

State of Hawai'i  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Papahānaumokuākea Marine National Monument  
Honolulu, Hawai'i 96813

August 14, 2020

Board of Land and Natural Resources  
Honolulu, Hawai'i

Request for Authorization to Issue a Papahānaumokuākea Marine National Monument  
Conservation and Management Permit to Mr. Andrew Rocheleau, Sea Engineering, Inc., for  
Access to State Waters to conduct salvage activities at Lisianski Island.

The Papahānaumokuākea Marine National Monument program hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Marine National Monument conservation and management permit to the Monument Co-Trustee representatives of the U.S. Department of the Interior, U.S. Fish and Wildlife Service; National Oceanic and Atmospheric Administration, U.S. Department of Commerce (NOAA); State of Hawai'i Department of Land and Natural Resources (DLNR), pursuant to § 187A-6, Hawai'i Revised Statutes (HRS), Hawai'i Revised Statutes (HRS); §§ 13-60.5-5 & 13-60.5-6, Hawai'i Administrative Rules (HAR); and §§ 13-126-9 & 13-126-10, HAR, and all other applicable laws and regulations.

The conservation and management permit, as described below, would allow entry and management activities to occur in Papahānaumokuākea Marine National Monument (Monument), including the NWHI State Marine Refuge and the waters (0-3 nautical miles) surrounding the following sites:

- Lisianski Island

The activities covered under this permit would occur from August 25, 2020 through August 24, 2021.

#### INTENDED ACTIVITIES

The applicants propose to salvage NOAA Buoy equipment and materials that were deposited into the nearshore waters and shoreline at Lisianski. A brief summary of the grounding is as follows and a more detailed summary including maps can be found in the approved salvage plan as part of this hearing package.

NOAA Buoy 3D61 was deployed at station 51101 (186 NM NW of Kauai Island, HI) on October 19, 2016. On March 28, 2018 the buoy was reported outside of its watch circle and considered to be adrift trailing an unknown length of its mooring. The buoy drifted into the Papahānaumokuākea Marine National Monument (PMNM) on October 21, 2018. While transiting through the Monument the mooring became entangled in the seafloor thereby re-mooring itself in three distinct locations. On February 8th, 2019 the buoy went ashore on the

eastern (windward) side of Lisianski Island at 26.0646N 173.9608W and has been reporting a near constant 45-degree tilt angle indicating that the buoy is out of the water and is being supported by the bridle and the hull at this heeled over angle. The buoy is disconnected from the mooring at the 3rd Class Split-Key Shackle closest to the bridle. The remainder of the mooring nearshore to the buoy consists of 75ft of 1" chain and approximately 1ft of synthetic line. Both ends of this chain have been marked with a small float. This section is described as heading 41 degrees Northeast from the buoy in 2-3ft of water. The chain is not hung up on any subsurface structures.

The immediate area next to the buoy is described as being a hard-bottom and covered in algae with little to no coral present. The bottom conditions persist outward from the shore to about 250ft-300ft with the relative absence of coral only confirmed to 75ft from shore. There is a deeper channel approximately 100ft from the buoy.

These ancillary response activities are being requested in order to fulfill duties by those responsible for the incident. The salvage will remove, and document the removal of, buoy equipment in accordance with the salvage plan to minimize and further damage to the resources.

The State of Hawaii Division of Aquatic Resources is requiring that a professional salvage company be utilized for the NOAA Buoy Center's salvage operation. The salvage operation would be closely monitored in the field by designated DAR agency staff.

Permitting these salvage activities proposed by the applicants is directly supported by the Monument Management Plan, as described in the priority management need 3.3.4 Emergency Response and Natural Resource Damage Assessment Action which states,

*"While Monument and State regulations regulate access, they also provide a general exemption for activities necessary to respond to emergencies. The general exemption for emergencies allows for individuals responding to emergencies threatening life, property, or the environment to conduct necessary activities without the need for a permit. The general exemption applies only to the emergency response activity itself and not to the ancillary activities, such as training for emergency response, **salvage operations**, remediation, or restoration. These ancillary actions also require a timely response and would be covered under the appropriate agency's conservation and management permit."*

## REVIEW PROCESS

The permit application and **associated salvage plan** was sent out for review and comment to the following scientific and cultural entities: Hawai'i Division of Aquatic Resources, Hawai'i Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

**Comments received from the scientific community are summarized as follows:**

Scientific reviews support the acceptance of this application. Concerns and comments regarding the proposed salvage action were integrated into the salvage plan. The review and associated plan updates were memorialized and are included as an attachment to the plan within this hearing package.

In addition, the MMB has created a set of COVID-19 questions. The applicant responses are below, and the referenced safety plan is an attachment within this hearing package.

**MMB Covid-19 Health and Safety Questions and Applicant Responses:**

1. What measures are you taking to comply with the U.S. Centers for Disease Control and Prevention current COVID-19 guidelines for keeping all listed personnel safe?

Crew will adhere to SEIs Covid Policy, which is attached, and continually updated based on CCH, WHO and CDC guidelines.

2. What measures are you taking to comply with the State of Hawaii's and City and County of Honolulu's current COVID-19 requirements, and the Board of Land and Natural Resources' current COVID-19 guidelines??

Crew will adhere to SEIs Covid Policy, which is attached, and continually updated based on CCH, WHO and CDC guidelines.

Any crew coming in from mainland for Hawaii Resource Group will quarantine for 14 days, as directed by the State of Hawaii, be temperature checked and complete a questionnaire prior to boarding.

3. What are your specific COVID-19 safety plans for departing from and/or returning to Hawaii?

Crew will follow State of Hawaii protocol. You can also reference our Covid Policy.

4. Does your proposed vessel have professionally trained medical personnel on board?

From previous email:

The Captain and two Mates on board are certified by the USCG as "medical care provider" and "Medical Care Person in Charge". These certifications are governed by an international organization and comprise of the following:

**Medical Care Provider:**

- Emergency Medical Services
- Maintaining the Well-Being and Safety of the Care Provider
- Recognizing and Managing Respiratory Emergencies
- Conducting Patient Assessment
- Communicating with Radio Medical Advisory Services

- Managing Medical and Behavioral Emergencies including the use of Basic Life Support and Principles of Pharmacology
- Delivering Immediate Response to Bleeding, Burns, Effects of Cold, Musculo-Skeletal and Spinal Injuries
- Administering CPR and AED

Medical Care Person in Charge Outline:

- Specific Diseases and Traumatic Injuries
- Principles of Aseptic Technique
- Taking Appropriate Medical History
- Performing Suitable Physical Assessment
- Administering Medications
- Performing Intravenous Therapy
- Suturing Wounds
- Inserting Nasogastric Tube
- Performing Urinary Catheterization
- Utilizing Shore-Side Resources
- Locating Information on and Conducting Radio Consultations
- Short / long-term assessment and care of the sick or injured

We keep a AED onboard as well as a fully stocked Medical Chest. I attached the inventory of the medical chest. Please note that this exceeds USCG requirements for what we have to maintain on our vessel.

