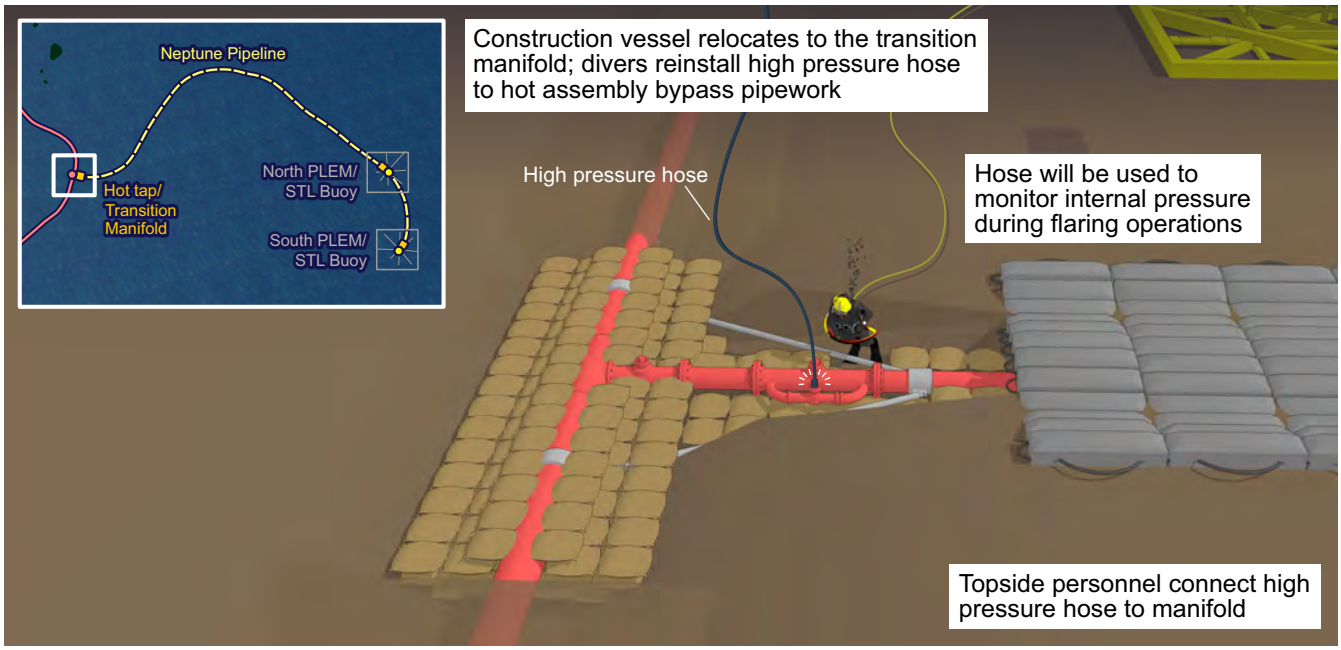


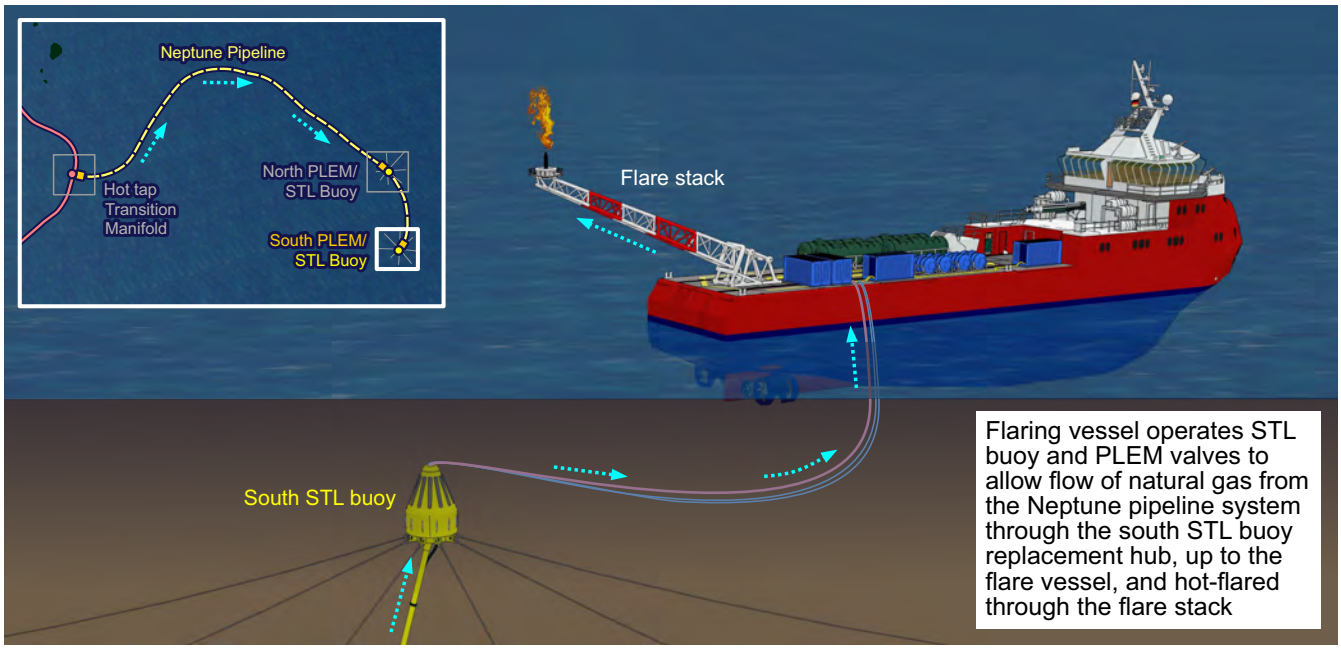


Project Neptune: Gas Removal and (Hot) Flaring

Purging & Flushing

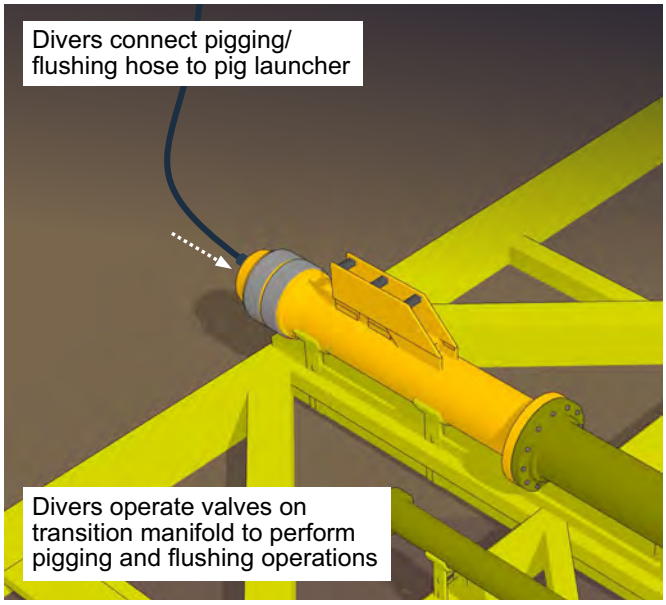


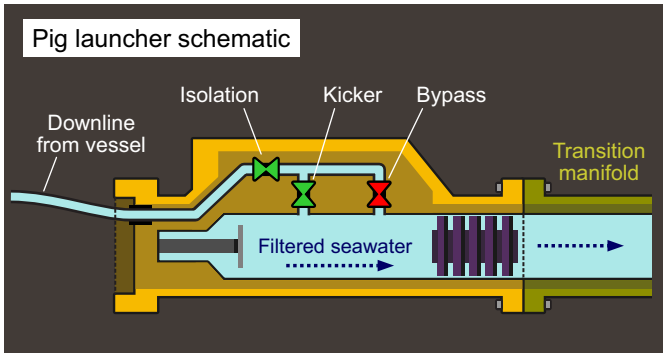


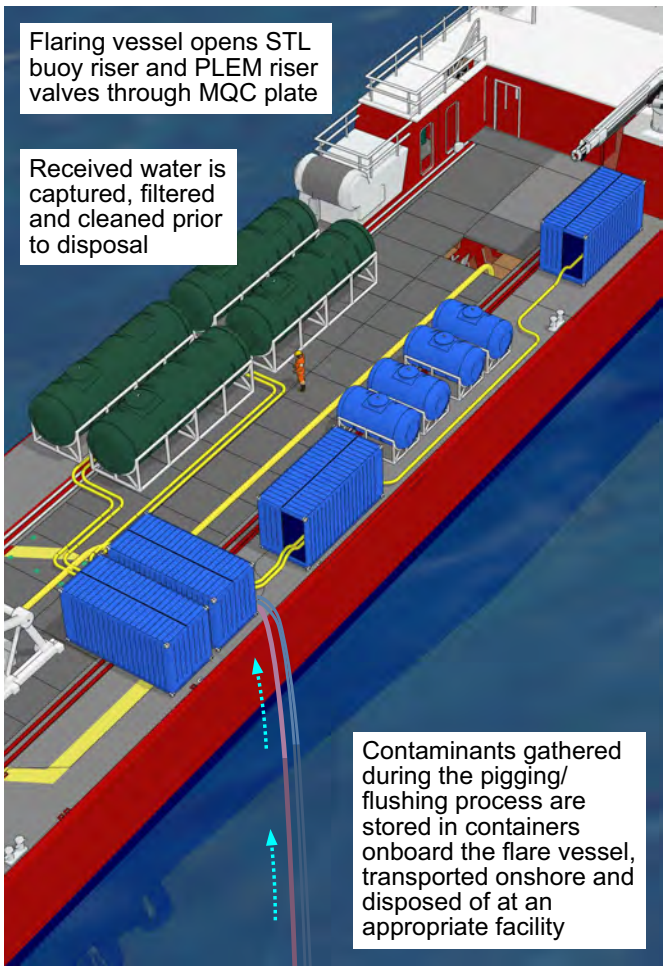


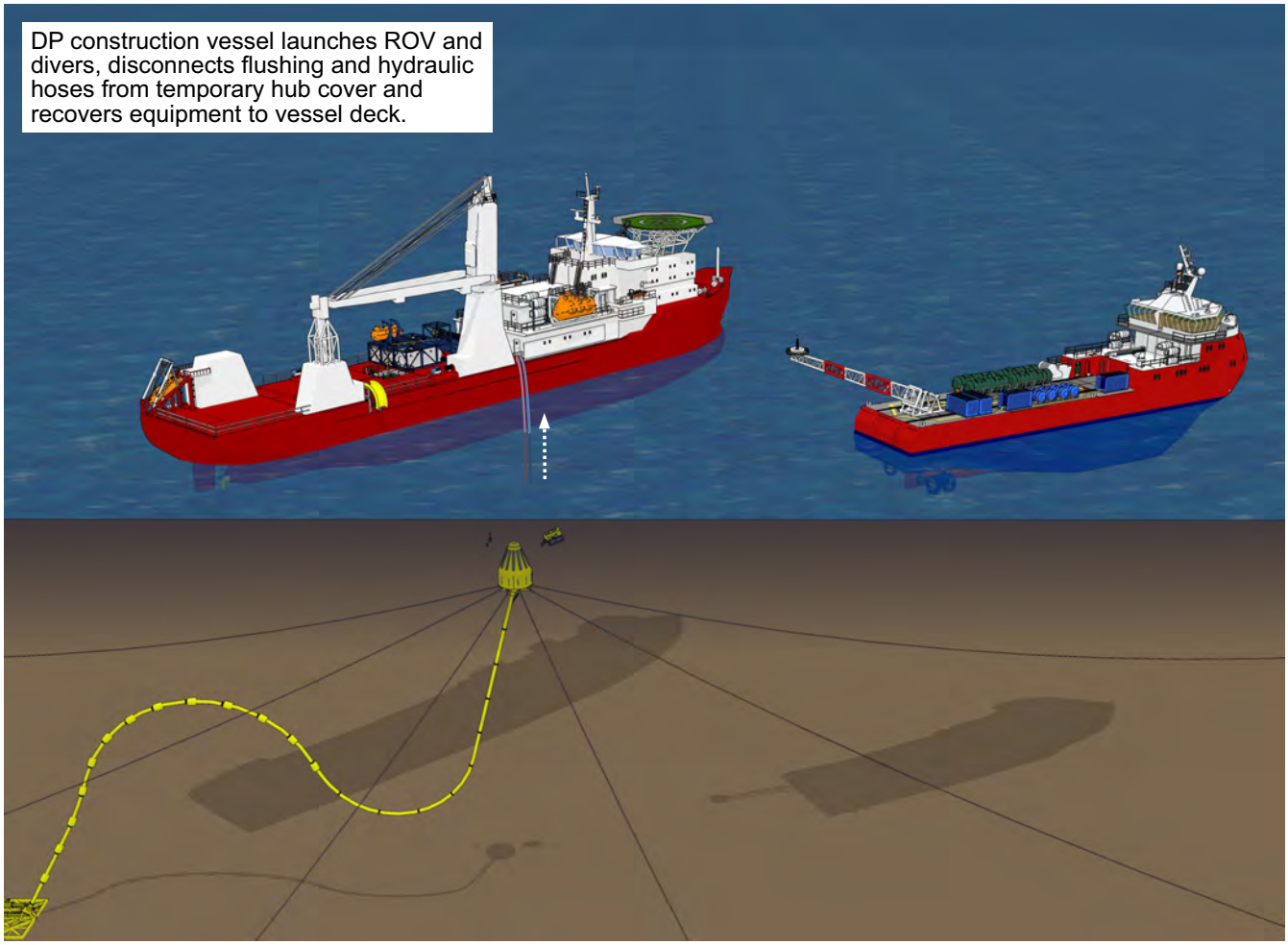
Project Neptune: Gas Removal and (Hot) Flaring

Purging & Flushing





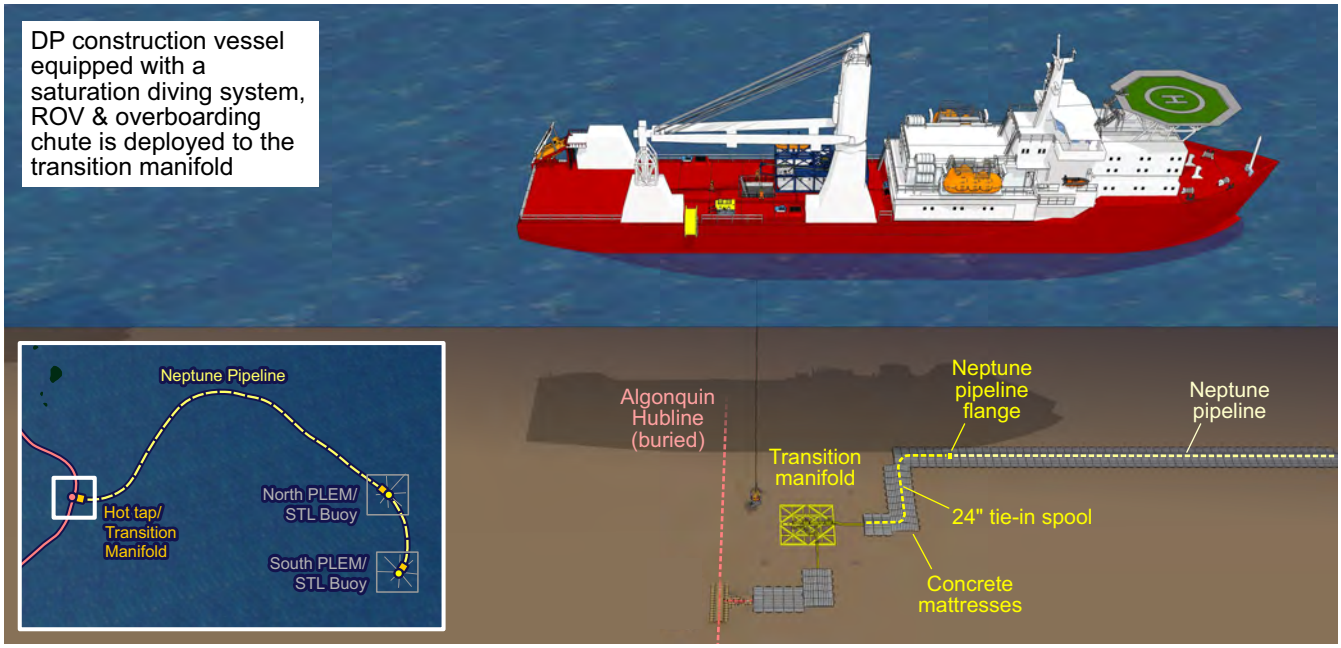




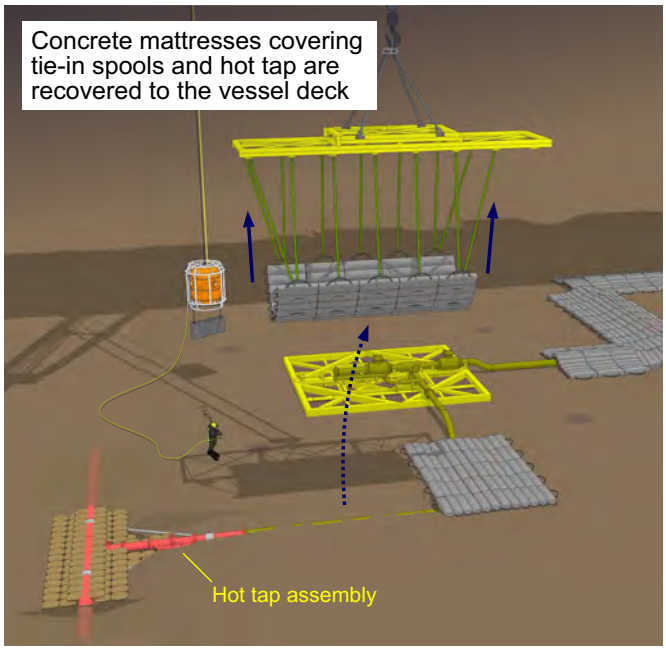
Project Neptune: Transition Manifold, PLEMs and Tie-in Spools

Concrete Mattress and Pipeline Tie-in Spool Recovery

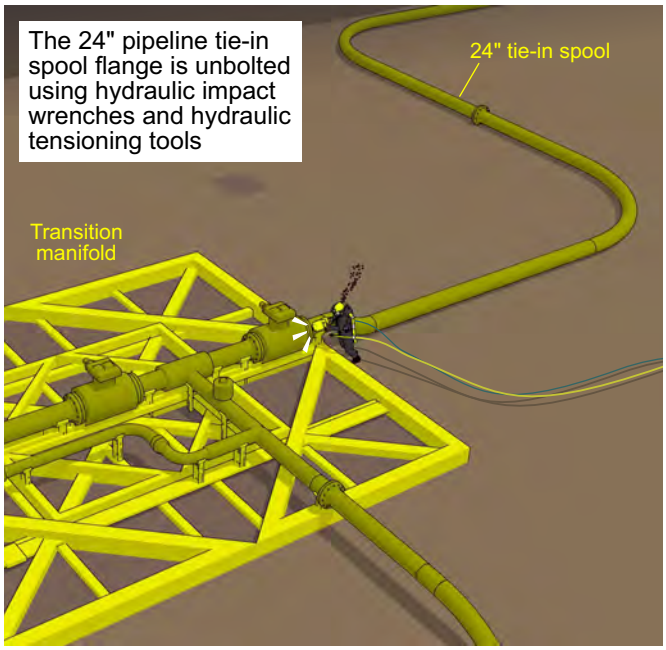
DP construction vessel equipped with a saturation diving system, ROV & overboarding chute is deployed to the transition manifold



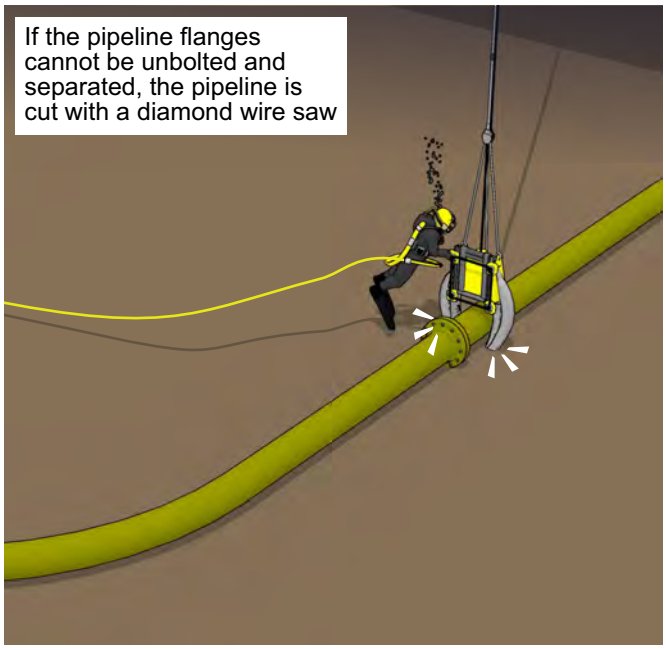
Concrete mattresses covering tie-in spools and hot tap are recovered to the vessel deck