5. What are your proposed vessel's capabilities/protocols in the event a medical evacuation is required?

We have two different means of satellite communication to allow us to communicate to shoreside medical support services to further render aid to the patient.

For emergency evacuations, we would coordinate with USCG on the closest location that could allow air or ship evacuation.

6. The permittee is required to follow all applicable Federal, State, and County laws with respect to the COVID-19 emergency response that apply at the time of departure and return. In issuance of this permit, the State of Hawaii is not otherwise monitoring or regulating permittee's compliance with COVID-19 laws and is not responsible for the health and safety of crew members, researchers or other occupants of the vessel associated with this permit.

Understood.

**Comments received from the Native Hawaiian community are summarized as follows:**

Cultural reviews support the acceptance of this application. No concerns were raised.

**Comments received from the public are summarized as follows:**

No comments were received from the public on this application.

**Additional reviews and permit history:**

Are there other relevant/necessary permits or environmental reviews that have or will be issued with regard to this project? (e.g. MMPA, ESA, EA) Yes ☒ No ☐

If so, please list or explain:

- The proposed activities are in compliance with HRS chapter 343. The Final Environmental Assessment covering the subject activity was published in OEQC's The Environmental Notice on December 23, 2008 with a finding of no significant impact (FONSI).
- The Department has made an exemption determination for this permit in accordance chapter 343, HRS, and Chapter 11-200, HAR. See Attachment ("DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200 HAR, FOR PAPAĦĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT CONSERVATION AND MANAGEMENT PERMIT TO MR. ANDREW ROCHELEAU, SEA ENGINEERING, FOR ACCESS TO STATE WATERS TO CONDUCT SALVAGE ACTIVITIES UNDER PERMIT PMNM-2020-007")

Has Applicant been granted a permit from the State in the past? Yes ☒ No ☐

If so, please summarize past permits:

- The applicants were granted access to PMNM via the PMNM-2016-001 permit in the past eight years for the purpose of managing the Monument.

Have there been any a) violations: Yes ☐ No ☒  
b) Late/incomplete post-activity reports: Yes ☐ No ☒

Are there any other relevant concerns from previous permits? Yes ☒ No ☐

**STAFF OPINION**

Department staff is of the opinion that Applicants have properly demonstrated valid justifications for their application and that they and their staff should be allowed to enter the NWHI State waters and to conduct the activities therein as specified in the application and related salvage plan with certain special instructions and conditions, which are in addition to the Papahānaumokuākea Marine National Monument Conservation and Management Permit General Conditions. All suggested special conditions have been vetted through the legal counsel of the Co-Trustee agencies (see Recommendation section).

MONUMENT MANAGEMENT BOARD OPINION

At the time of the writing of this submittal, the MMB, though fully aware and supportive of the salvage effort to remove this grounded NOAA Buoy, had not had the opportunity to endorse this application. A verbal status update will be provided the day of the BLNR hearing.

RECOMMENDATION

That the Board authorize and approve a Conservation and Management Permit with the following special conditions:

1. That the Board declare that the actions which are anticipated to be undertaken under this permit will have little or no significant effect on the environment and is therefore exempt from the preparation of an environmental assessment.
2. Upon the finding and adoption of the department's analysis by the Board, that the Board delegate and authorize the Chairperson to sign the declaration of exemption for purposes of recordkeeping requirements of chapter 343, HRS, and chapter 11-200, HAR.
3. That the permittee provide, to the best extant possible, a summary of their Monument access, including but not limited to, any initial findings to the DLNR for use at educational institutions and outreach events.
4. This permit is not to be used for nor does it authorize the sale of collected organisms. Under this permit, the authorized activities must be for noncommercial purposes not involving the use or sale of any organism, by-products, or materials collected within the Monument for obtaining patent or intellectual property rights.
5. The permittee may not convey, transfer, or distribute, in any fashion (including, but not limited to, selling, trading, giving, or loaning) any coral, live rock, or organism collected under this permit without the express written permission of the Co-Trustees.
6. To prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocol attached to this permit.
7. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.
8. Refueling of tenders and all small vessels must be done at the support ships and outside the confines of lagoons or near-shore waters in the State Marine Refuge.
9. No fishing is allowed in State Waters except as authorized under State law for subsistence, traditional and customary practices by Native Hawaiians.
10. The permittee is required to follow all applicable Federal, State, and County laws with respect to the COVID-19 emergency response that apply at the time of departure and return. In issuance of this permit, the State of Hawaii is not otherwise monitoring or regulating permittee's compliance with COVID-19 laws and is not responsible for the health and safety of crew members, researchers or other occupants of the vessel associated with this permit.

Respectfully submitted,



*Maria Carnevale*

Maria Carnevale  
Papahānaumokuākea Marine National Monument

APPROVED FOR SUBMITTAL

Signature: 

Email: [suzanne.case@hawaii.gov](mailto:suzanne.case@hawaii.gov)

BLNR ITEM F-1

Suzanne Case  
Chairperson

**Papahānaumokuākea Marine National Monument**  
CONSERVATION AND MANAGEMENT Permit Application

**NOTE:** *This Permit Application (and associated Instructions) are to propose activities to be conducted in the Papahānaumokuākea Marine National Monument. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Papahānaumokuākea Marine National Monument (Monument).*

**ADDITIONAL IMPORTANT INFORMATION:**

- Any or all of the information within this application may be posted to the Monument website informing the public on projects proposed to occur in the Monument.
- In addition to the permit application, the Applicant must either download the Monument Compliance Information Sheet from the Monument website OR request a hard copy from the Monument Permit Coordinator (contact information below). The Monument Compliance Information Sheet must be submitted to the Monument Permit Coordinator after initial application consultation.
- Issuance of a Monument permit is dependent upon the completion and review of the application and Compliance Information Sheet.

**INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED**

Send Permit Applications to:

NOAA/Inouye Regional Center

NOS/ONMS/PMNM/Attn: Permit Coordinator

1845 Wasp Blvd, Building 176

Honolulu, HI 96818

nwhipermit@noaa.gov

PHONE: (808) 725-5800      FAX: (808) 455-3093

**SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT REQUIRED. FOR ADDITIONAL SUBMITTAL INSTRUCTIONS, SEE THE LAST PAGE.**

## **Papahānaumokuākea Marine National Monument Permit Application Cover Sheet**

This Permit Application Cover Sheet is intended to provide summary information and status to the public on permit applications for activities proposed to be conducted in the Papahānaumokuākea Marine National Monument. While a permit application has been received, it has not been fully reviewed nor approved by the Monument Management Board to date. The Monument permit process also ensures that all environmental reviews are conducted prior to the issuance of a Monument permit.

### **Summary Information**

**Applicant Name:** Andrew Rocheleau

**Affiliation:** Sea Engineering, Inc.

**Permit Category:** Conservation & Management

**Proposed Activity Dates:** June 1 to August 31, 2020

**Proposed Method of Entry (Vessel/Plane):** Vessel

**Proposed Locations:** Lisianski Island

**Estimated number of individuals (including Applicant) to be covered under this permit:**

Sea Engineering, Inc. (SEI) = four (4)

Hawaii Resource Group (HRG) = seven (7)

Agency staff = four (4)

**Estimated number of days in the Monument:** Seventeen (17) Days

**Description of proposed activities:** (complete these sentences):

**a.) The proposed activity would salvage NOAA Buoy 3D61 at Lisianski Island.**

NOAA Buoy 3D61 was deployed at station 51101 (186 NM NW of Kauai Island, HI) on October 19, 2016. On March 28, 2018 the buoy was reported outside of its watch circle and considered to be adrift trailing an unknown length of its mooring. The buoy drifted into the Papahānaumokuākea Marine National Monument (PMNM) on October 21, 2018. While transiting through the Monument the mooring became entangled in the seafloor thereby re-mooring itself in three distinct locations. On February 8th, 2019 the buoy went ashore on the eastern (windward) side of Lisianski Island at 26.0646N 173.9608W and has been reporting a near constant 45-degree tilt angle indicating that the buoy is out of the water and is being supported by the bridle and the hull at this heeled over angle.

The buoy is disconnected from the mooring at the 3rd Class Split-Key Shackle closest to the bridle. The remainder of the mooring nearshore to the buoy consists of 75ft of 1" chain and approximately 1ft of synthetic line. Both ends of this chain have been marked with a small float. This section is described as heading 41 degrees Northeast from the buoy in 2-3ft of water. The chain is not hung up on any subsurface structures.

The immediate area next to the buoy is described as being a hard-bottom and covered in algae with little to no coral present. The bottom conditions persist outward from the shore to about 250ft-300ft with the relative absence of coral only confirmed to 75ft from shore. There is a deeper channel approximately 100ft from the buoy.

**b.) To accomplish this activity, we would dismantle the buoy in sections and float the hull off the reef at high tide.**

The salvage is located on the eastern (windward) shore of Lisianski Island, approximately 1,000 nautical miles from Honolulu Harbor and approximately 225 nautical miles from Midway Atoll Harbor. Lisianski Island is surrounded by significant coral reefs referred to as Neva Shoals. Travel to/from the project site will be completed through a vessel voyage from Honolulu Harbor direct to Lisianski Island.

The steps associated with the salvage effort are outlined below:

1. Transit from Honolulu Harbor to Lisianski Island. Estimated transit five (5) days
2. Pre-salvage ROV survey vessel support. Estimated one (1) day.
3. NOAA-NDBC Technician to clear the buoy of any explosive environment and remove all sensors and internal electronics. SEI crew to assist as possible.
4. Utilizing the pad-eye on the skyward end of the hull, SEI crew will secure a chain fall to either (a) holdback anchor secured in the rock, (b) eye bolt secured into the substrate, or (c) other approved structure on-island. This will secure the buoy in its current side-over configuration.
5. SEI crew will remove the mooring tripod (bridle) using hand tools or 18V power tools. The mooring tripod will be transferred by small boat back to the Imua.
6. SEI crew will slack the chain fall. Buoy will transfer back over the water and come to rest upright on the bottom hull section.
7. SEI crew will wait for high tide. It is expected, given the high tide at the edge of the growth, that the buoy will float once the tide fills in.
8. SEI crew will tow the buoy along a pre-determined egress path back to the Imua for recovery on-board.
9. SEI crew will utilize Subsalve Enclosed Shallow Water Float Bags (EFB) and Subsalve SFB-300 cable floats to float the chain and allow it to be carefully towed and transferred to the Imua.
10. All equipment, gear and materials used during the salvage will be removed.
11. Post salvage photos of the site will be taken for documentation of completed job.
12. Post-salvage ROV survey vessel support. Estimated one (1) day.
13. Transit from Lisianski Island to Honolulu Harbor. Estimated transit five (5) days

Alternative salvage options that may be incorporated into the salvage plan include:

- Using lift bags to float the removed the hull once back in the water if it does not float naturally.
- Using a jack and dunnage to secure the hull in its current configuration if the primary steps of using a chain fall are not feasible.
- Using a large inflatable board (12ft x 4ft x 8" thick) to transfer chain to the small boat in the event conditions do not allow the chain to be recovered.

- c.) This activity would help the Monument by removing materials that, if left over time, could pose a threat to Monument resources.**

**Other information or background:**

Detailed descriptions of the salvage operations, equipment, gear, vessels, crew, and Best Management Practices are included in the attached Salvage Plan.

## **Section A - Applicant Information**

### **1. Applicant**

Name (last, first, middle initial): ROCHELEAU, Andrew R.

Title: Vice President, Sea Engineering, Inc. (SEI)

### **1a. Intended field Principal Investigator (See instructions for more information):**

Name (last, first, middle initial): NELSON, Jacob W.

Title: Salvage Master, Sea Engineering, Inc. (SEI)

### **2. Mailing address (street/P.O. box, city, state, country, zip):**

Sea Engineering, Inc.