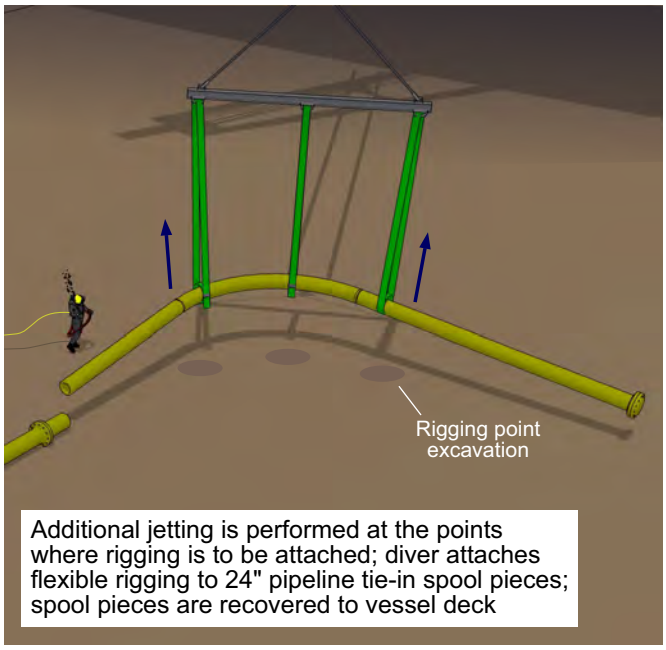


The 24" pipeline tie-in spool flange is unbolted using hydraulic impact wrenches and hydraulic tensioning tools



If the pipeline flanges cannot be unbolted and separated, the pipeline is cut with a diamond wire saw

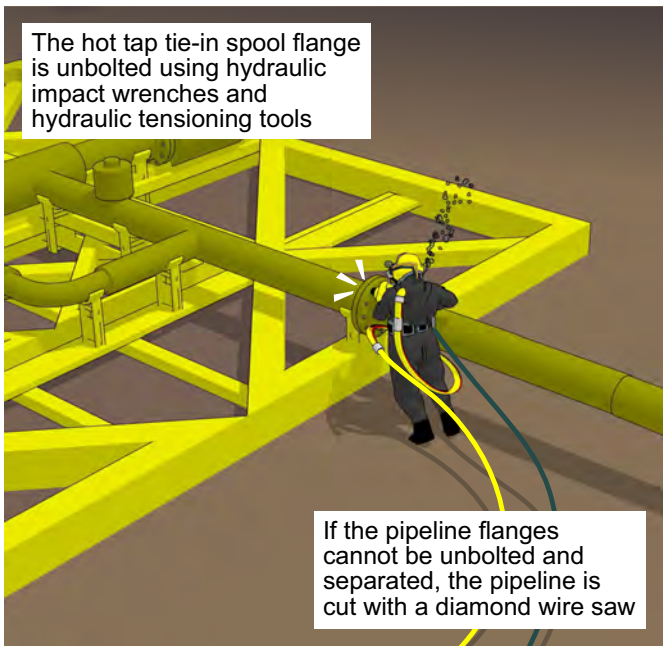


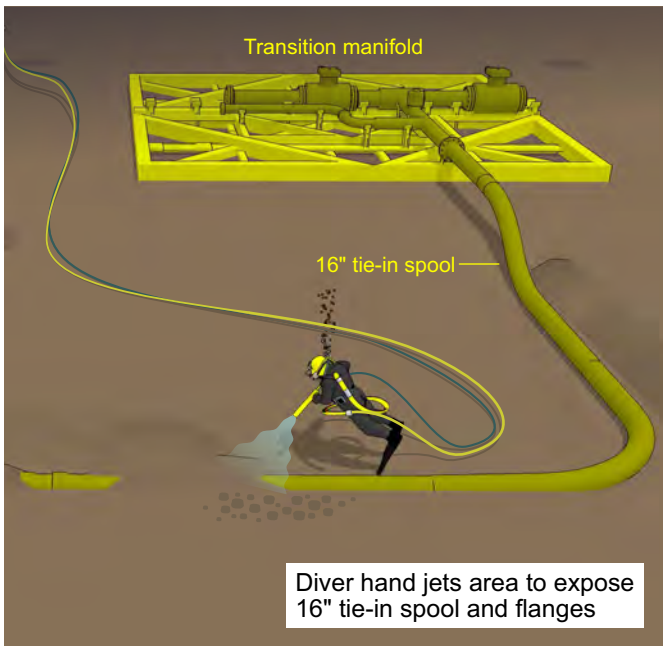


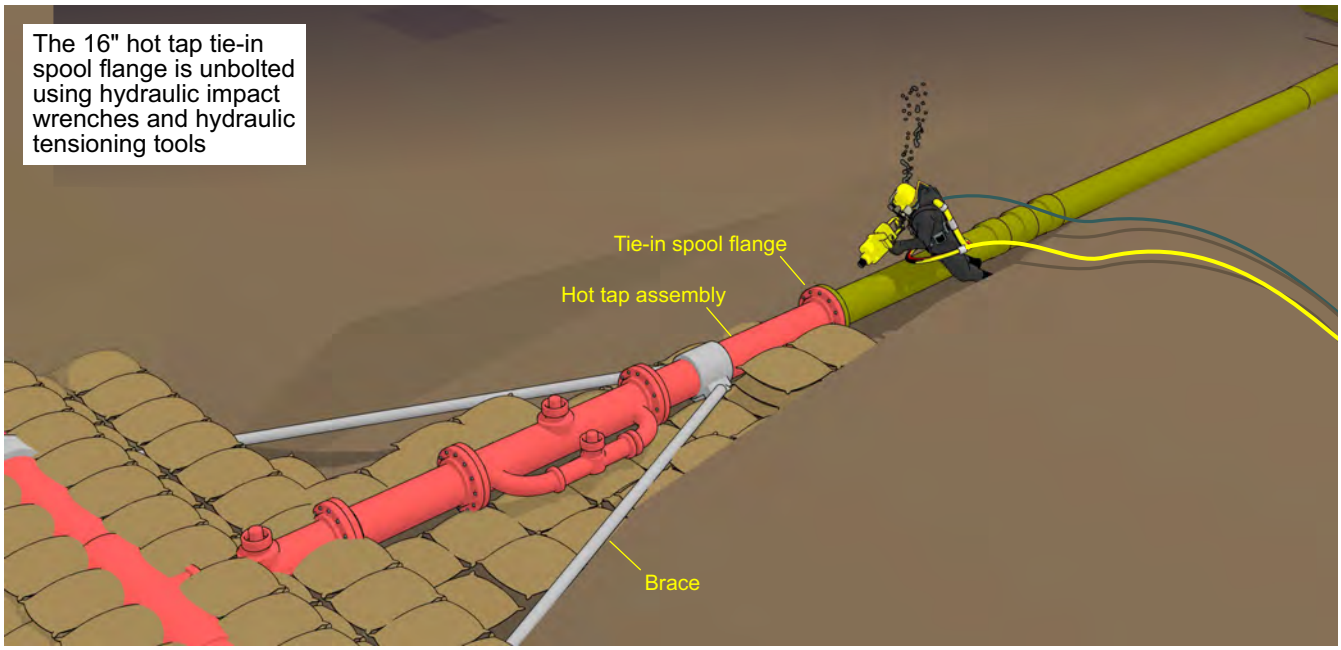
Additional jetting is performed at the points where rigging is to be attached; diver attaches flexible rigging to 24" pipeline tie-in spool pieces; spool pieces are recovered to vessel deck

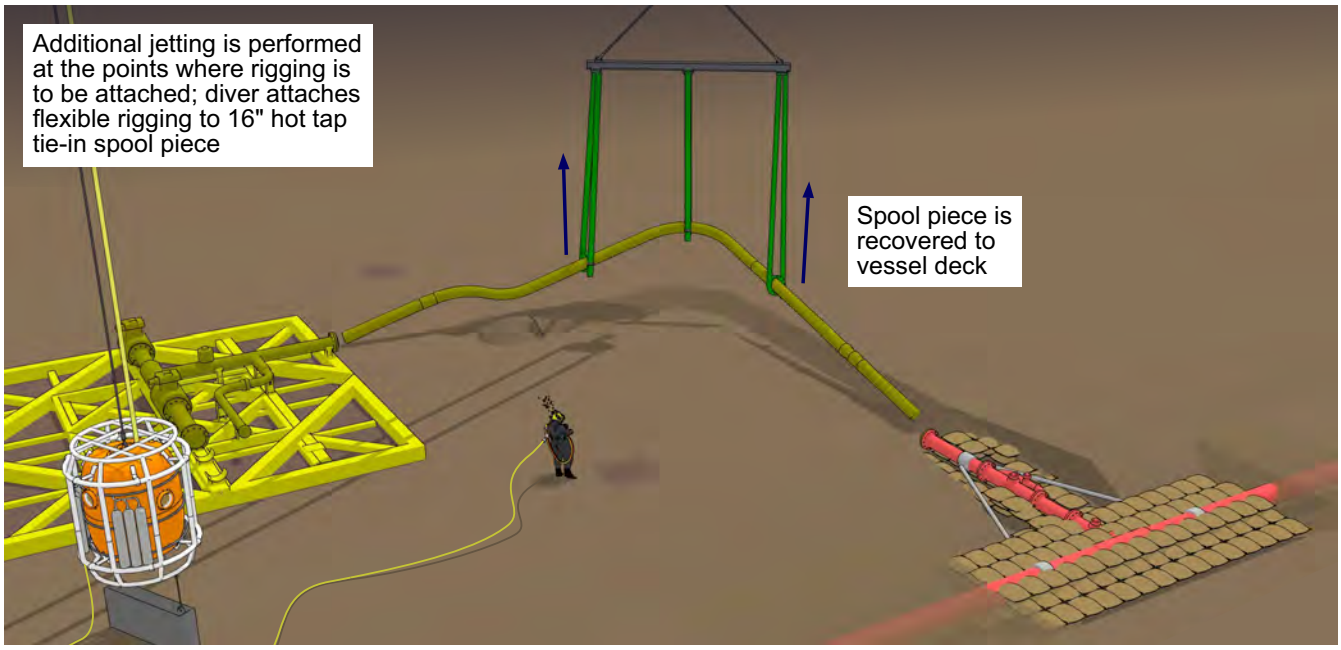
Project Neptune: Transition Manifold, PLEMs and Tie-in Spools

Hot Tap Tie-in Spool Recovery



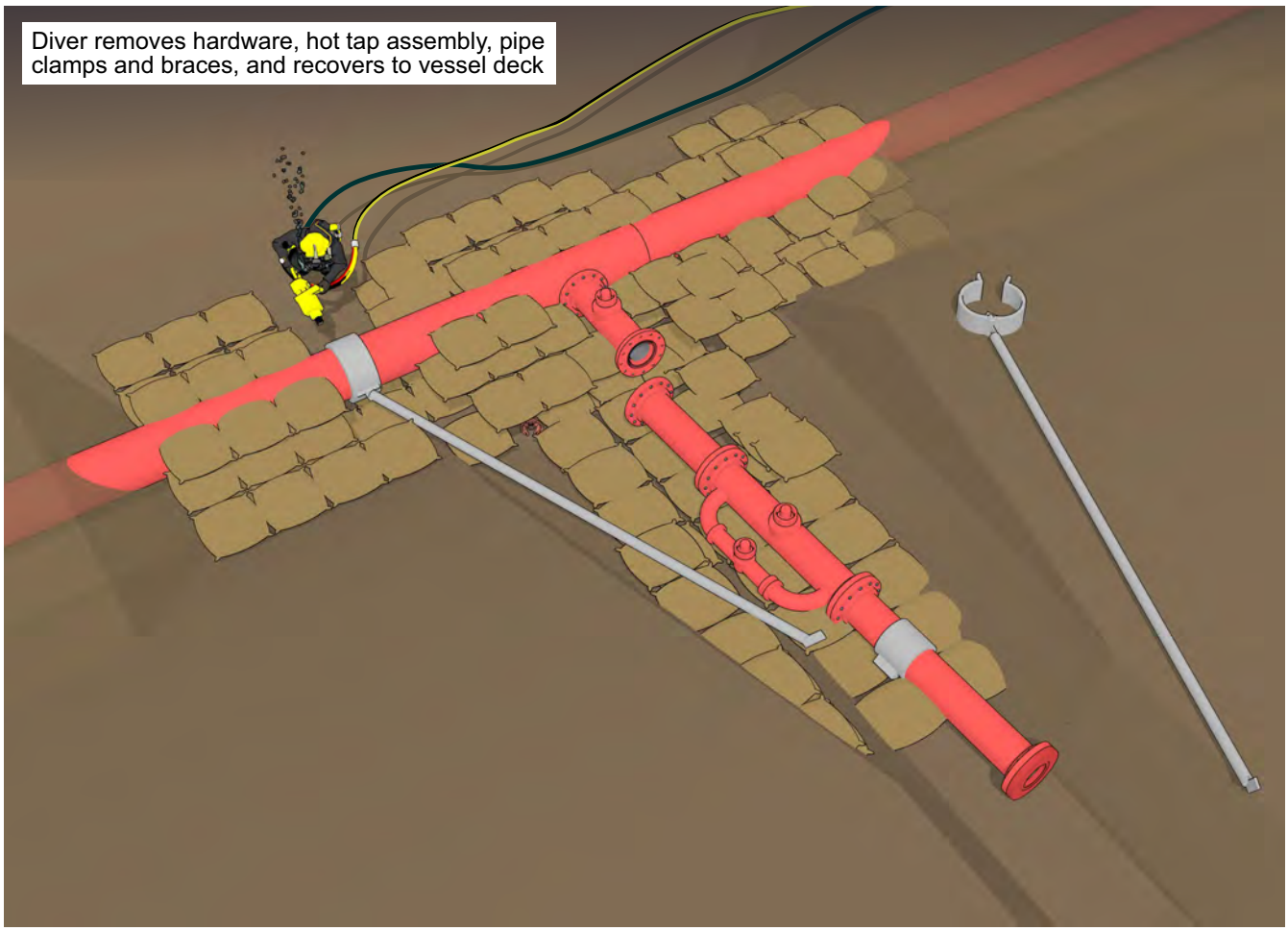


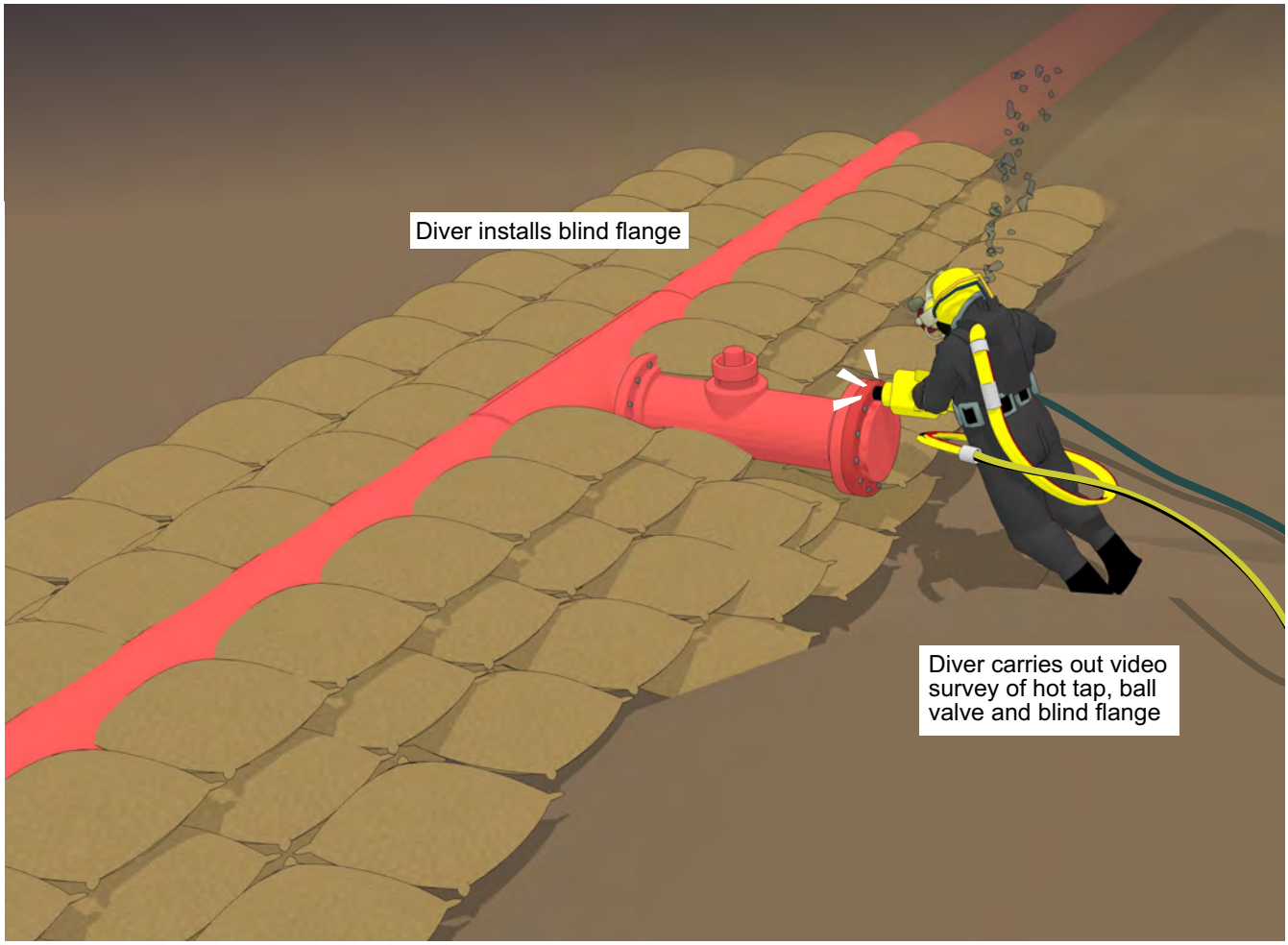




Project Neptune: Transition Manifold, PLEMs and Tie-in Spools

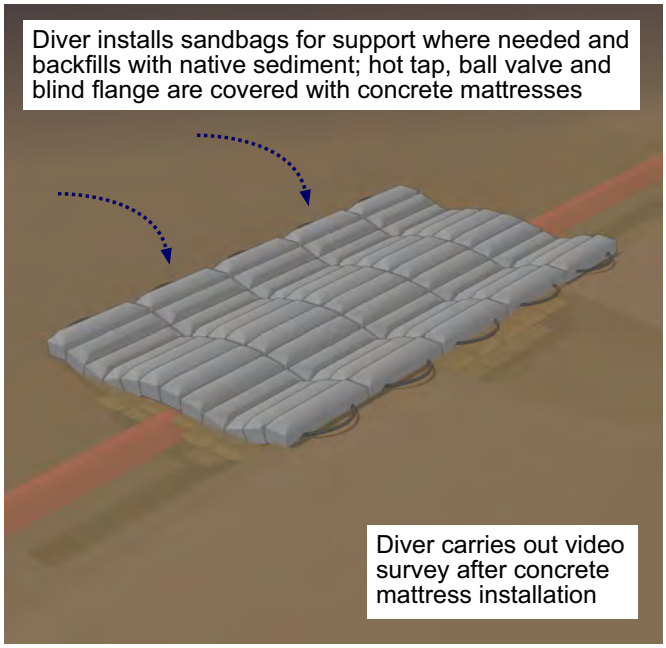
Hot Tap Tie-in Spool Recovery

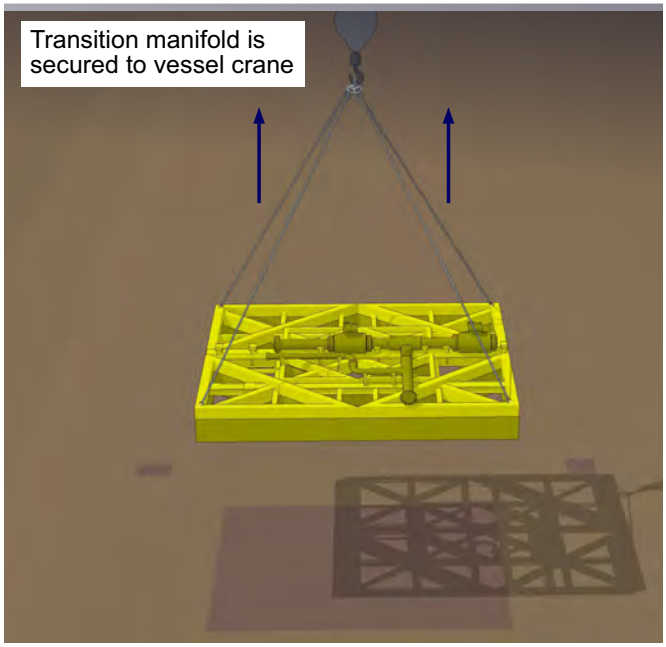


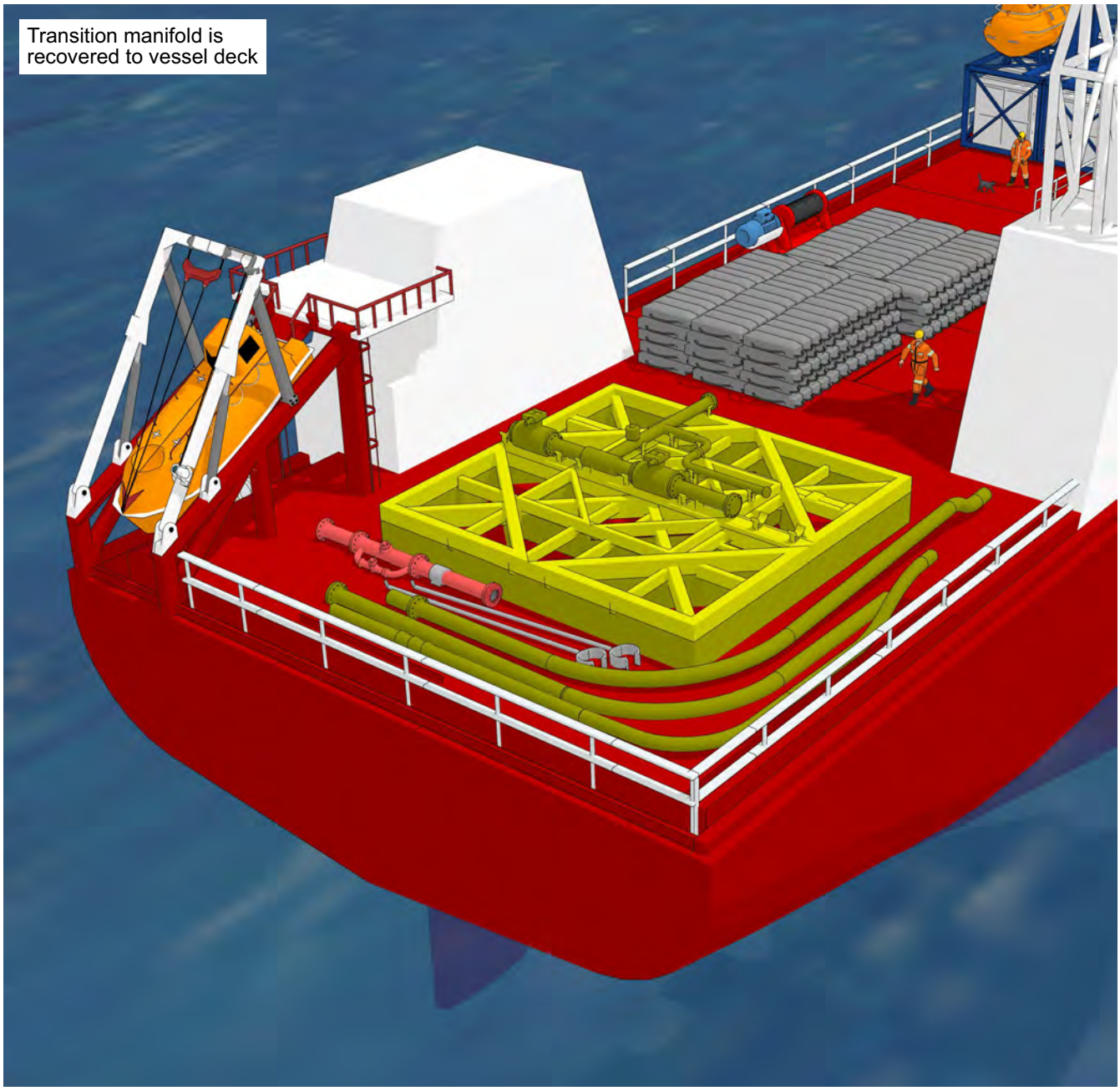


Project Neptune: Transition Manifold, PLEMs and Tie-in Spools

Transition Manifold Recovery

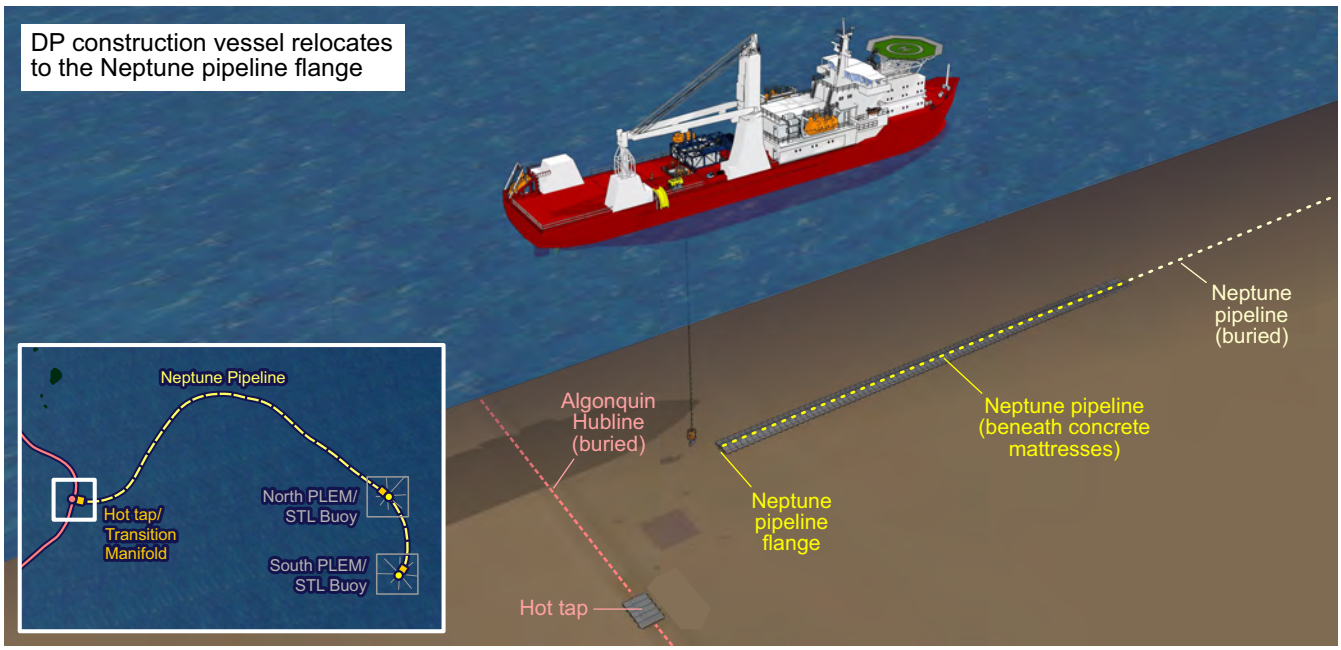


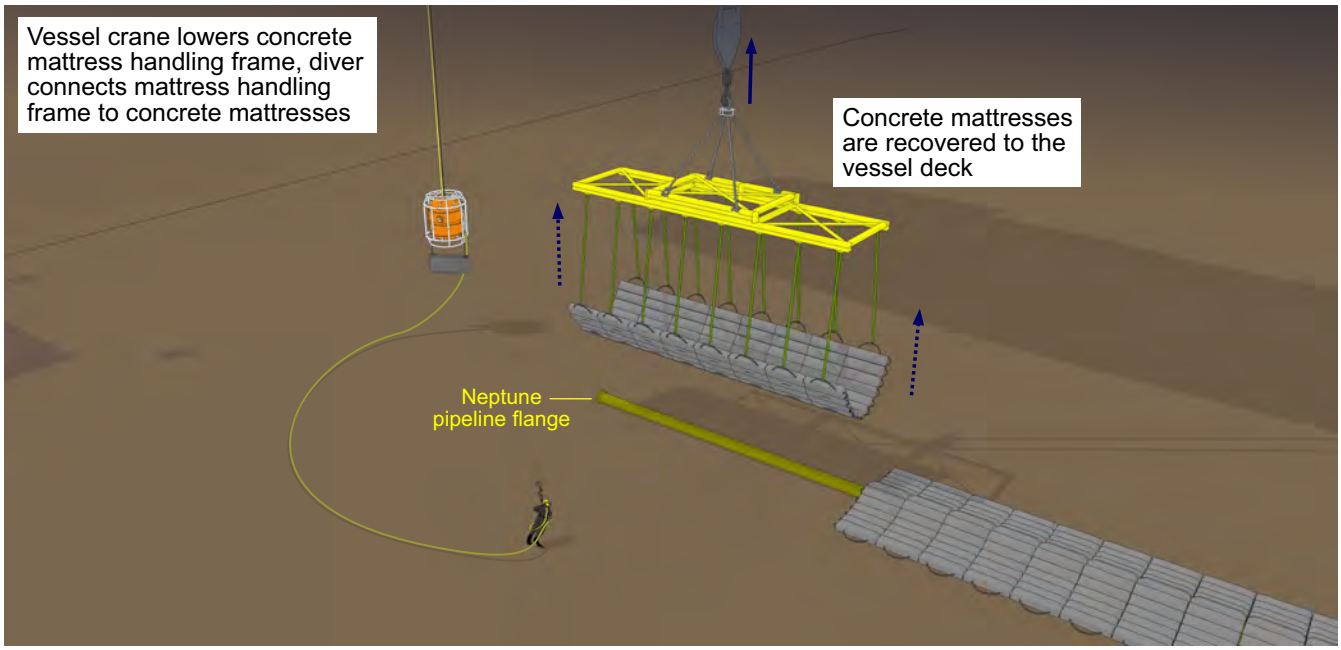


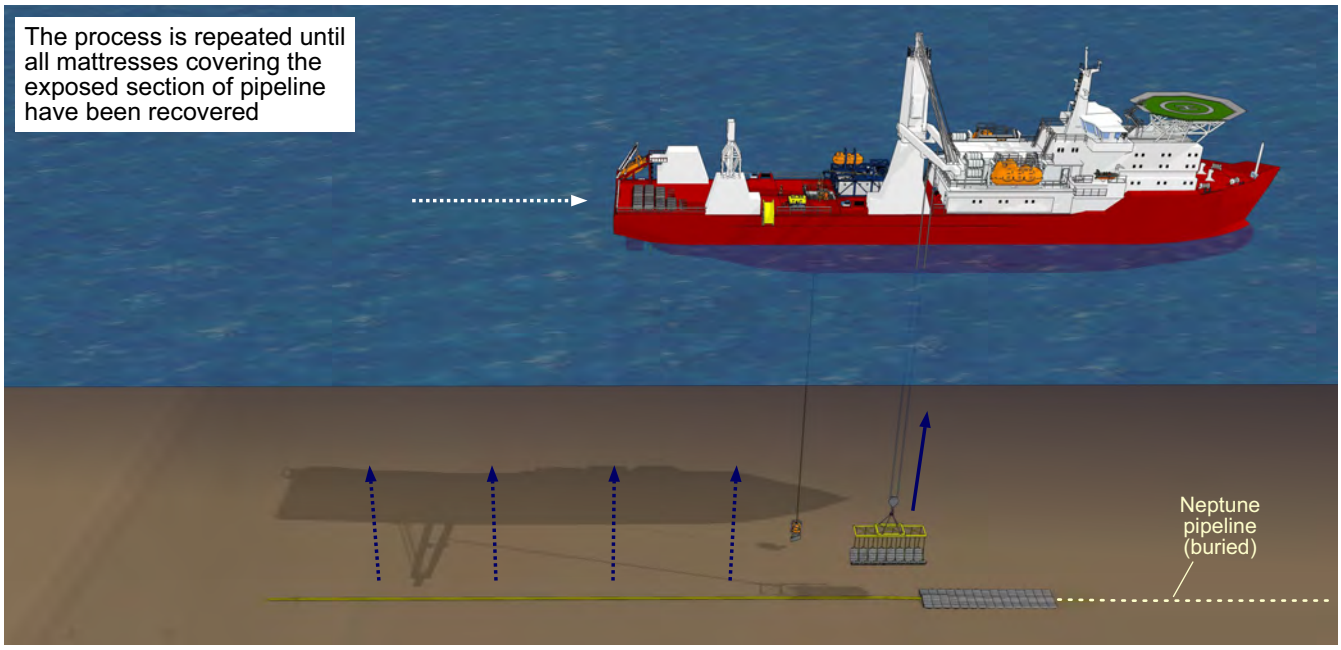


Project Neptune: Pipeline Section Removal and Abandonment

Concrete Mattress Recovery (Pipeline)

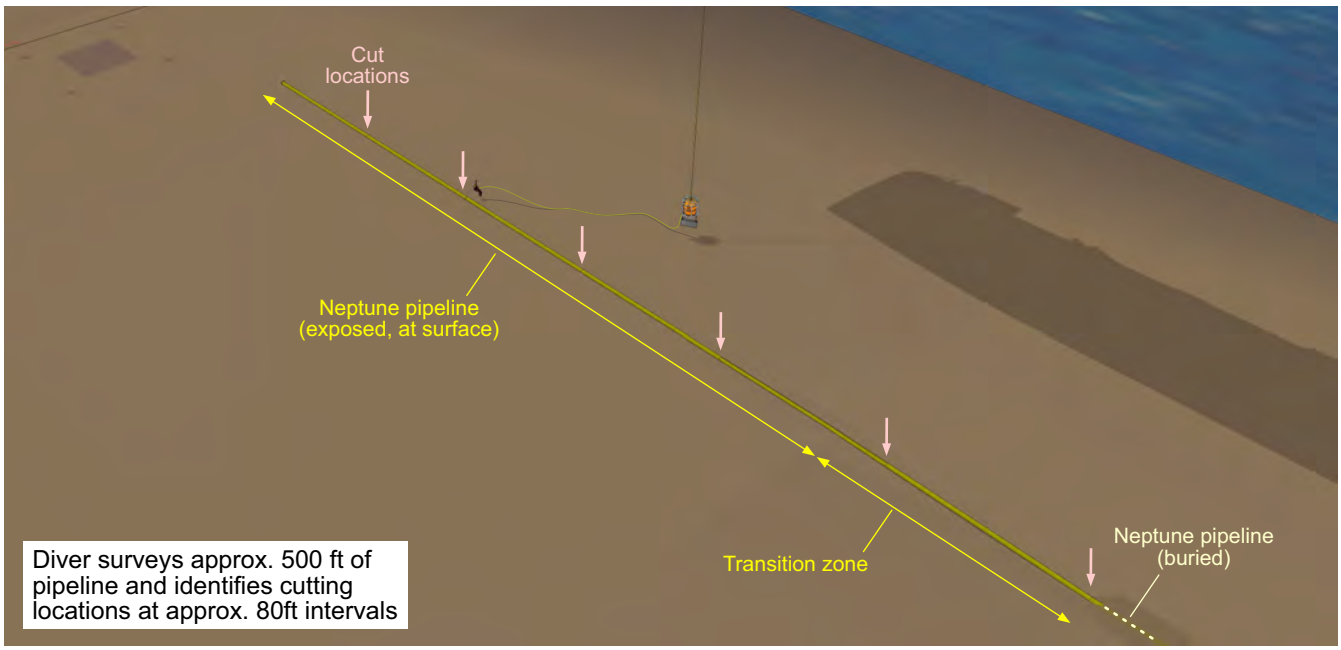




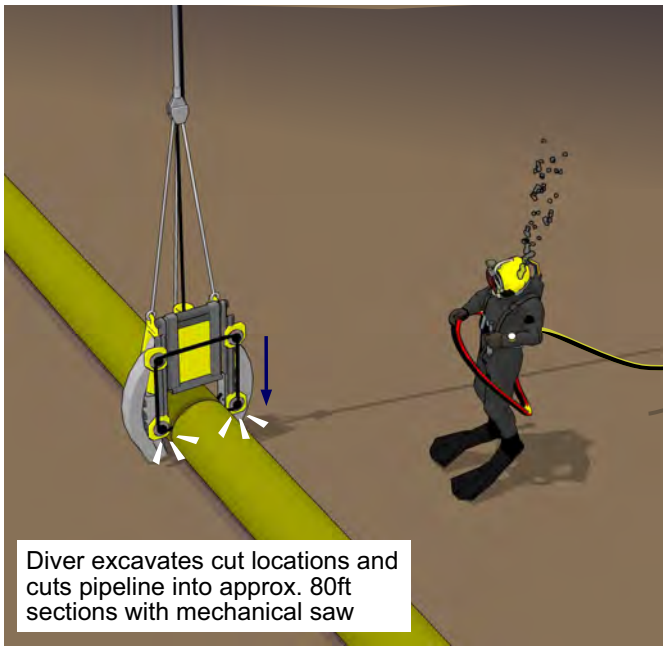


Project Neptune: Pipeline Section Removal and Abandonment

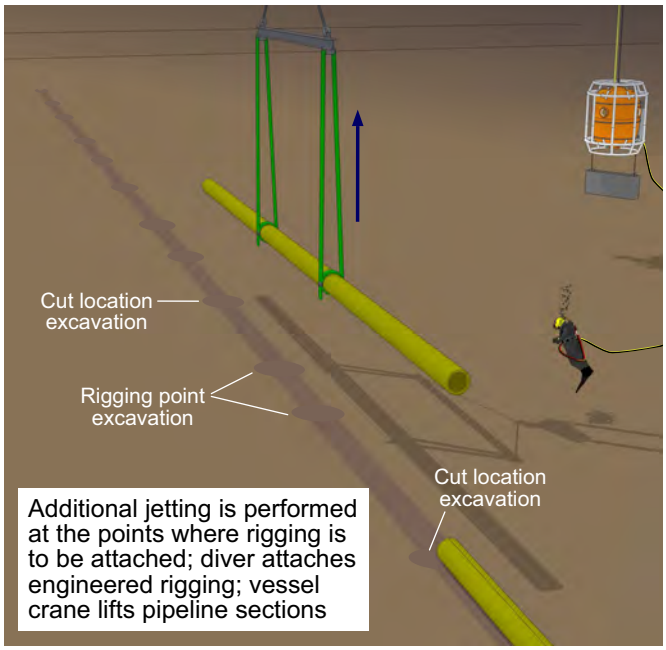
Pipeline Survey, Cutting and Recovery; Pipeline Abandonment



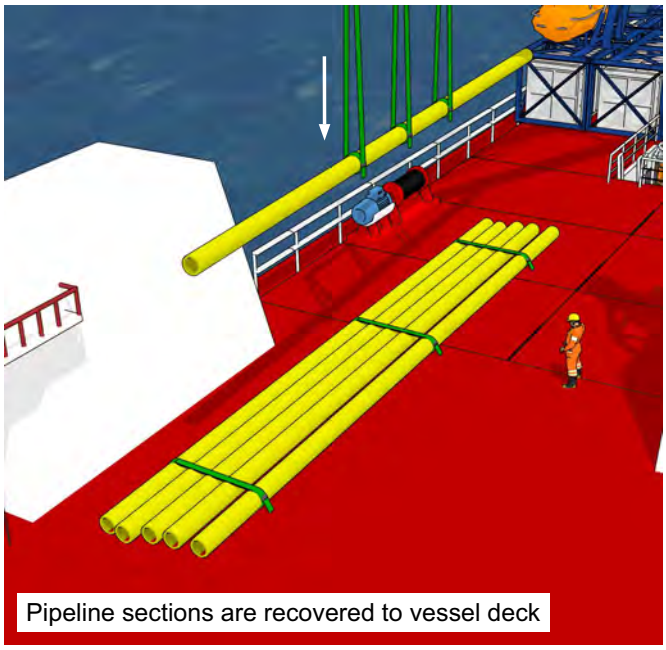
Diver surveys approx. 500 ft of pipeline and identifies cutting locations at approx. 80ft intervals



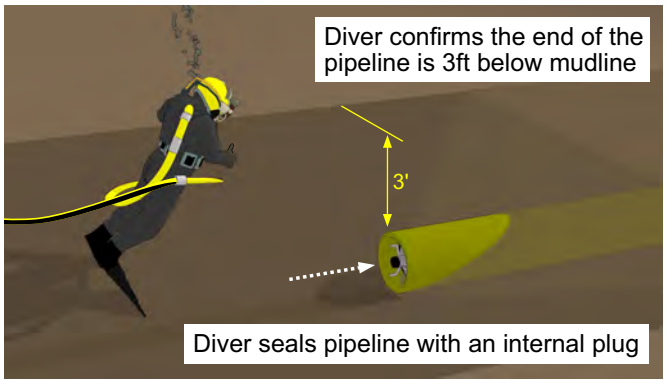
Diver excavates cut locations and cuts pipeline into approx. 80ft sections with mechanical saw



Additional jetting is performed at the points where rigging is to be attached; diver attaches engineered rigging; vessel crane lifts pipeline sections