[REDACTED]

[REDACTED]

For students, major professor's name, telephone and email address: N/A

### **3. Affiliation (institution/agency/organization directly related to the proposed project):**

National Oceanic and Atmospheric Administration / National Ocean Service / National Marine Sanctuary Program / Papahānaumokuākea Marine National Monument

### **4. Additional persons to be covered by permit. List all personnel roles and names (if known at time of application) here (e.g. John Doe, Research Diver; Jane Doe, Field Technician):**

Sea Engineering, Inc. (SEI)

- Salvage Master, Vessel Operator – TBD
- Dive Supervisor, Diver, Standby Diver, Tender – TBD
- Dive Supervisor, Diver, Standby Diver, Tender – TBD
- Dive Supervisor, Diver, Standby Diver, Tender – TBD

Hawaii Resource Group (HRG)

- Imua Captain – TBD
- Imua Mates (2) – TBD

- Imua Deckhands (3) – TBD
- Imua Engineer – TBD

Additional Persons

- Agency staff (2) - TBD

## **Section B: Project Information**

### **5a. Project location(s):**

<input type="checkbox"/> Nihoa Island	<input type="checkbox"/> Land-based	<b><u>Ocean Based</u></b>	
<input type="checkbox"/> Necker Island (Mokumanamana)	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> French Frigate Shoals	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Gardner Pinnacles	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Maro Reef			
<input type="checkbox"/> Laysan Island	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Lisianski Island, Neva Shoal	<input checked="" type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input checked="" type="checkbox"/> Deep water
<input type="checkbox"/> Pearl and Hermes Atoll	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Midway Atoll	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Kure Atoll	<input type="checkbox"/> Land-based	<input type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input type="checkbox"/> Other			

NOTE: Shallow water is defined by water less than 100 meters in depth.

☐ Remaining ashore on any island or atoll (with the exception of Sand Island at Midway Atoll and field camp staff on other islands/atolls) between sunset and sunrise.

NOTE: There is a fee schedule for people visiting Midway Atoll National Wildlife Refuge via vessel and aircraft.

### **Location Description:**

Eastern (windward) shore of Lisianski Island.

### **5b. Check all applicable regulated activities proposed to be conducted in the Monument:**

- ☒ Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource
- ☐ Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands
- ☒ Anchoring a vessel
- ☐ Deserting a vessel aground, at anchor, or adrift
- ☐ Discharging or depositing any material or matter into the Monument
- ☐ Touching coral, living or dead
- ☐ Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the Monument
- ☐ Attracting any living Monument resource
- ☐ Sustenance fishing (Federal waters only, outside of Special Preservation Areas, Ecological Reserves and Special Management Areas)
- ☐ Subsistence fishing (State waters only)
- ☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

**6. Purpose/Need/Scope *State purpose of proposed activities:***

The proposed salvage activities constitute management activities for the conservation and management of Papahānaumokuākea Marine National Monument as follows:

*Marine Debris*

Reduce the adverse effects of marine debris to Papahānaumokuākea Marine National Monument resources and reduce the amount of debris entering the North Pacific Ocean.

- Continue working with partners to remove marine debris in the Monument and reduce additional debris entering the Monument.
- Catalog, secure, contain, and properly remove hazardous materials that wash ashore in the PMNM.

*Emergency Response and Natural Resource Damage Assessment*

Minimize damage to Papahānaumokuākea Marine National Monument resources through coordinated emergency response and assessment. Grounded vessels and their related debris and pollution must be removed from the reefs as soon as possible to prevent damage to coral reef ecosystems and protected marine mammals, turtles, and seabirds.

\*Considering the purpose of the proposed activities, do you intend to film / photograph federally protected species? Yes ☐ No ☒

If so, please list the species you specifically intend to target.  
N/A

For a list of terrestrial species protected under the Endangered Species Act visit:

<http://www.fws.gov/endangered/>

For a list of marine species protected under the Endangered Species Act visit:

<http://www.nmfs.noaa.gov/pr/species/esa/>

For information about species protected under the Marine Mammal Protection Act visit:

<http://www.nmfs.noaa.gov/pr/laws/mmpa/>

**7. Answer the Findings below by providing information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Monument:**

The Findings are as follows:

**a. How can the activity be conducted with adequate safeguards for the cultural, natural and historic resources and ecological integrity of the Monument?**

The conservation and management activities conducted by the permit applicants will be carried out with strict safeguards for the cultural, natural and historic resources of the Monument, as required by Presidential Proclamation 8031, and other applicable law and agency policies and standard operating procedures. The applicant will have and follow field protocols and best

management practices to minimize or eliminate disturbance to wildlife, flora, habitats, and cultural and historic resources.

**b. How will the activity be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument cultural, natural and historic resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects?**

The proposed salvage activities are directed by Presidential Proclamation 8031, and other applicable law and agency policies. The applicant will conduct the salvage activities with respect to and for the Monument's cultural, natural and historic resources, qualities, and ecological integrity in a manner that will not diminish and will likely preserve and enhance them. By conducting this activity, removal of equipment, the applicant will prevent any potential secondary or future damage to the Monument's cultural, natural and historic resources.

**c. Is there a practicable alternative to conducting the activity within the Monument? If not, explain why your activities must be conducted in the Monument.**

No. The equipment is grounded on the eastern shoreline of Lisianski Island and the applicant will need access to the Monument in order to conduct the salvage.

**d. How does the end value of the activity outweigh its adverse impacts on Monument cultural, natural and historic resources, qualities, and ecological integrity?**

By conducting the proposed salvage activity, the applicant will remove equipment that pose a threat to the cultural, natural and historic resources of the Monument. Any short-term adverse impacts will be negligible when compared with the long-term beneficial impact at Lisianski Island.

**e. Explain how the duration of the activity is no longer than necessary to achieve its stated purpose.**

All conservation and management activities conducted by the applicant will be conducted in the shortest possible window to prevent or eliminate disturbance to the cultural, natural and historic resources of the Monument.

**f. Provide information demonstrating that you are qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.**

Sea Engineering, Inc. (SEI) specializes in ocean and coastal engineering, permitting and planning, waterfront construction, commercial diving, emergency response and salvage. SEI's Marine Operations Division maintains U.S. Army Corps of Engineers EM385-1-1 standard dive lockers, as well as spill response and salvage equipment. SEI currently supports the U.S. Coast Guard with their District 14 Basic Ordering Agreement for emergency response on spill pollution and salvage of vessels.

SEI's Marine Operations Division routinely supports salvage and emergency response efforts for the Federal Government, State of Hawaii and private industry. Recent, notable projects include the removal of the sunken 43-foot Grand Banks in the Ala Wai Canal for the State of Hawaii Department of Land and Natural Resources (2019), the removal of a grounded 23-ft Radon on the north shore of Niihau (2018), and the removal of a Komatsu PC88 excavator from the nearshore waters of Green Island on Kure Atoll (2017). In addition, SEI's Engineering Division has completed bathymetric, topographical and wave modeling services for Midway Island (2014), mooring inspection and repair at Wake Island (2003), hydrographic and geophysical surveys at Wake Island (2001), and a basis of design for shore protection of Tern Island (2000).

SEI proposes to team with Hawaii Resource Group (HRG) for the project. SEI will provide salvage crew and equipment. HRG will provide the supply boat, IMUA, as well as small boats to support the salvage. This is the same partnership that was utilized for the Kure Atoll excavator salvage SEI completed in 2017.

HRG has provided vessels and crews to support voyages to the Papahānaumokuākea Marine National Monument since 2006 for NOAA, U.S. Fish and Wildlife Service, and the State of Hawaii. These charters were initially completed by M/V KAHANA which was replaced in 2018 by M/V IMUA. IMUA is on long term charter to FWS to provide logistical support to the involved agencies and routinely travels to the monument about six times per year. The crew on IMUA have sailed to all of the major islands and atolls, including but not limited to Nihoa, Tern, Laysan, Lisianski, Midway and Kure and know the safe anchorage areas and small boat routes to the shore. IMUA complies with all requirements of the monument, including underwater hull inspections, derat certifications, ability to contain overboard discharges and vessel tracking information.

The attached salvage plan has been reviewed by state and federal PMNM staff. These experts provided their knowledge and recommendations in all management decisions so that all impacts will be minimized to maximum extent possible.

**g. Provide information demonstrating that you have adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.**

Sea Engineering, Inc. (SEI) and Hawaii Resource Group (HRG) have adequate financial resources to conduct and complete the activity and mitigate any potential impacts resulting from the conduct.

**h. Explain how your methods and procedures are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument cultural, natural and historic resources, qualities, and ecological integrity.**

The methods and procedures to be used in the salvage activity are appropriate to achieve the goals and objectives of the proposed activity. The activity will be reviewed/approved by all stakeholders inclusive of the PMNM management agencies. All activities proposed are required

to protect the Monument's cultural, natural and historic resources, qualities, and ecological integrity.

**i. Has your vessel been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?**

All vessels used by the applicant will be outfitted with a functional NOAA Office of Law Enforcement type-approved Vessel Monitoring System as required by 50 CFR Part 404.5 and stated in Presidential Proclamation 8031.

**j. Demonstrate that there are no other factors that would make the issuance of a permit for the activity inappropriate.**

There are no other factors that would make issuance of a permit for the proposed activity inappropriate.

**8. Procedures/Methods:**

The proposed activities will be conducted by the applicant in accordance with Presidential Proclamation 8031 and all other applicable laws and regulations.

The applicant will abide by the following policies and procedures when operating in the Monument:

- Marine Alien Species Inspection Standards for Maritime Vessels
- Human Hazards to Seabird Briefing
- Best Management Practices for Boat Operations and Diving Activities
- Special Conditions and Rules for Moving Between Islands/Atolls and Packing for Field Camps
- Best Practices for Minimizing the Impact of Artificial Light on Sea Turtles
- Marine Wildlife Viewing Guidelines
- Disease and Introduced Species Prevention Protocol for Permitted Activities
- in the Marine Environment
- Rodent Prevention and Inspection Standards for Permitted Vessels

The applicant will provide accommodations for up to four (4) observers including:

- One (1) NOAA/NDBC Representative
- One (1) NOAA/PMNM Resource Monitor
- One (1) US Fish and Wildlife Resource Monitor
- One (1) State of Hawaii Resource Monitor

The proposed salvage activities will be completed in strict adherence to the Best Management Practices listed above and at the discretion of the Resource Monitors with regards to habitat and wildlife impact.

**NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding.**

**9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):**

Common name:

N/A

Scientific name:

N/A

# & size of specimens:

N/A

Collection location:

N/A

☐ Whole Organism ☐ Partial Organism

**9b. What will be done with the specimens after the project has ended?**

N/A

**9c. Will the organisms be kept alive after collection? ☐ Yes ☐ No**

N/A

• General site/location for collections:

N/A

• Is it an open or closed system? ☐ Open ☐ Closed

N/A

• Is there an outfall? ☐ Yes ☒ No

N/A

• Will these organisms be housed with other organisms? If so, what are the other organisms?

N/A

• Will organisms be released?

N/A

**10. If applicable, how will the collected samples or specimens be transported out of the Monument?**

N/A

**11. Describe collaborative activities to share samples, reduce duplicative sampling, or duplicative research:**

N/A

**12. List all specialized gear and materials to be used in this activity:**

Dive and salvage equipment will consist of the following:

- SEI 7-Meter Ambar Rigid Hull Inflatable Boat
- HRG 7-Meter Silvership Rigid Hull Inflatable Boat
- EFB-500 Enclosed Shallow Water Flotation Bags (500lb lift capacity per float)
- SFB-300 Subsalve Cable Floats (330lb lift capacity per float)
- 18V Milwaukee power tools (Bandsaw, Grinder, Impact Drill)
- Hand tools
- 12'6" Mega Inflatable Stand Up Paddle Board
- Rigging (Slings, Crosby Shackles)
- 2-ton chain falls
- SCUBA tanks (20)
- 240-volt Bauer SCUBA compressor
- Floating Tow Line (1" tow line – minimum length to be determined in the salvage plan)

Preparation of personnel and gear will be conducted on-board HRG's vessel, Imua. Salvage gear and SEI's 7-Meter Ambar RHIB will be mobilized at their facility at 863 N. Nimitz Hwy, Honolulu, HI 96817. Once equipment has been prepared and inspected, it will be taken to HRG's yard and loaded on the Imua. Once on-board the Imua, decontamination, including bleach solution of the dive gear, lines and lift bags and fumigation of the 7-Meter Ambar RHIB, will be completed. State and NOAA inspection of decontaminated gear will be conducted on before departure from Honolulu Harbor. Crew and equipment will be prepared in accordance with the "Marine Ecosystem Protection Protocols" of the Northwest Hawaiian Islands Packing Guidelines.

**13. List all Hazardous Materials you propose to take to and use within the Monument:**

All hazardous materials necessary for the proposed salvage activity are listed in the attached salvage plan. All U.S. Department of Transportation safety measures will be followed for storage and transport of hazardous materials within the Monument.