Pipeline sections are recovered to vessel deck



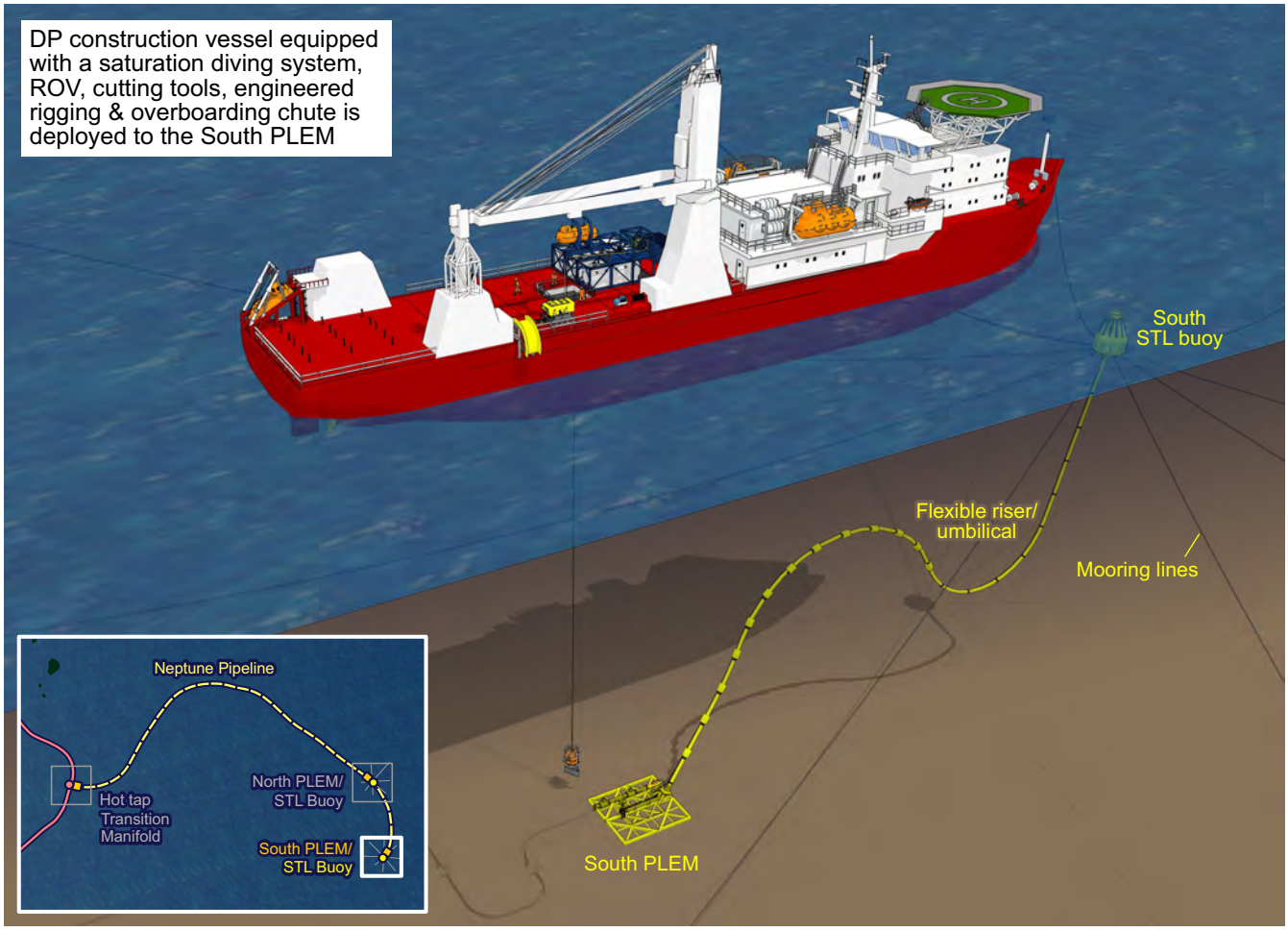
Diver confirms the end of the pipeline is 3ft below mudline

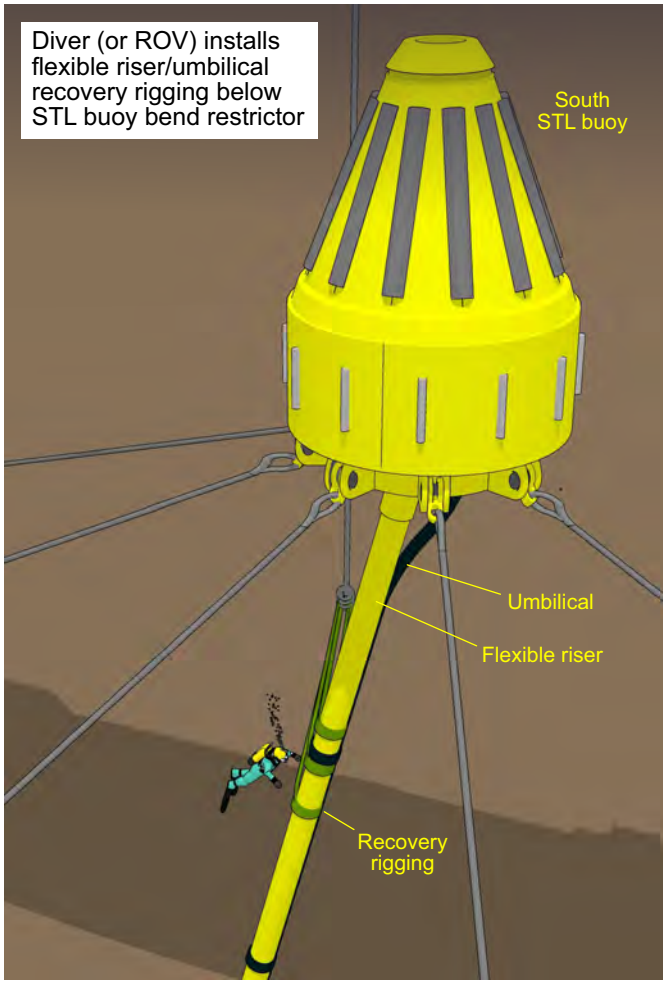
Diver seals pipeline with an internal plug

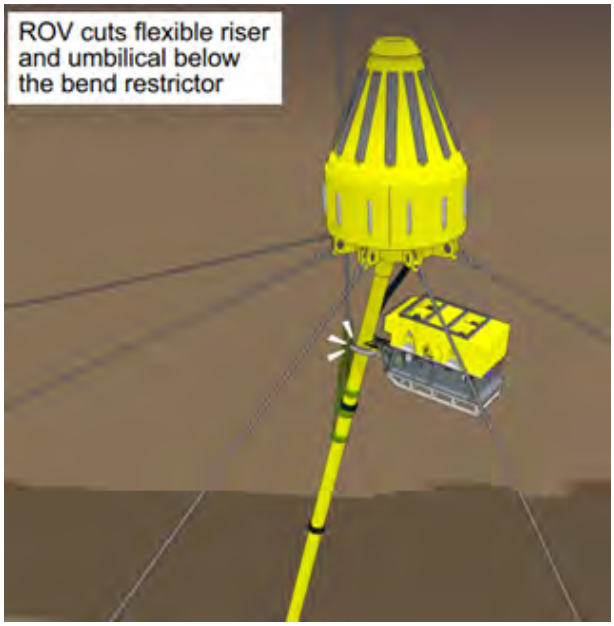
Plugged pipeline is covered with sand/cement bags and backfilled with native sediment