The buoy itself contains no petroleum products or other hazardous materials other than batteries located within the center compartment of the buoy. These include a quantity of six (6) secondary rechargeable batteries (Sun Extender PVX-1080T). These batteries produce a small amount of hydrogen while charging. The buoy is equipped with 3 passive vents

which should adequately remove enough of this hydrogen to prevent an explosive environment inside the hull. Also included in the power system are a quantity of 10 primary batteries (Cegassa ZincAir Alkaline 2AS10-2). These batteries do not present a hazard unless the well becomes flooded. Under this condition, the batteries will produce an acid that is highly reactive with the aluminum material in the well that in turn produces a significant amount of hydrogen which will likely produce an explosive environment. NDBC has specific procedures in which to ascertain the presence of this condition and to eliminate the hazard

**14. Describe any fixed installations and instrumentation proposed to be set in the Monument:**

N/A

**15. Provide a time line for sample analysis, data analysis, write-up and publication of information:**

N/A

**16. List all Applicant's publications directly related to the proposed project:**

N/A

With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct. I agree that the Co-Trustees may post this application in its entirety on the Internet. I understand that the Co-Trustees will consider deleting all information that I have identified as "confidential" prior to posting the application.



January 22, 2020

Signature

Date

**SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT OFFICE BELOW:**

NOAA/Inouye Regional Center  
NOS/ONMS/PMNM/Attn: Permit Coordinator  
1845 Wasp Blvd, Building 176  
Honolulu, HI 96818  
FAX: (808) 455-3093

**DID YOU INCLUDE THESE?**

- ☒ Applicant CV/Resume/Biography
- ☒ Intended field Principal Investigator CV/Resume/Biography
- ☒ Electronic and Hard Copy of Application with Signature
- ☐ Statement of information you wish to be kept confidential
- ☐ Material Safety Data Sheets for Hazardous Materials



# Sea Engineering, Inc.

## **NOAA Buoy 36DI SALVAGE PLAN**

**Lisianski Island, Northwestern Hawaiian Islands**

2	Andrew Rocheleau	Final	
1	Jacob Nelson	Draft	
<b>Revision #</b>	<b>Revised By</b>	<b>Description</b>	<b>Date Approved</b>

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## 1. PROJECT INTRODUCTION AND ROLES

Sea Engineering, Inc. (SEI) a Hawaii based salvor has been hired by NOAA. Due to the remote nature of the project, SEI has not been able to visually inspect the salvage area. Information pertaining to conditions on-site, as well as general infrastructure and surroundings are based on information provided by NOAA.

The salvage plan will outline SEI's proposed methodology as well as address concerns related to;

- *Human Health and Safety*
- *Environmental Impact*
- *Effects on Other Users of the Area (commercial, recreational, subsistence, cultural)*
- *Effects on Other Aspects of the Overall Impact Response*

### 1.1 ROLES AND RESPONSIBILITIES

SEI's salvage master will be responsible for personnel and equipment safety during the salvage effort. The salvage master will analyze sea conditions during the effort to ensure that equipment at the salvage site can be removed safely.

Hawaii Resource Group is providing the supply vessel, 'Imua', crew and some small boat support for the operation. The 'Imua' Captain will be responsible for overall safety of the HRG vessels and their crew. The 'Imua' Captain will analyze sea conditions during the effort to ensure that equipment can be deployed and recovered from the 'Imua' safely.

If, in the opinion of the salvage master or 'Imua' Captain conditions are not safe for either of their respective operations, the salvage operations will be postponed until conditions improve.

## 2. INCIDENT OVERVIEW AND GENERAL INFORMATION

Initial incident report and overview was provided to Sea Engineering, Inc. (SEI) from NOAA. NOAA Buoy 3D61 was deployed at station 51101 (186 NM NW of Kauai Island, HI) on October 19, 2016. On March 28, 2018 the buoy was reported outside of its watch circle and considered to be adrift trailing an unknown length of its mooring. The buoy drifted into the Papahānaumokuākea Marine National Monument (PMNM) on October 21st, 2018. While transiting through the PMNM the mooring became entangled in the seafloor thereby re-mooring itself in three distinct locations; (A) 26.1100N 173.857W in 100ft of water, (B) 26.1095N 173.934W in 90ft of water, and (C) 26.0892N 173.951W in 45ft of water. ON February 8th, 2019 the buoy went ashore on the eastern side of Lisianski Island at 26.0646N 173.9608W and has been reporting a near constant 45-degree tilt angle indication that the buoy is out of the water and is being supported by the bridle and the hull at this heeled over angle. The buoy continues to operate and transmit hourly messages.