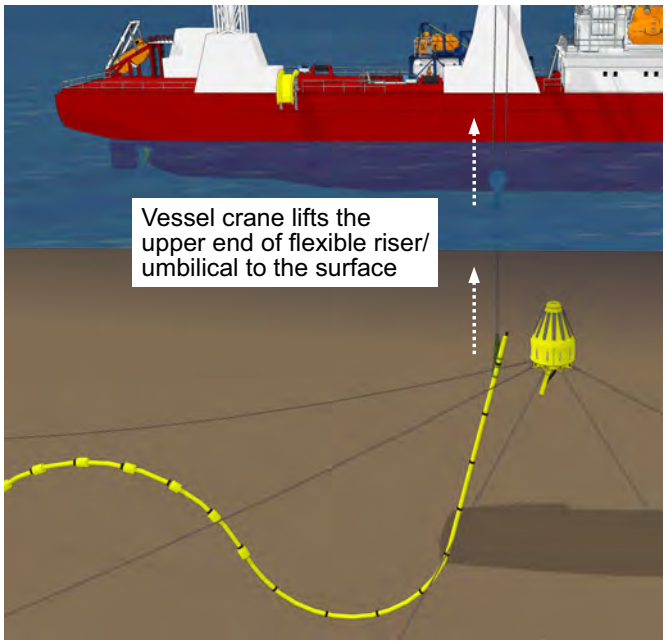
Project Neptune: Risers and Umbilicals

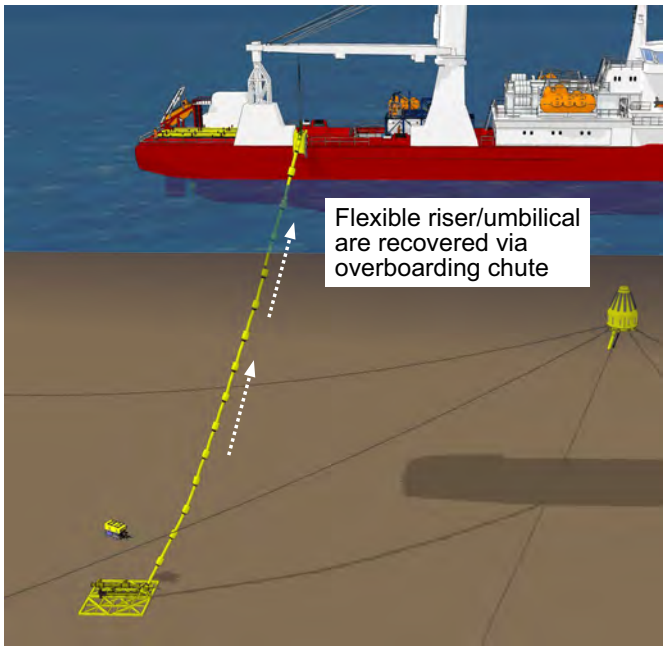
Flexible Riser and Umbilical Recovery

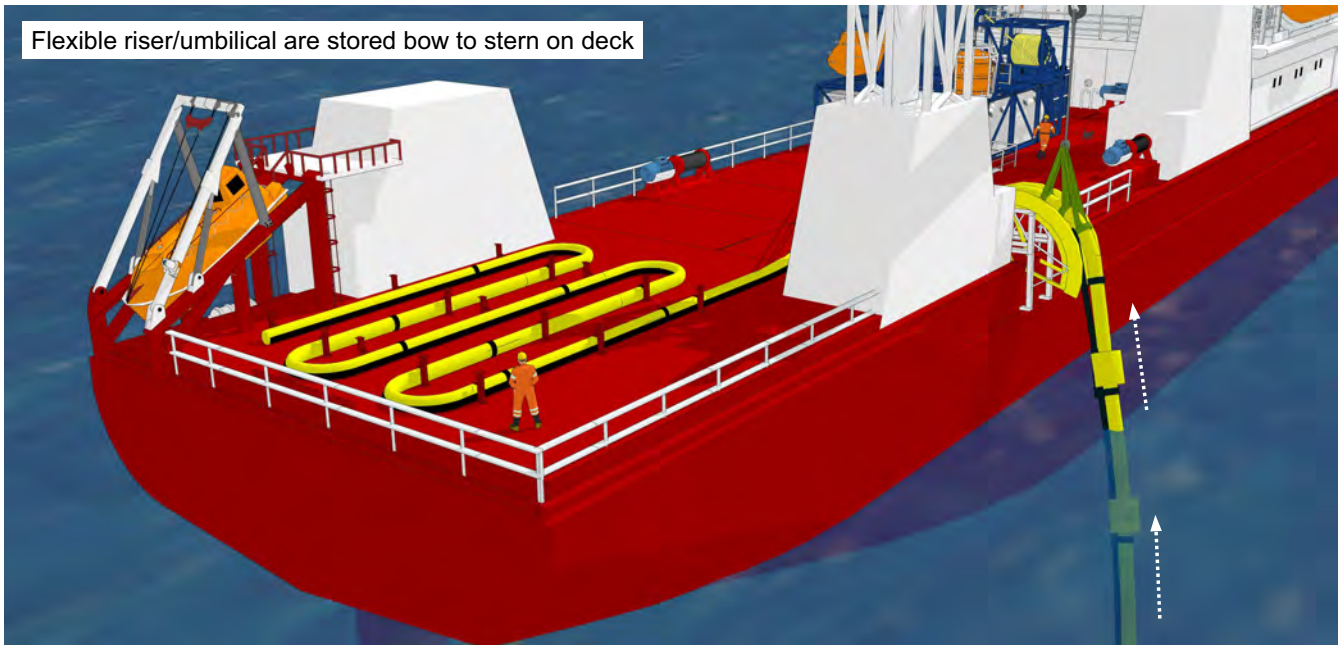





ROV cuts flexible riser and umbilical below the bend restrictor

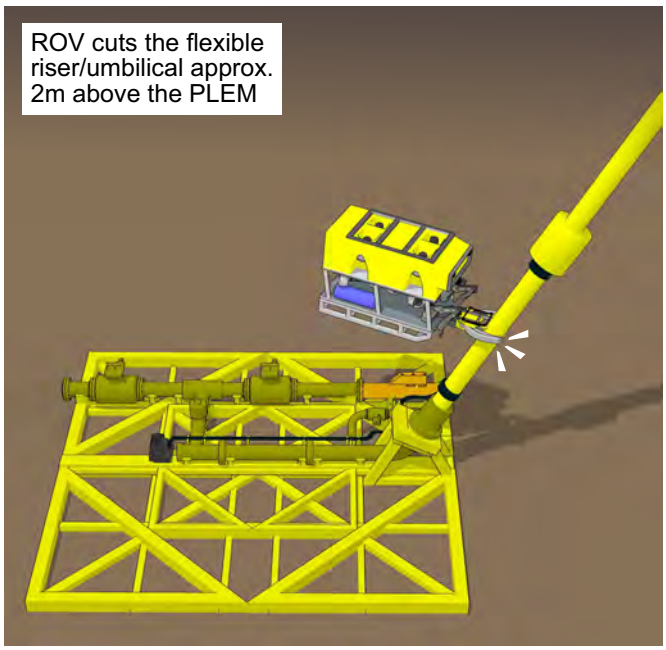

Vessel crane lifts the upper end of flexible riser/ umbilical to the surface

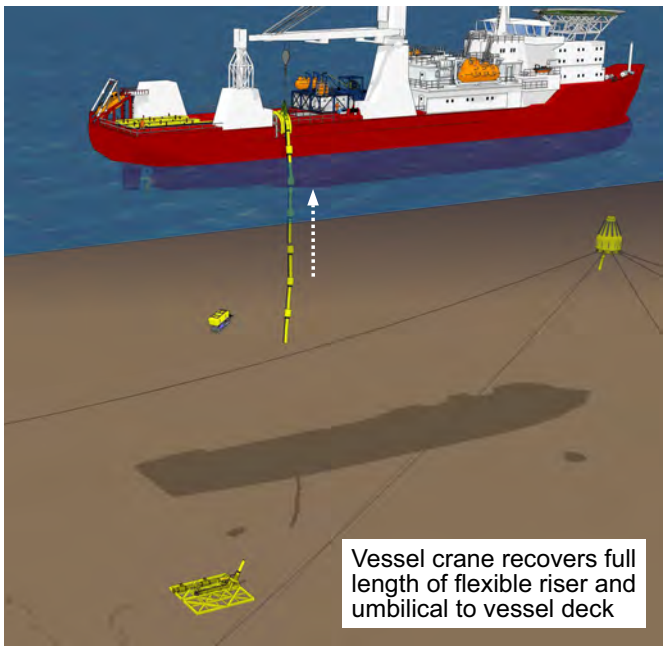

Flexible riser/umbilical are recovered via overboarding chute

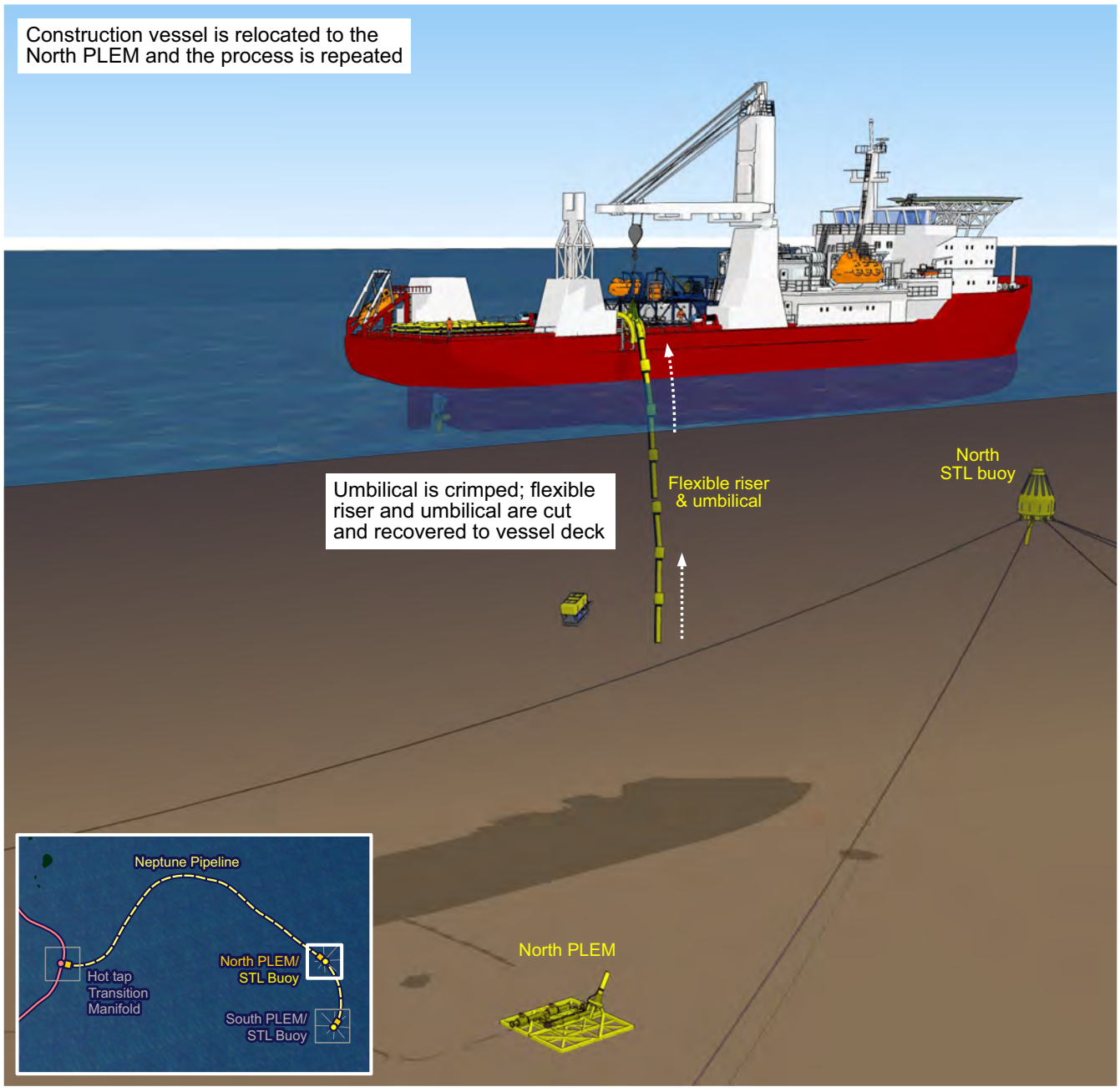

Flexible riser/umbilical are stored bow to stern on deck

Project Neptune: Risers and Umbilicals

Flexible Riser and Umbilical Recovery

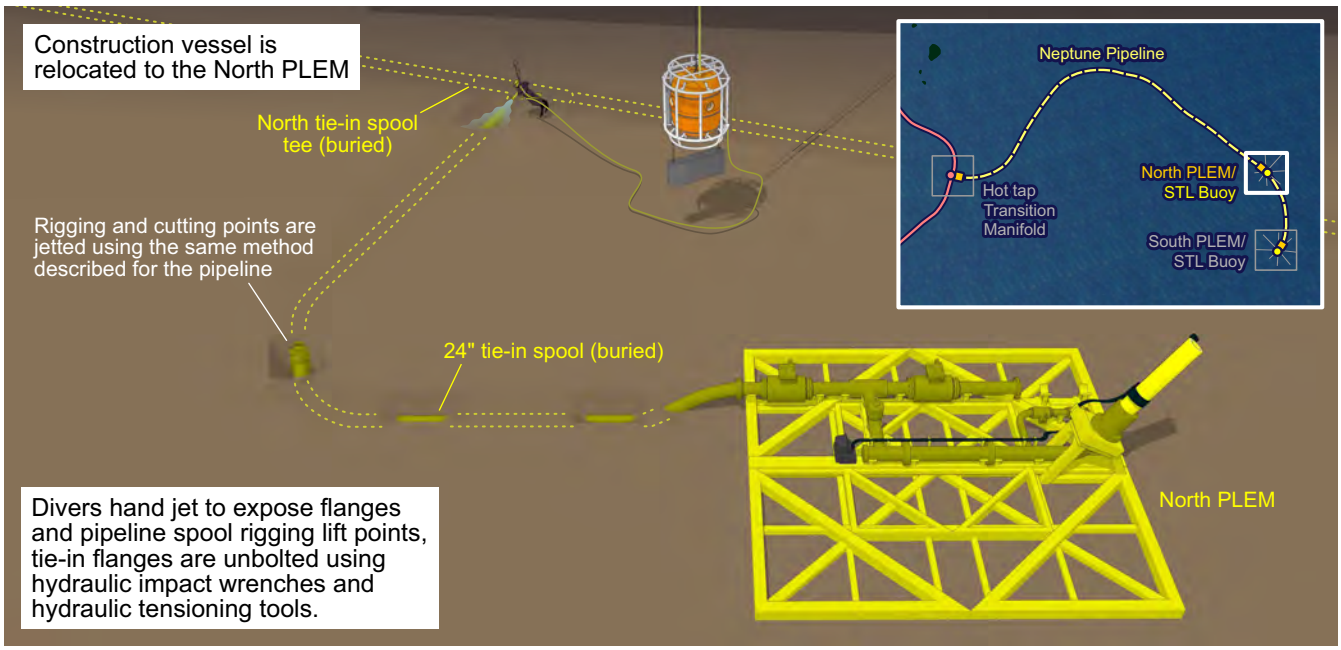


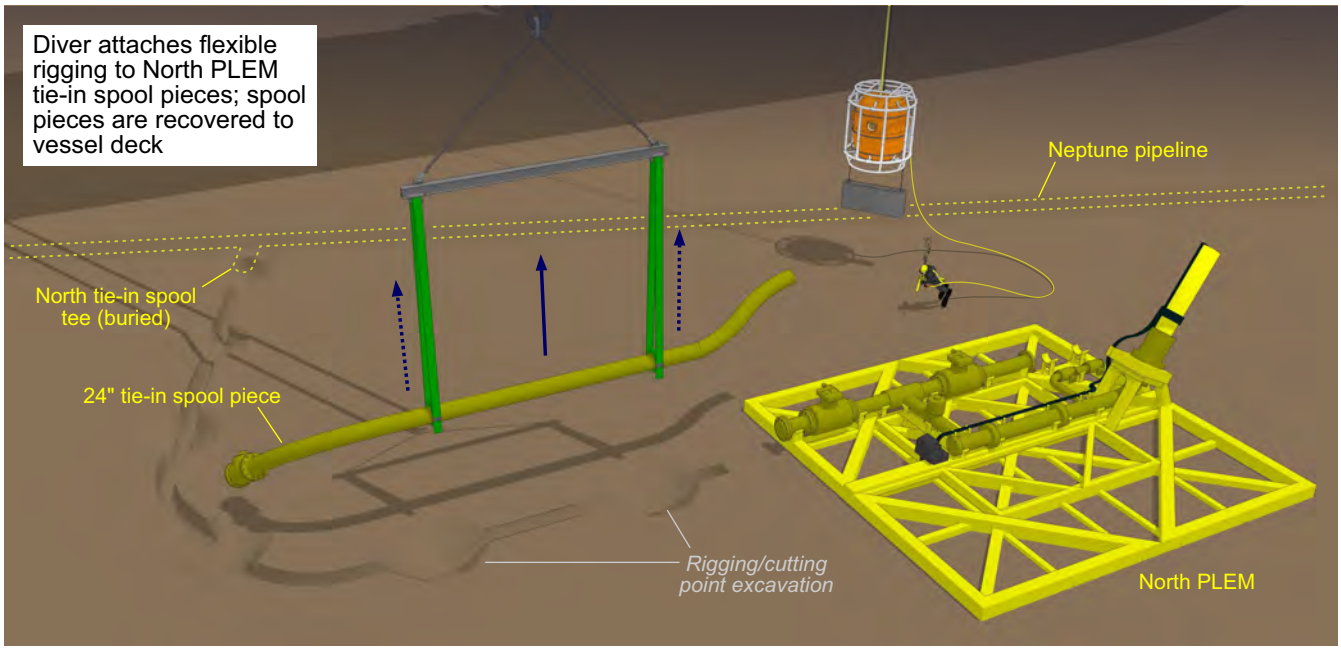


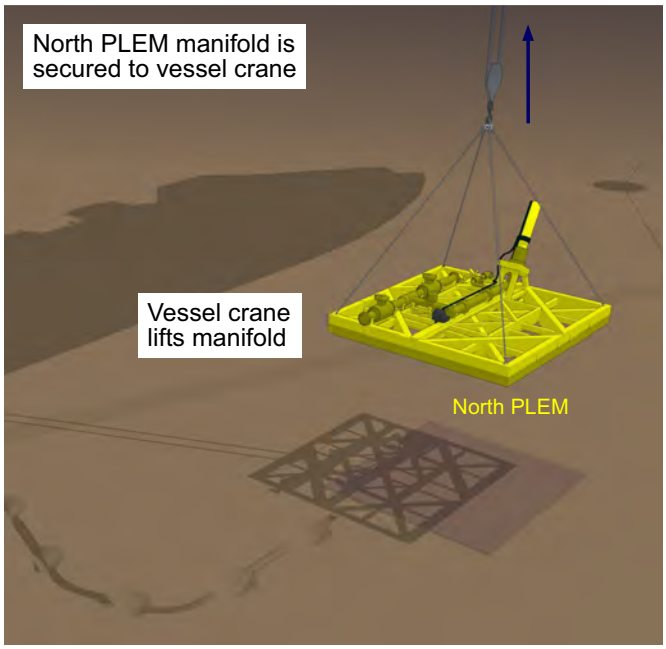


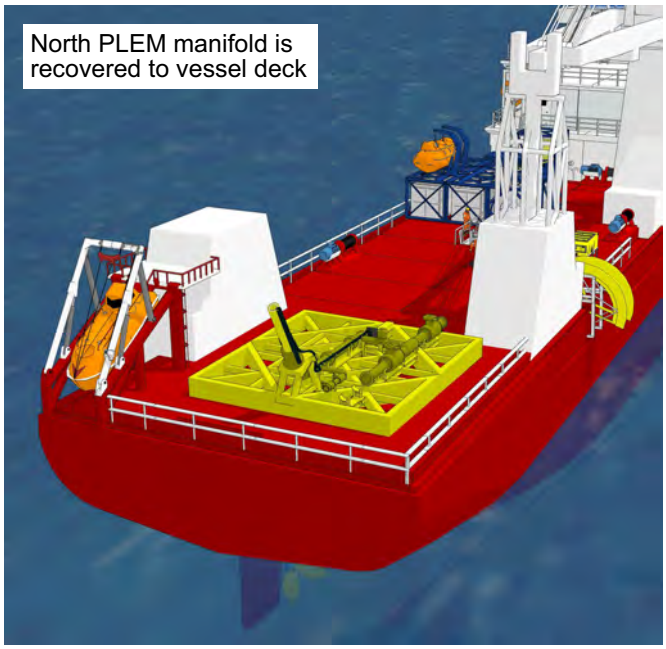
Project Neptune: Transition Manifold, PLEMs and Tie-in Spools

North Tie-in Spool and PLEM Recovery



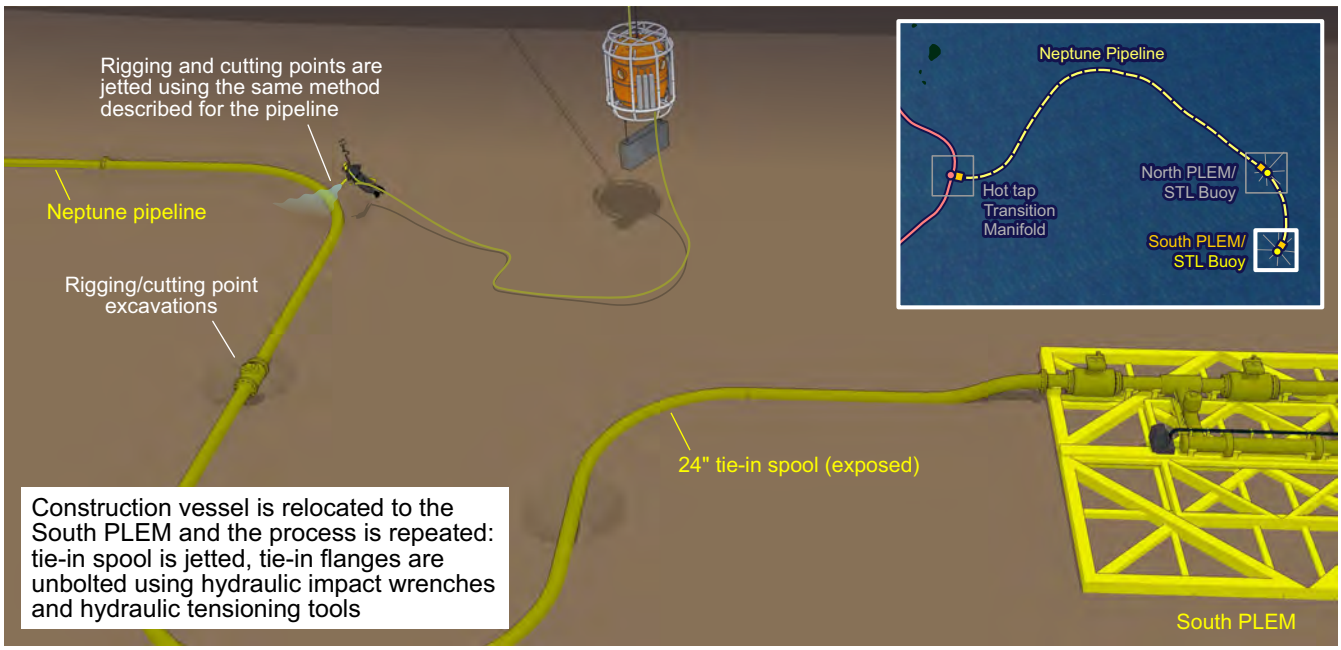


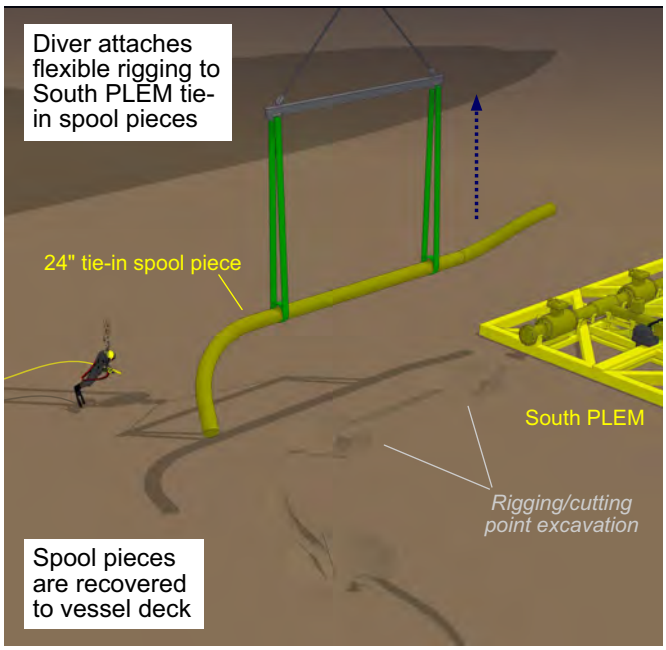


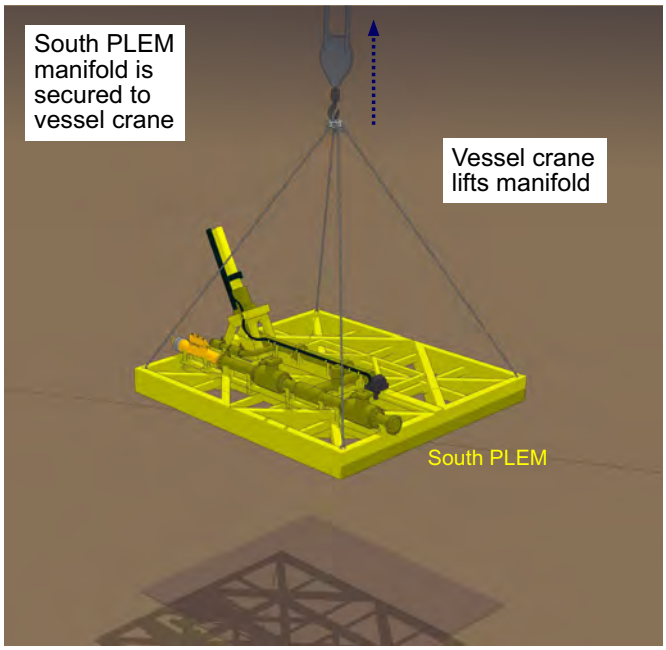


Project Neptune: Transition Manifold, PLEMs and Tie-in Spools

South Tie-in Spool and PLEM Recovery

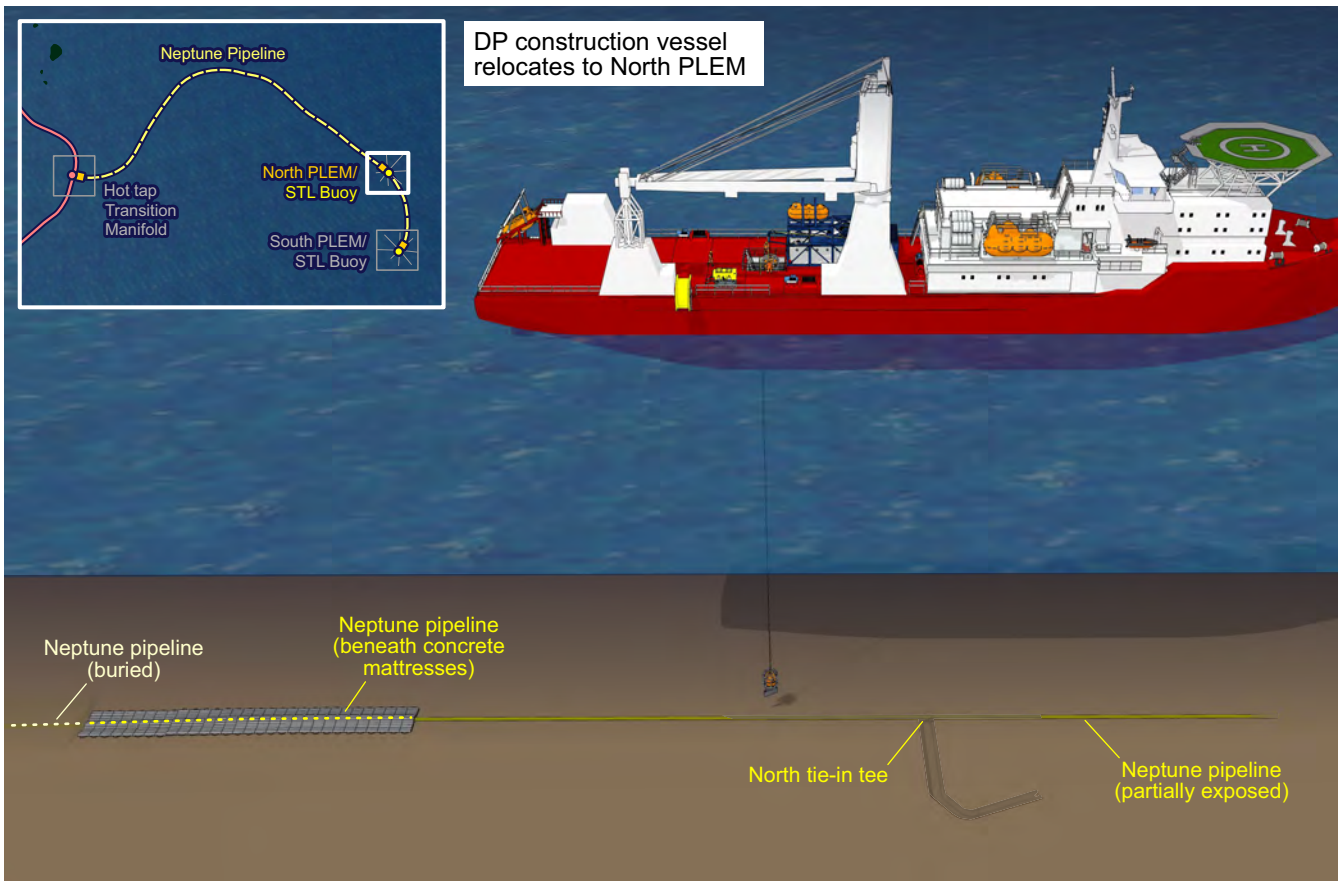


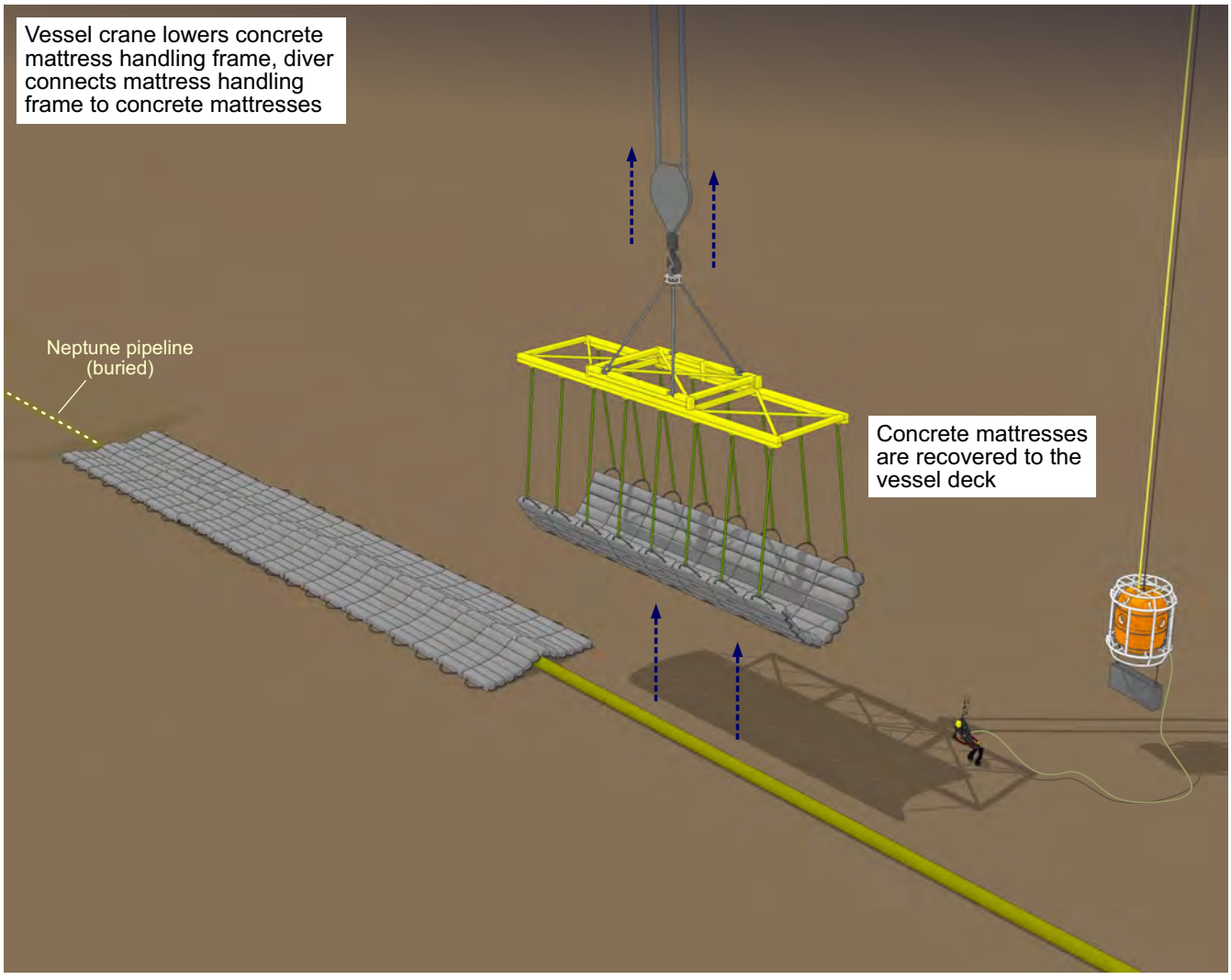




Project Neptune: Concrete Mattress and Pipeline Recovery

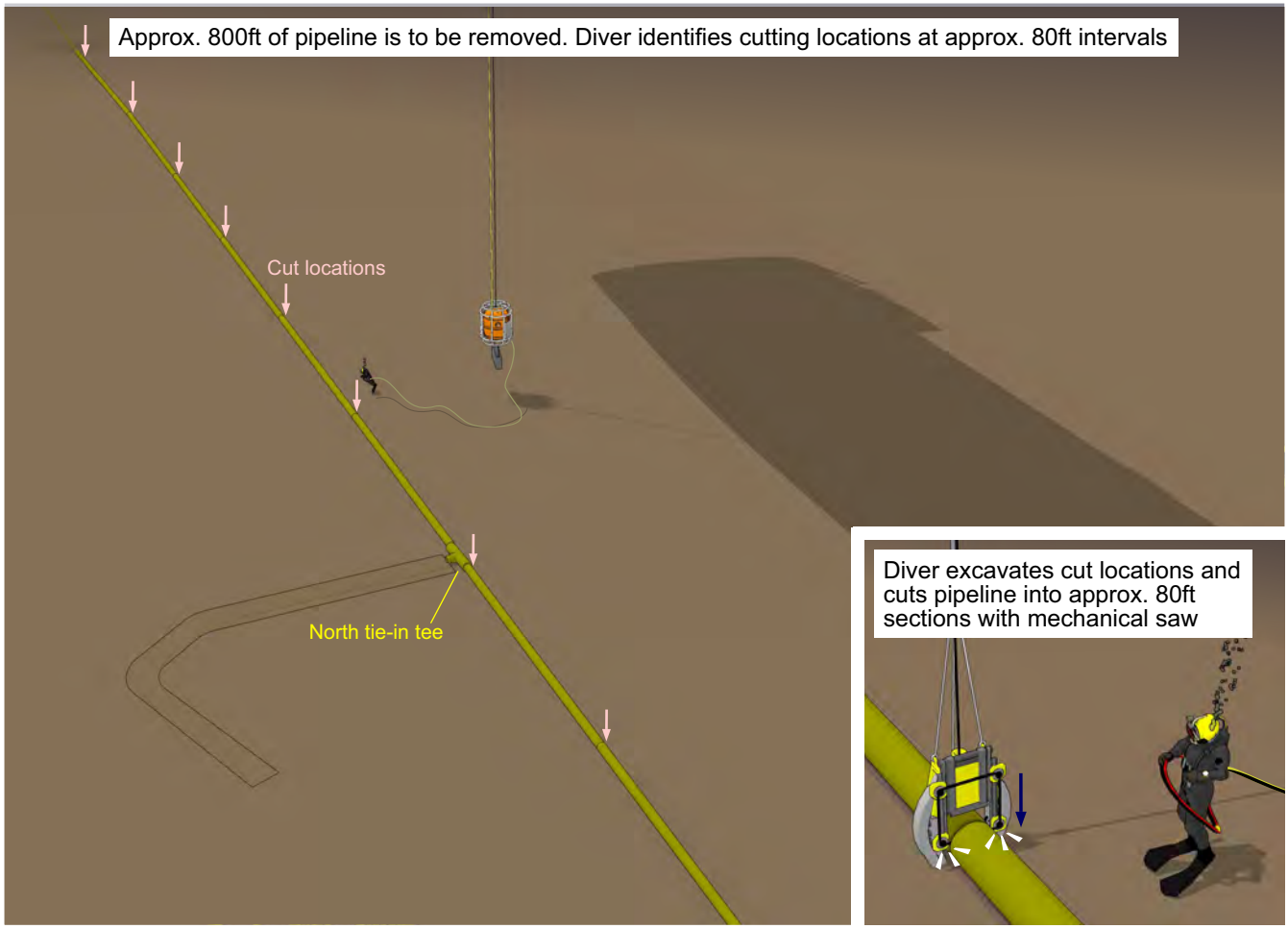
Concrete Mattress and Pipeline Recovery/Abandonment (North PLEM)