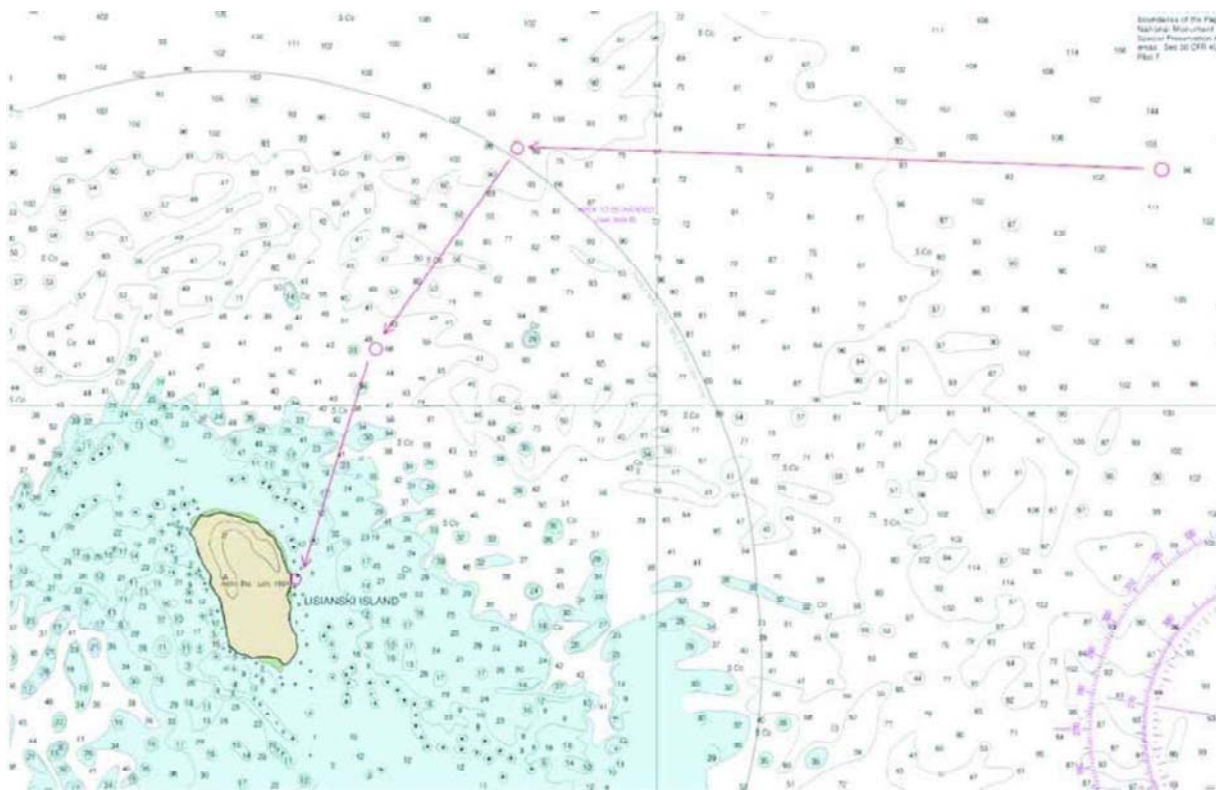


Figure 2-1: NOAA Buoy 36D1 Track to Lisianski Island

### 3. SITE CONDITIONS

#### 3.1 Geographical Access Issues

The salvage is located on the Northeastern shore of the remote Lisianski Island within the Northwest Hawaiian Islands, approximately 1,000 nautical miles from Honolulu Harbor and approximately 225 nautical miles from Midway Atoll Harbor. Lisianski Island is surrounded by significant coral reefs referred to as Neva Shoals. Travel to/from the project site is completed through either a vessel voyage from Honolulu Harbor direct to Lisianski Island or by flying to Midway and meeting the salvage support vessel for the final voyage to Lisianski Island. Figure 2 presents the location of Lisianski Island relative to the main Hawaiian Islands as well as the salvage support vessels general staging location.

Access, once on-station, is available only by small tender or RHIB boat.



**Figure 3-1: Satellite Picture of Lisianski Island with NOAA Buoy 36D1 Location**

### **3.2 Environmental Access Issues**

The salvage is located on the Eastern shore of Lisianski Island.

Based on nautical charts for Lisianski Island , SEI will plot an access route onto and off the Islands Eastern shore to ensure safe access for vessel and salvage operations.

Personnel and equipment preparation requirements to access Lisianski Island are found in Appendix A of the salvage plan. Crew and equipment will be prepared in accordance with the “Marine Ecosystem Protection Protocols” pages 9 through 11 of the Northwest Hawaiian Island Packing Guidelines.

### **3.3 Legal Access Issues**

The Lisianski Island is part of the Northwestern Hawaiian Island Marine Refuge and a State of Hawaii Seabird Sanctuary as well as part of the Papahānaumokuākea Marine National Monument. As such, all salvage activities will be conducted in accordance with the following:

Monument Permit

State Permit

USACE NWP22 Permit

Crew will be aware of associated BMP's for each of these permits.

### **3.4 Informational Sources (Charts, etc..)**

SEI will reference the regional topographic chart (NOAA Chart 19442 – Dated 2013) for aid in the salvage operation.

### **3.5 Environmental Resource at Risk**

Salvage efforts will take place in critical habitat for the endangered Hawaiian Monk Seal.

- i. Habitat - Coral reef as well as live rock formations are potentially at risk of being impacted during the salvage in the event of contact with the salvage equipment (vessel, divers, etc.) or with the items to be salvaged (mini-buoy, fencing, etc.).
- ii. Species - Hawaiian Monk Seals, Green Sea Turtles, Spinner Dolphins and other marine mammals commonly found in Lisianski Island.
- iii. Water/Air - The lagoon water could be impacted if an incidental release of diesel, hydraulic oil or engine oil were to occur during the salvage.

## **4. GROUNDING ANALYSIS**

The grounding analysis includes (a) ingress pathway, (b) primary scar, (c) secondary pathways, (d) secondary scars, (e) possible egress pathways and (f) speed at the time of incident.

## **5. VESSEL INFORMATION**

### **5.1 Specific In-Water Elements Information**

#### *5.1.1 Name, Registration info, size and shape information, displacement (lightship, full load, deadweight):*

- NOAA Buoy 3D61, Marked “51101” and referred to as “511x1”.
- 10ft Diameter, 18ft above water line, 8ft draft.
- Total weight of 3,800 lbs.
- 75ft of 1” Chain (est. 8.6lbs/foot) (est. 645lbs total weight)

#### *5.1.2 Ship type, Flag, Year Built, Builder, Class ID:*

- NOAA Buoy 3D61, Marked “51101” and referred to as “511x1”.

#### *5.1.3 Weight, Displacement, Support Points, Center of Gravity, etc.:*

- 10ft Diameter, 18ft above water line, 8ft draft.
- Total weight of 3,800 lbs.

5.1.4 *Ship plans/layout (includes info on shear stress, bending moment, intact and damaged stability, etc.):*

5.1.5 *Type of keel, engines, accessory gear, etc.:*

- (10) Cegassa ZincAir Alkaline 2AS10-2 primary batteries.
- (6) Sun Extender PVX-1080T secondary batteries.

## **5.2 Description of Known Damage to Vessel**

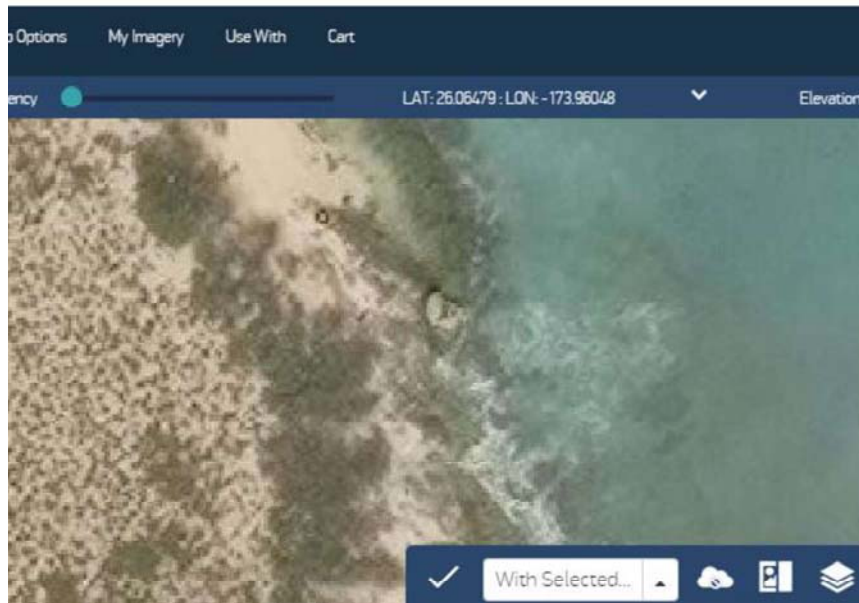
5.2.1 *General description of damage with drawing or photos, locations, etc.*

The photographs in Figure 3 show the latest known current condition and location of the buoy on the northeastern shore of Lisianski Island.