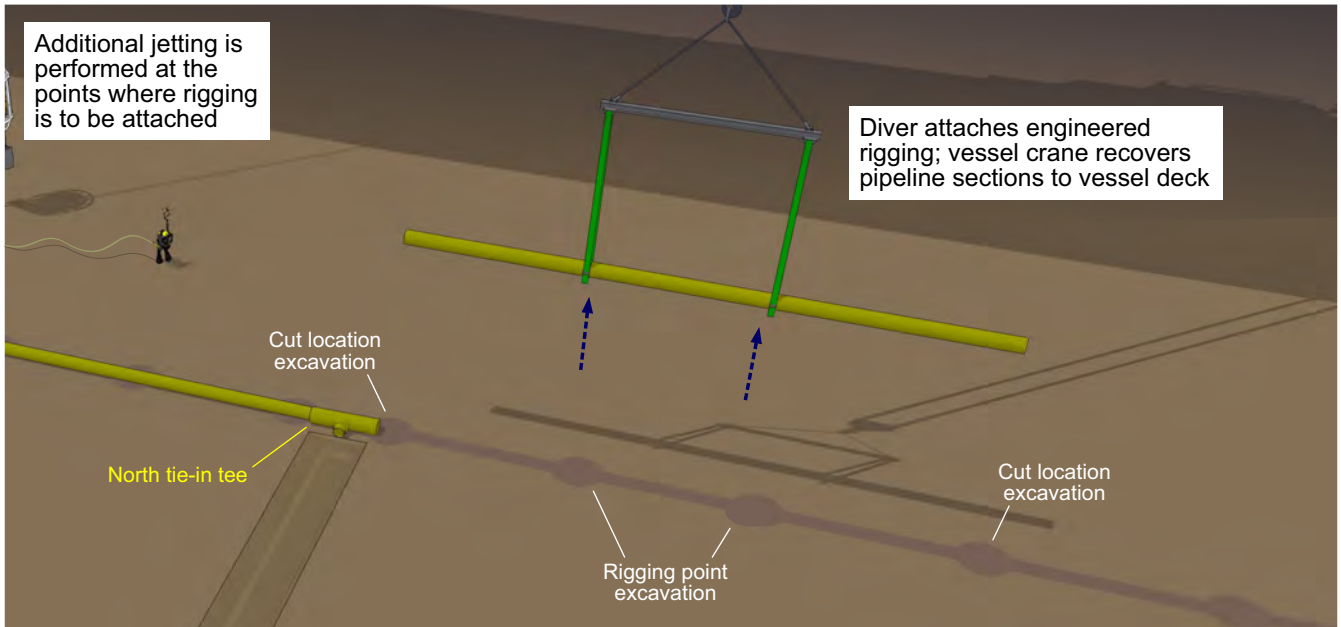


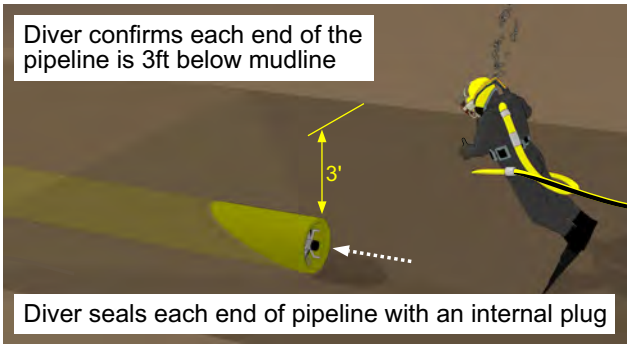


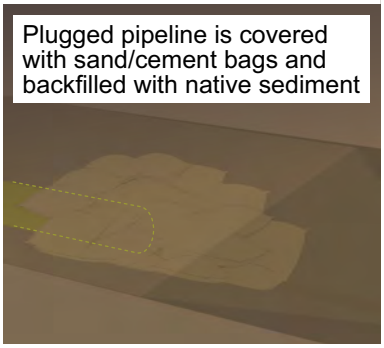
Project Neptune: Concrete Mattress and Pipeline Recovery

Concrete Mattress and Pipeline Recovery/Abandonment (North PLEM)



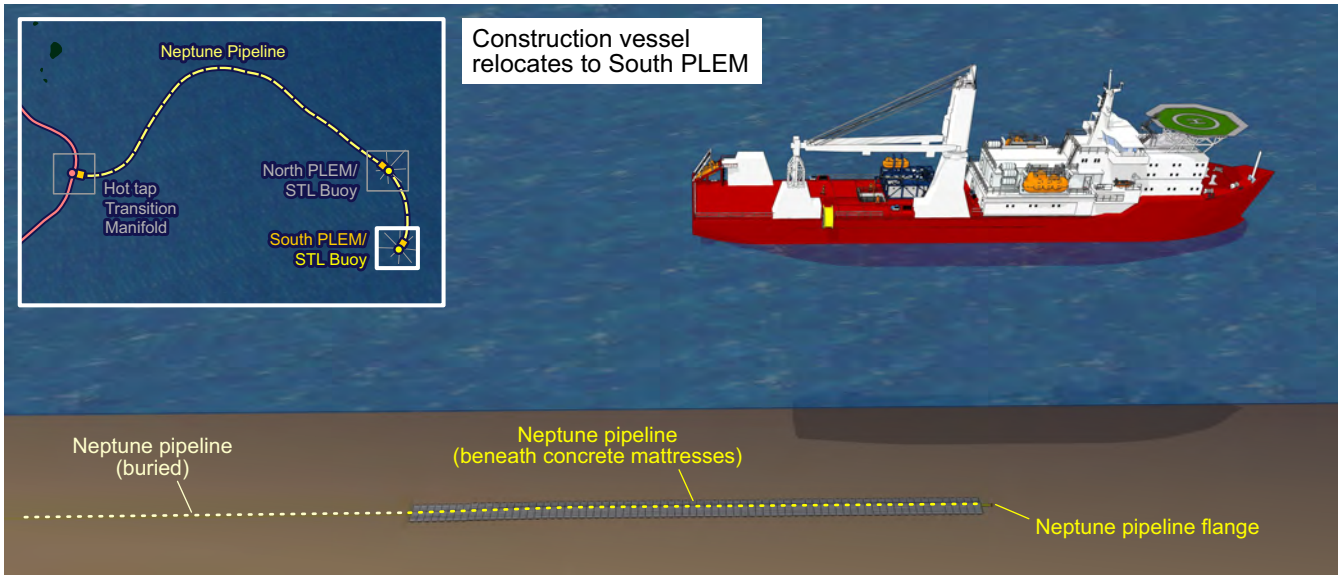


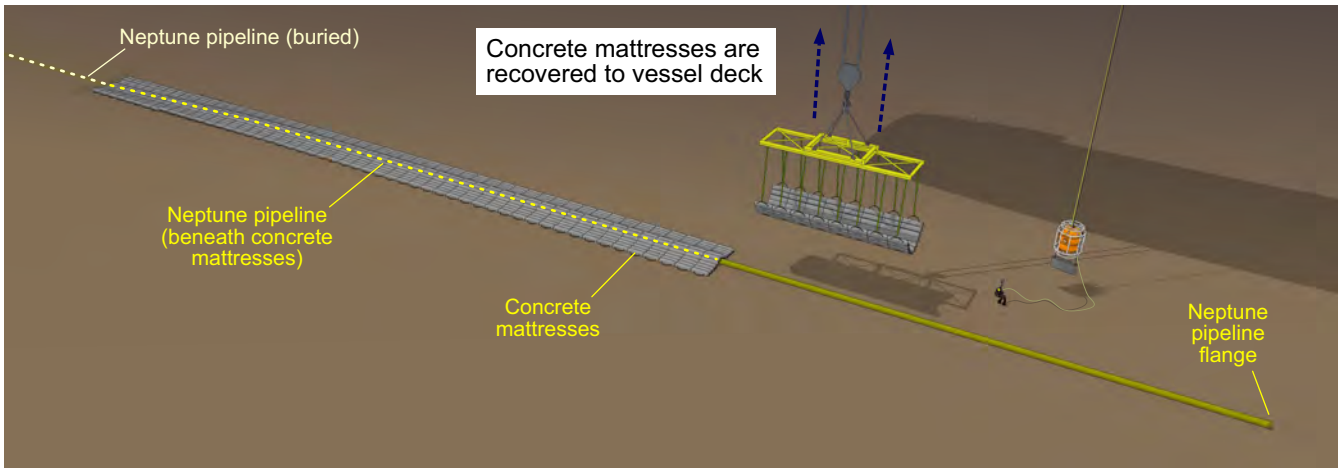


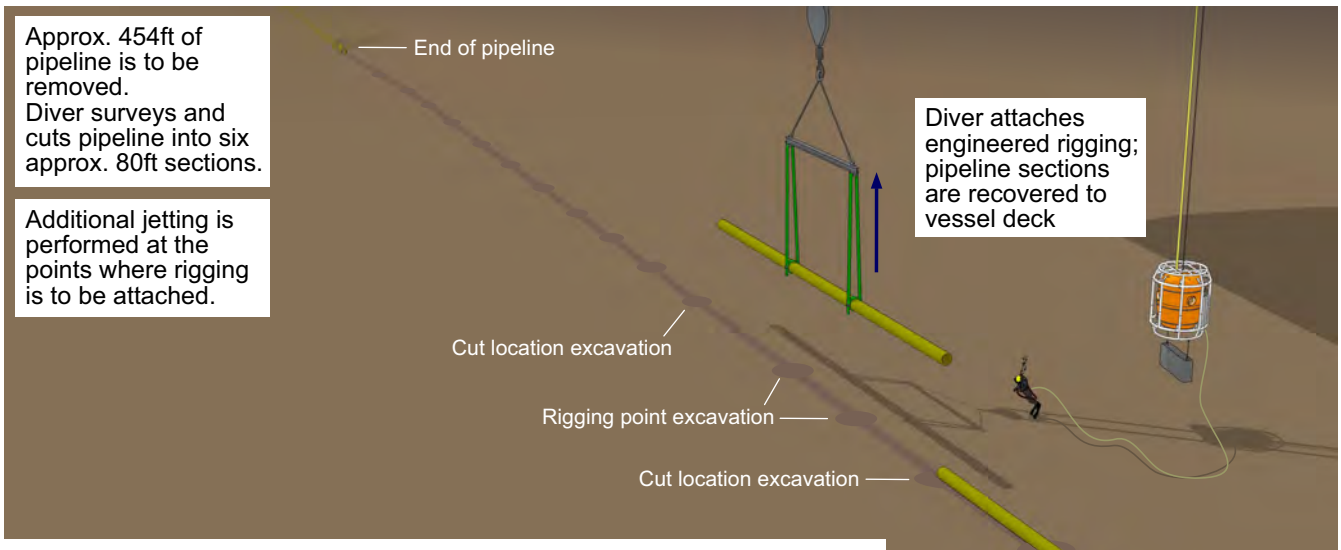


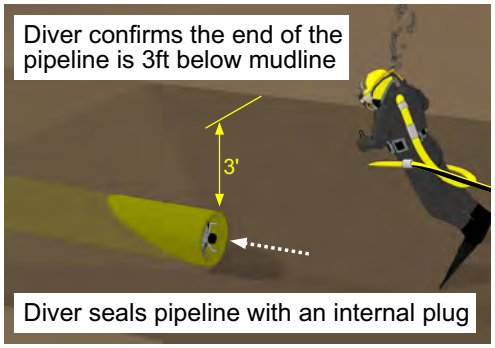
Project Neptune: Concrete Mattress and Pipeline Recovery

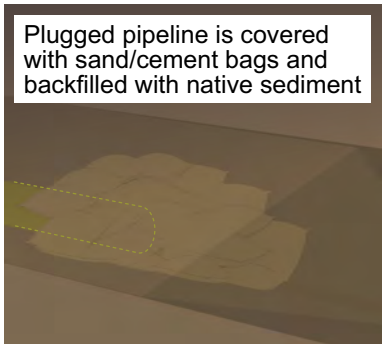
Concrete Mattress and Pipeline Recovery/Abandonment (South PLEM)





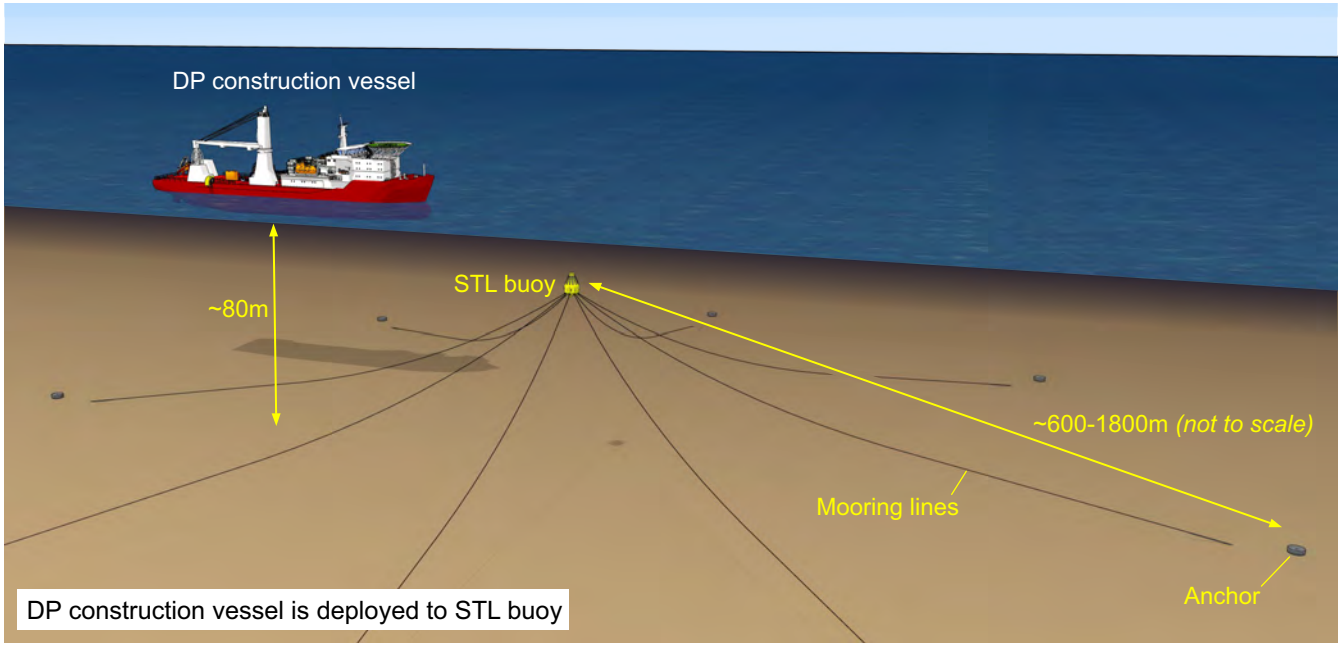




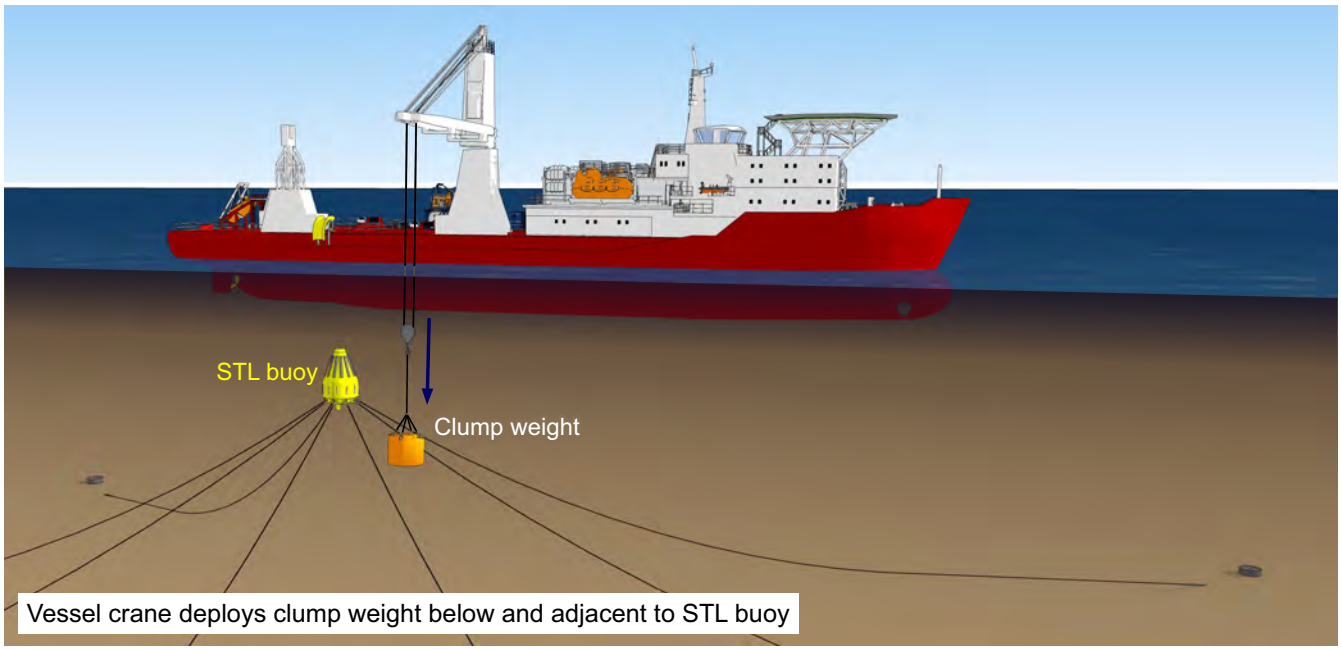


Project Neptune: Mooring Lines and STL Buoys

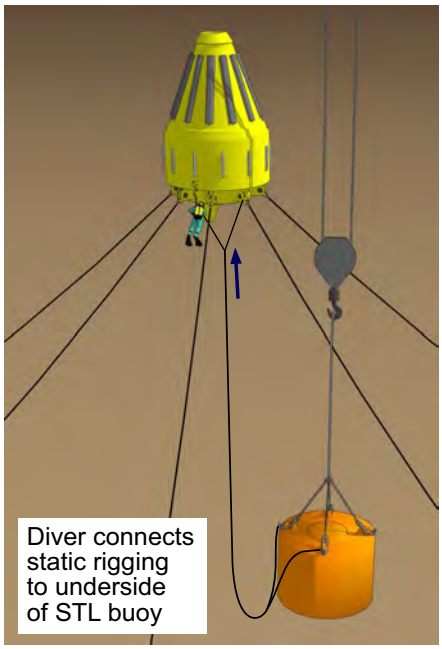
STL Buoy Stabilisation



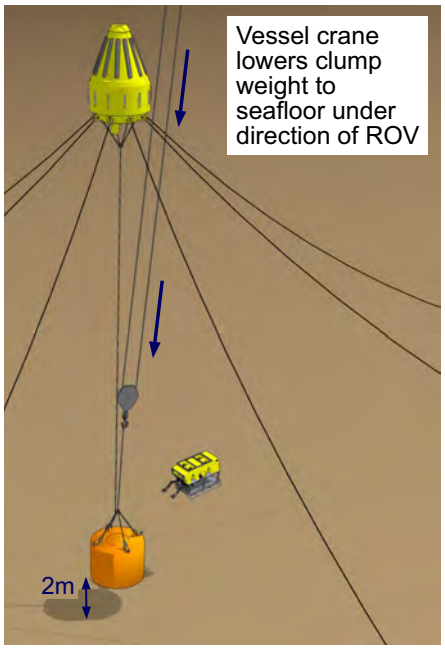
DP construction vessel is deployed to STL buoy



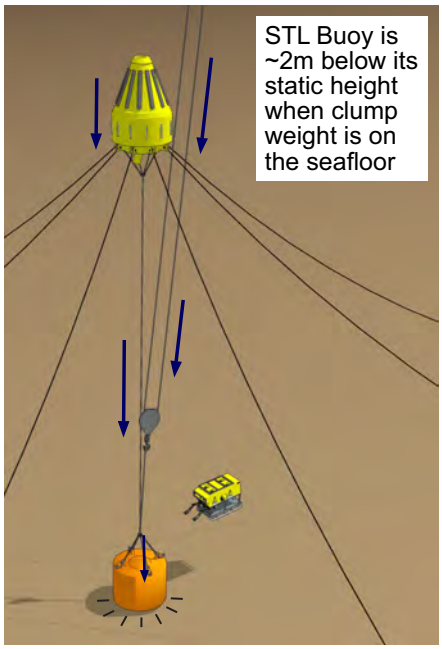
Vessel crane deploys clump weight below and adjacent to STL buoy



Diver connects static rigging to underside of STL buoy



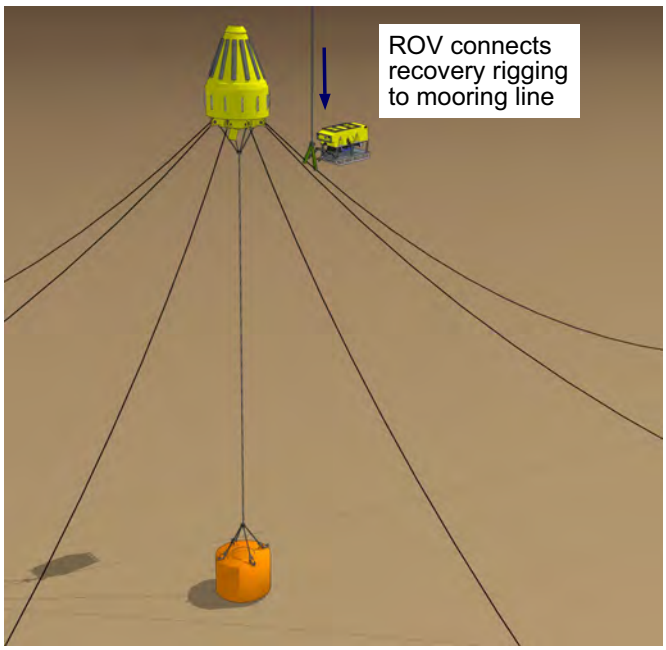
Vessel crane lowers clump weight to seafloor under direction of ROV

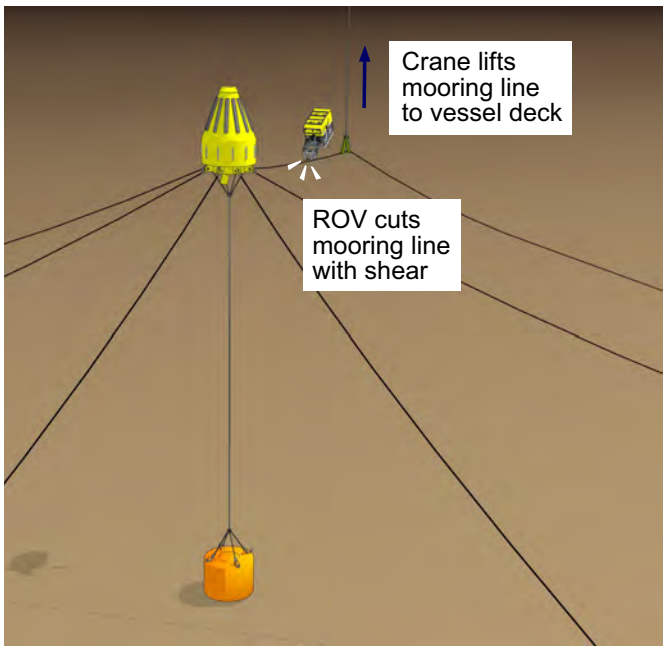


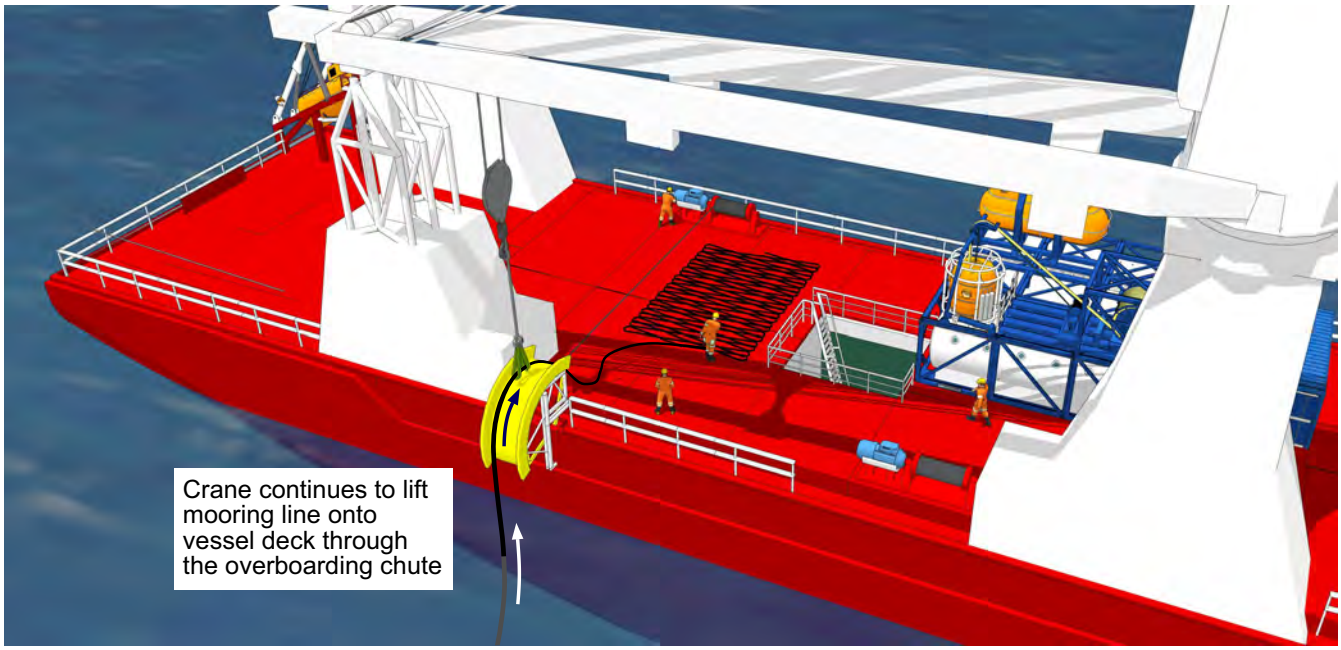
STL Buoy is ~2m below its static height when clump weight is on the seafloor

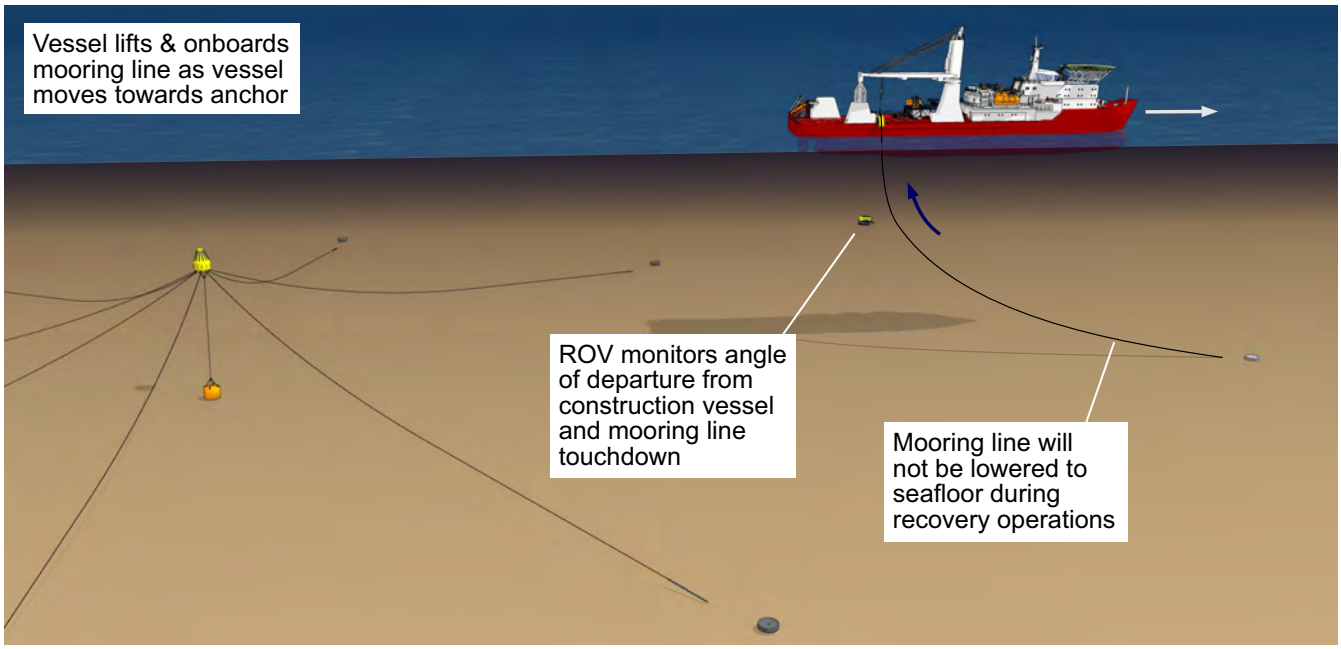
Project Neptune: Mooring Lines and STL Buoys

Mooring Line Recovery



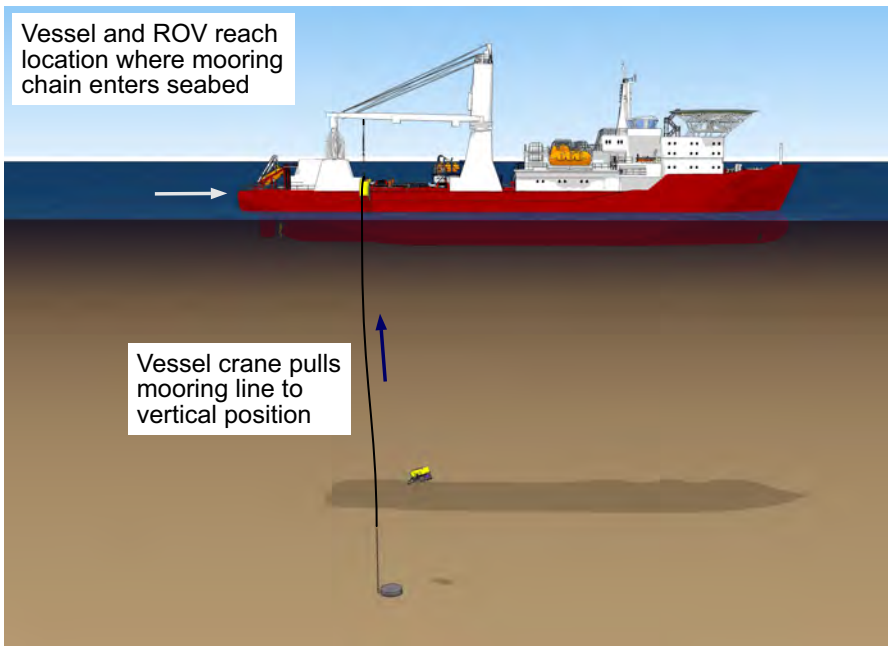


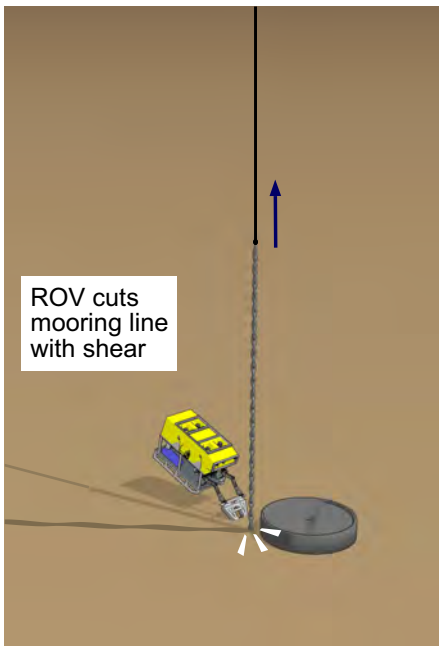


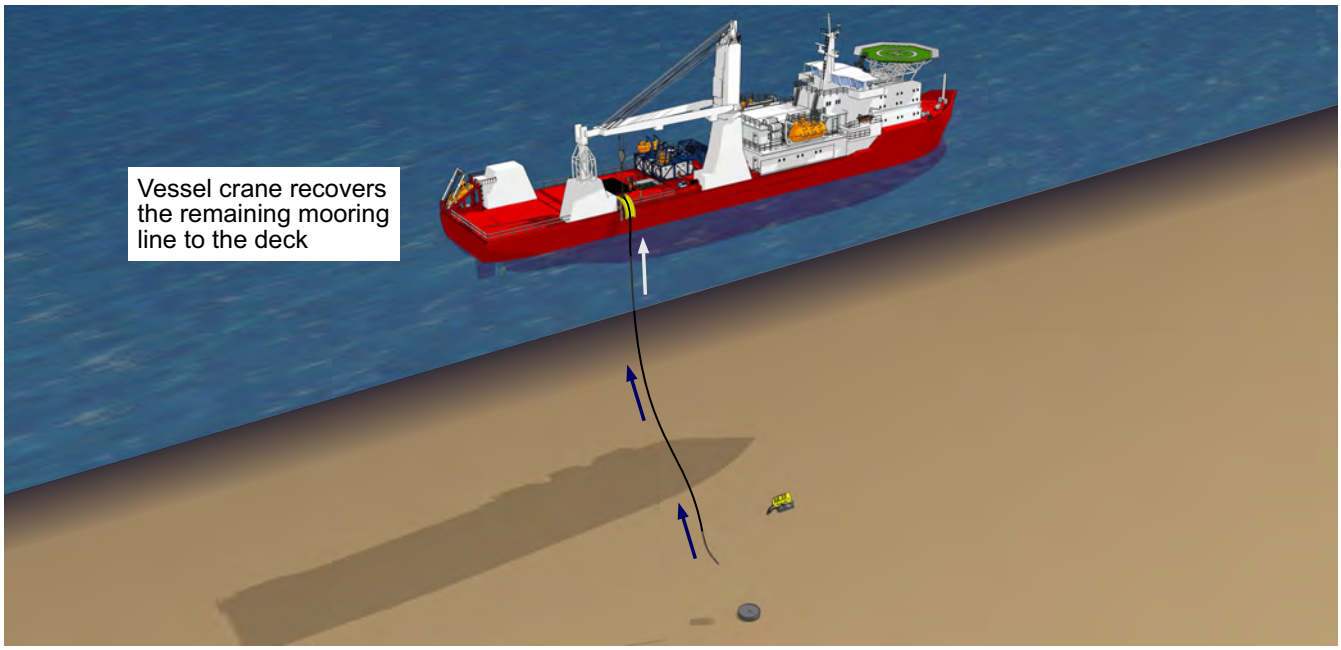


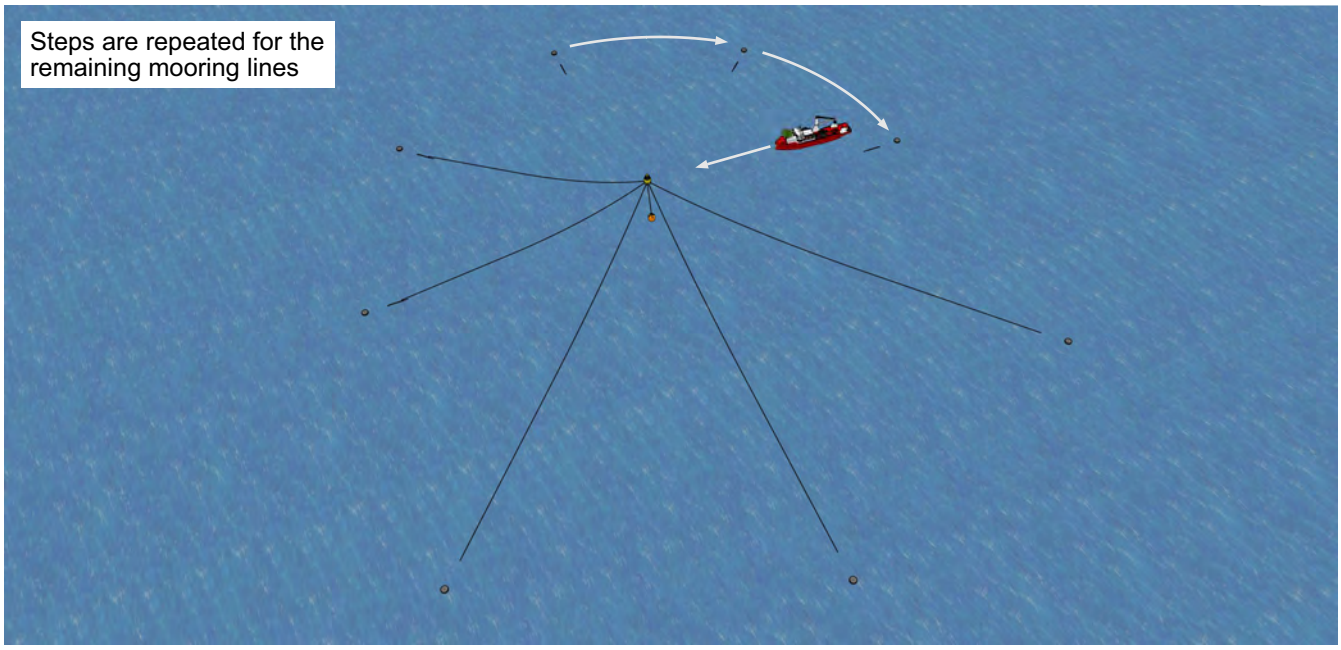
Project Neptune: Mooring Lines and STL Buoys

Mooring Line Recovery (continued)



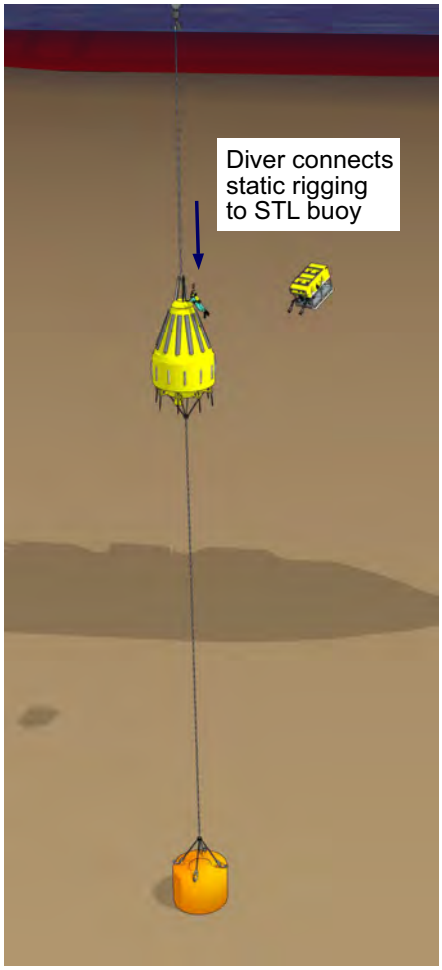


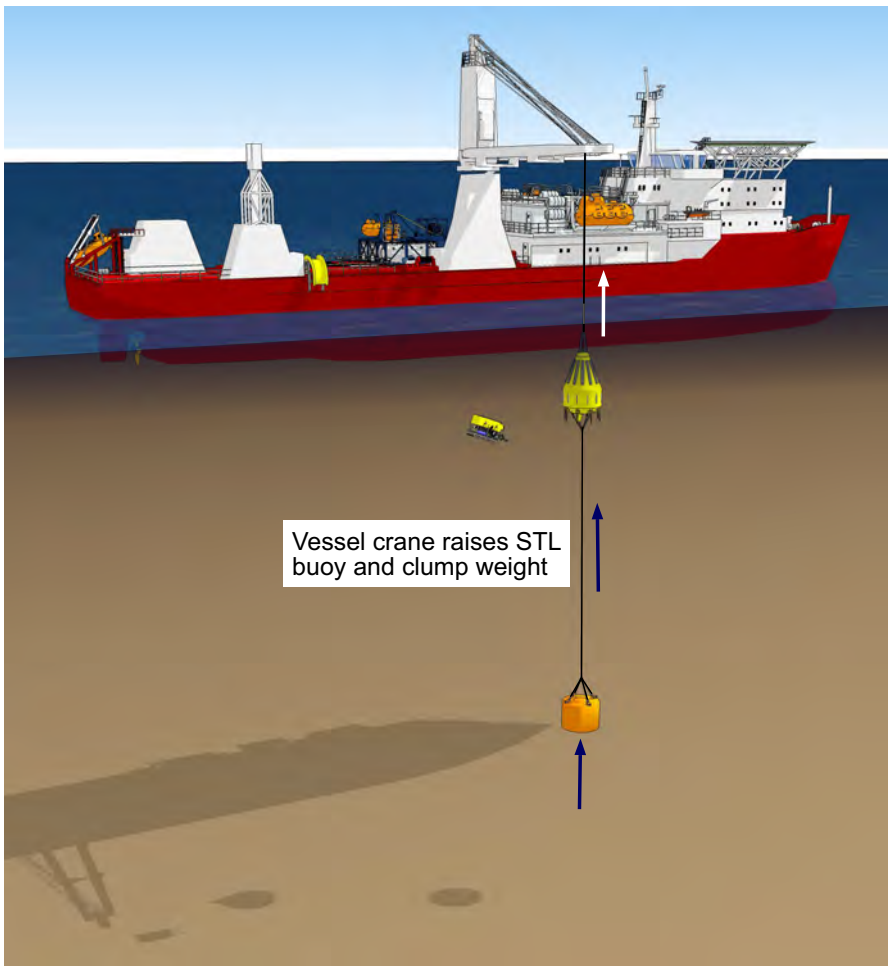


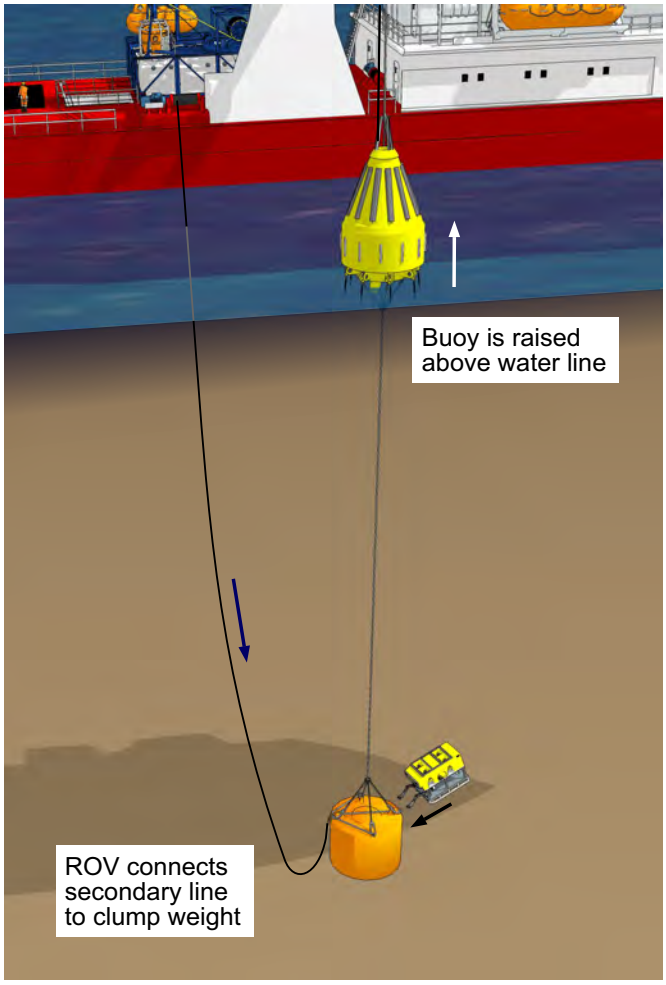


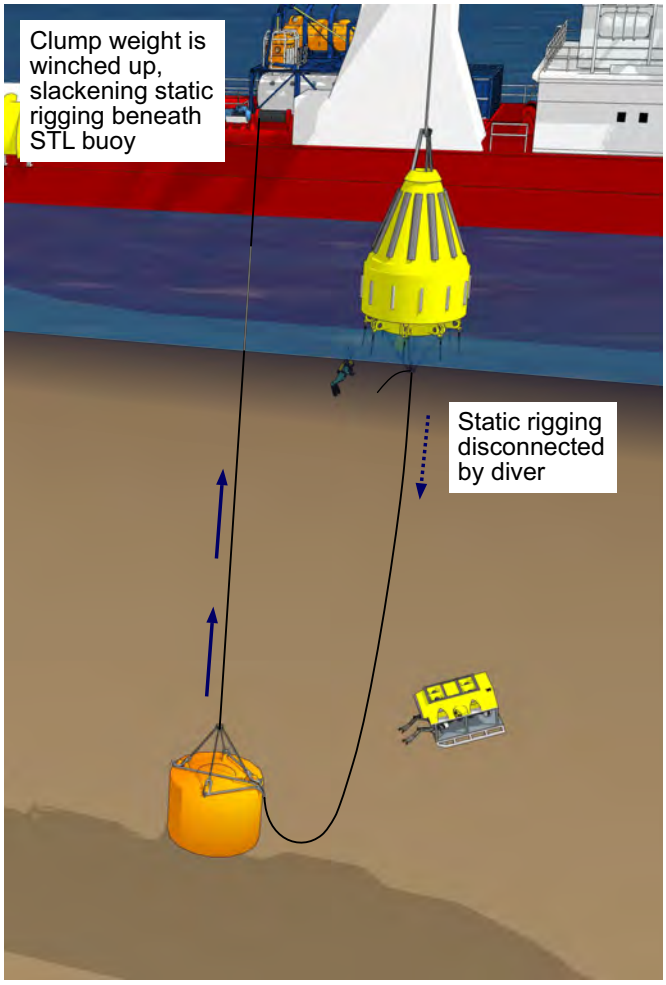
Project Neptune: Mooring Lines and STL Buoys

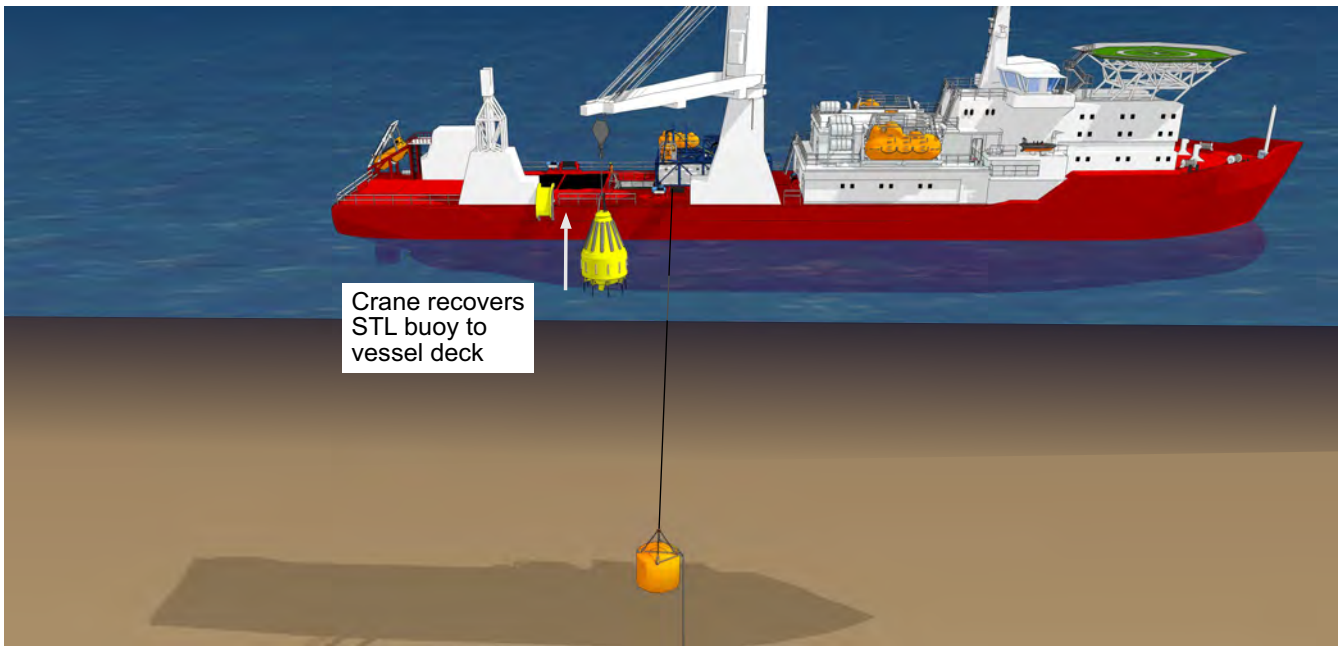
STL Buoy Recovery

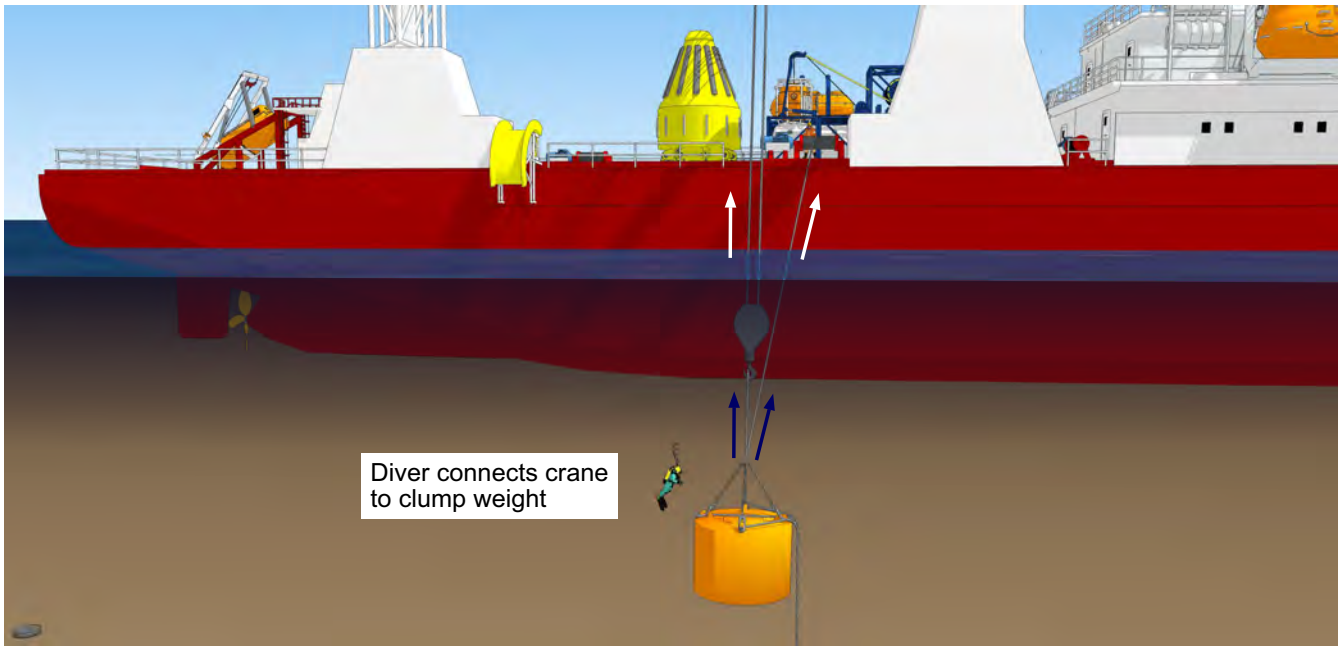


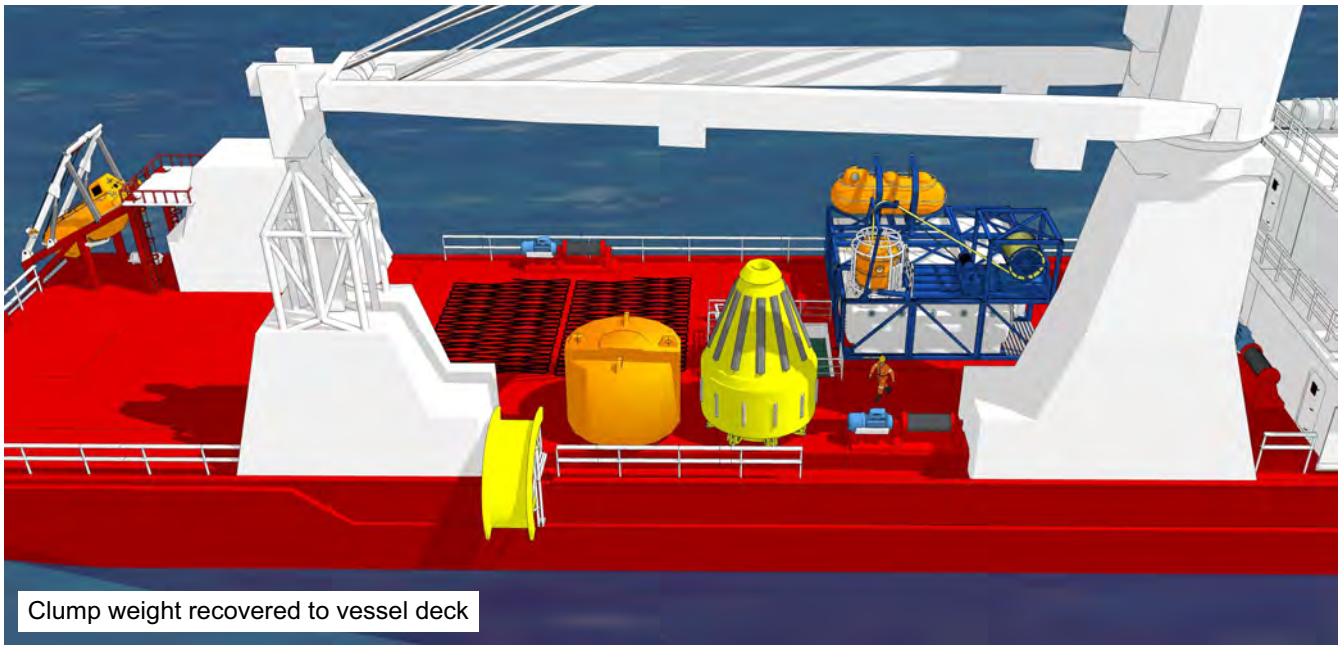






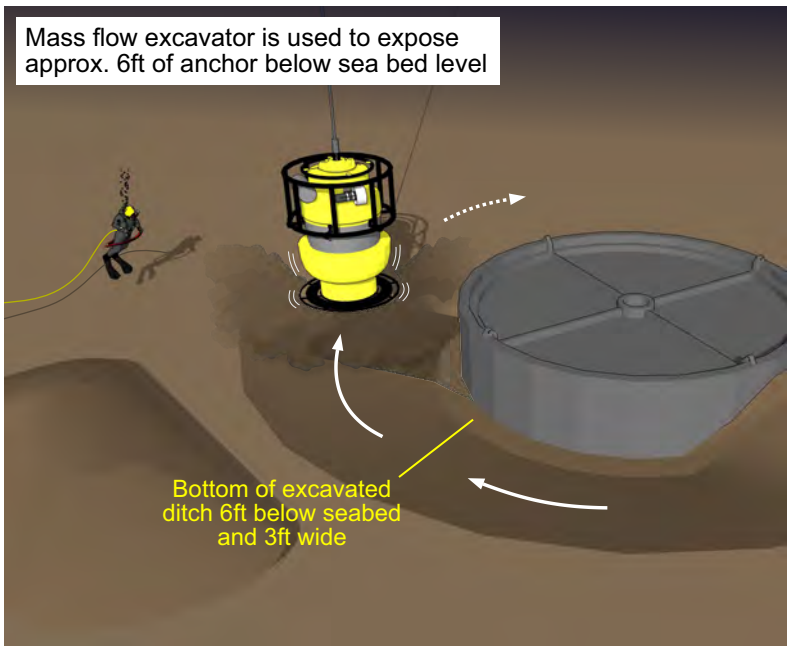

Crane recovers STL buoy to vessel deck

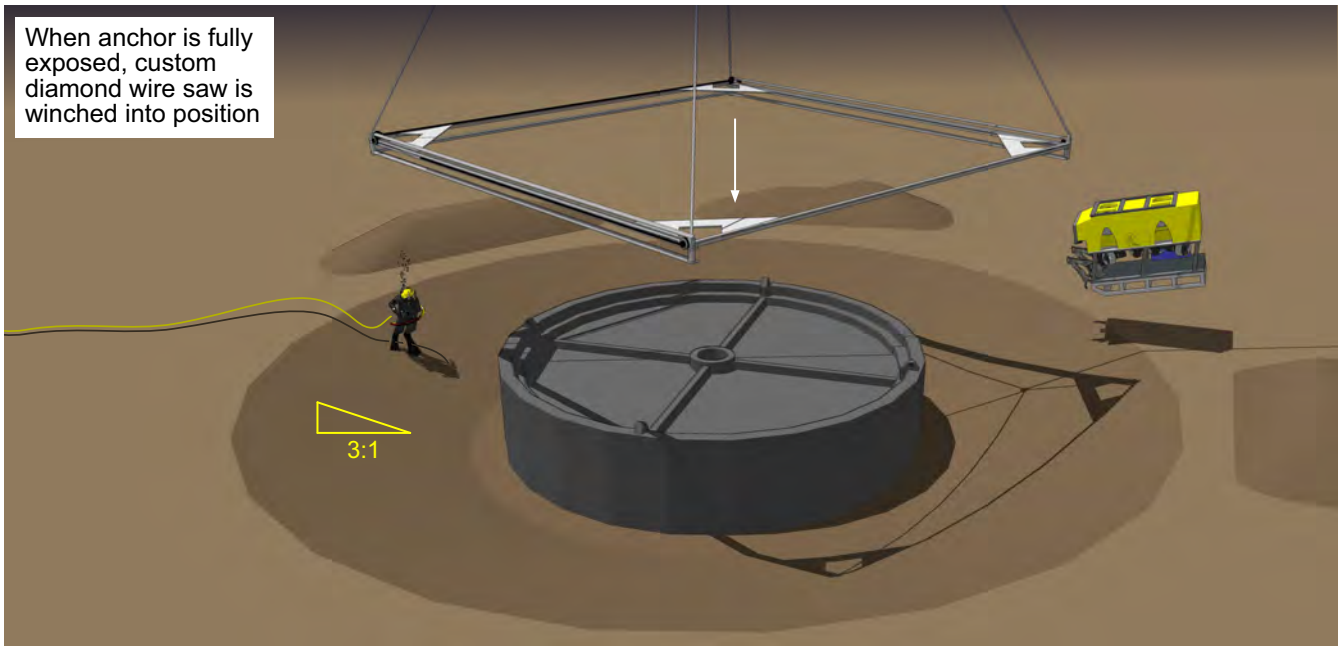

Diver connects crane to clump weight

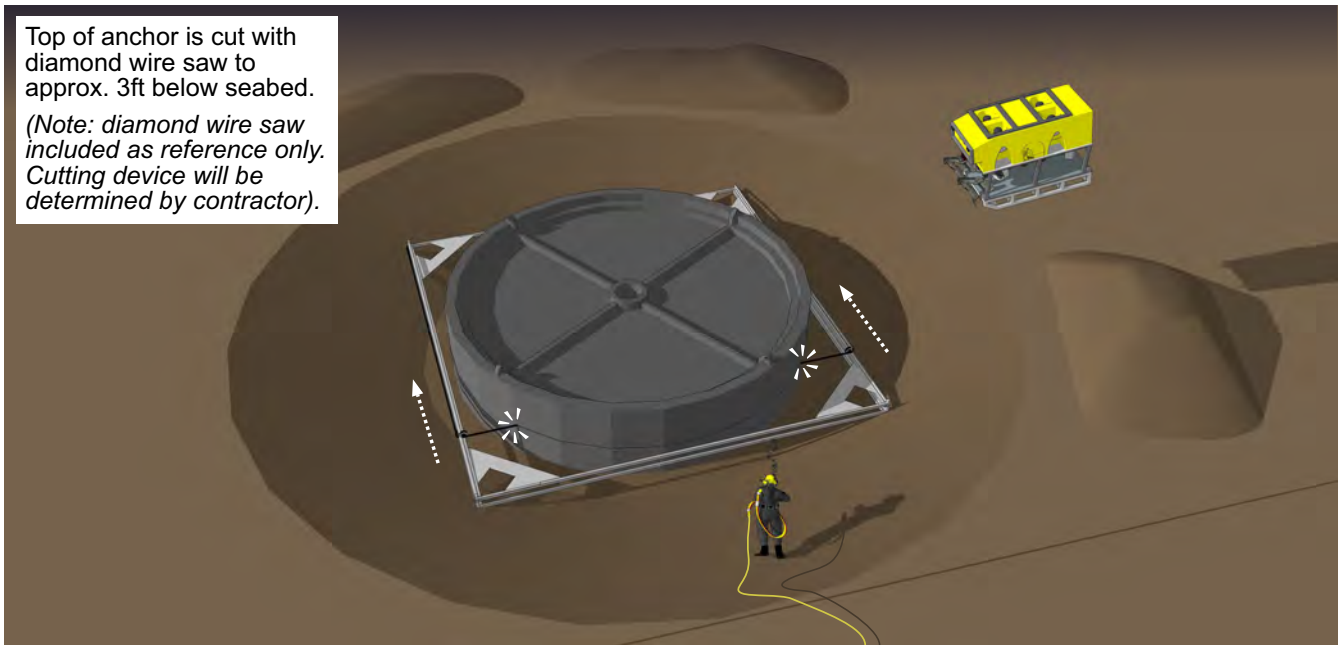

Clump weight recovered to vessel deck

Project Neptune: Anchors

Removal/Recovery of Top of Anchors







Project Neptune: Anchors

Removal/Recovery of Top of Anchors (continued)