NOTE: Satellite imagery shared by NOAA on 4/7/20 indicates that the buoy may have rotated 180 degrees and now be leaning offshore. While the orientation of the bouy may change the location of the holdback anchor, it will not significantly alter any salvage plans.



**Figure 5-1: NOAA Buoy 3D61 as reported on the Northeastern shore of Lisianski Island**



**Figure 5-2: NOAA Buoy 3D61 Orientation as of 4/7/2020**

**5.2.2 External Damage:**

Failed connection at the chain/ line connection that led to the buoy grounding. No other damage is known or reported at this time.

**5.2.3 Internal Damage:**

None known at this time.

**5.2.4 Flooding Summary (where is water coming, in, is there oil in water, etc.):**

None known at this time.

**5.3 Stability Information at present**

Not Applicable.

**5.4 Structural Information at present**

Not Applicable.

**5.5 Environmental models at present (and forecasts for salvage period)**

Limiting swell and sea conditions are based on two operations:

- (i) Landing/ approaching Lisianski Island Lagoon Channel at the Northeastern Edge Figure 5-1
- (ii) Imua Crane Operations

The salvage master will have overall control of salvage and determine if conditions are unsafe for the tow effort.

If, in the opinion of either the Imua's Captain or SEI's salvage master conditions are deemed unsafe the salvage operation will be postponed. Final salvage of the buoy, including floating and tow, will not be conducted until the Imua's Captain has deemed crane operations safe.

*5.5.1 Swell (height, period, direction):*

Swell is expected to be a factor at Lisianski Island . The Captain of tow will monitor conditions to determine if swell sizes exceeds what is determined to be safe operating conditions for the vessel or salvaged equipment.

*5.5.2 Currents (speed, direction, surface/subsurface):*

Currents are not expected to be a factor in salvage operations.

*5.5.3 Tidal data*

Tides at Sand Island, Midway Islands (the closest tide station) indicate a fluctuating tide of up to 1.4 ft during field operations. Tides will present a concern for salvage during operations.

*5.5.4 Wind (speed, direction)*

Wind is expected to be a factor at Lisianski Island . The Captain of tow will monitor conditions to determine if winds exceed what is determined to be safe operating conditions for the vessel or salvaged equipment.

*5.5.5 Turbidity:*

Not Applicable

*5.5.6 Biological or other environmental concerns at the site*

Marine Life

Marine life is expected to be in-line with general species noted in the Papahānaumokuākea Marine National Monument including Galapagos and Tiger Sharks as well as Ulua and Monk Seals. As precautionary measure, any shiny objects or parts of the dive gear will be taped over with black tape to eliminate fish attraction.

Divers as well as topside looking support will actively monitor shark behavior, should they come into the area. In general divers will look for (i) arched back, (ii) lowered, cocked pectoral fins, (iii) erratic behavior. Should divers encounter an aggressive shark, operations will be halted until the shark has left the area and the dive supervisor has determined it is safe to enter the water again.

## **6. FUEL, BATTERIES, LUBES (TYPES, AMOUNTS, LOCATIONS FOR EACH)**

*6.1.1 Amount Loaded*

- (10) Cegassa ZincAir Alkaline 2AS10-2 primary batteries.
- (6) Sun Extender PVX-1080T secondary batteries.

6.1.2 *Estimate Consumed:*

None

6.1.3 *Estimate Released:*

None

**6.2 Other Possible Hazmat or Pollution (types, amounts, locations for each)**

6.2.1 *Ballast:* N/A

6.2.2 *Grey Water:* N/A

6.2.3 *Sewage:* N/A

6.2.4 *Explosives:* N/A

6.2.5 *Other Chemicals:*

- (10) Cegassa ZincAir Alkaline 2AS10-2 primary batteries.
- (6) Sun Extender PVX-1080T secondary batteries.

6.2.6 *Biohazard (food, bait, catch, human or animal remains):* N/A

**6.3 Potential Casualty/Impact Information (from the incident itself but should also be referenced for the specific salvage response risk actions also).**

6.3.1 *Fire/Explosion (type, location, etc.) :*

The batteries do not present a hazard unless the well of the bouy becomes flooded. Under this conditions, the batteries will produce an acid that is highly reactive with the aluminum material in the buoy well that in turn produces a significant amount of hydrogen which will likely produce an explosive enviroment.

NDBC has a specific procedures in which to ascertain the presence of this condition and to eliminate the hazard. **Salvage crews will follow the NDBC protocols with the NOAA technician onsite prior to any work on the buoy.**

6.3.2 *Collision:* None

6.3.3 *Grounding*

SEI has identified grounding, during the salvage effort as a potential risk. SEI's Captain will use nautical charts, as well as in-field verification of soundings along route to mitigate this risk during salvage operations. A proposed route with alter-course coordinates is included based on the 2013 NOAA Nautical chart for Lisianski Island .

6.3.4 *Sinking*

The buoy is foam filled and thus not expected to sink. If the hull is observed to have failed, lift bags will be utilized to float the structure.

6.3.5 *Structural Failure/Damage:*

None know at this time.

6.3.6 *Flooding:*

None known at this time.

6.3.7 *Pollution Release (type(s) of material – the State views pollution broadly, beyond just OPA concerns)*

**7-Meter RHIB:**

100-gallons Gasoline

Ballast / Grey Water / Sewage – Not Applicable

SEI will adhere to Best Management Practices during salvage operations to ensure no additional pollutants from salvage vessels are introduced into the environment.

6.3.8 *Biosecurity - Invasive Species (usually present in ballast, on hull, seachest, etc.)*

Proper vessel and gear preparation, as specified in Appendix A of the salvage plan, will be completed prior to leaving Honolulu Harbor. Crew and equipment will be prepared in accordance for the “Marine Ecosystem Protection Protocols” pages 9 through 11 of the Northwest Hawaiian Island Packing Guidelines.

Gear preparation of personnel gear and SEI’s 7-Meter RHIB will be conducted on-board HRG’s vessel, Imua. Salvage gear and SEI’s vessel will be mobilized at their facility at 863 N. Nimitz Hwy, Honolulu, HI 96817. Once equipment has been checked out and prepared, it will be taken to Hawaii Resource Group’s yard and loaded on the Imua. Once on-board the Imua, de-contamination, including bleach solution of the dive gear, lines and lift bags and fumigation of the 7-Meter RHIB will be completed. State and NOAA inspection of decontaminated gear will be conducted on before departure.

**6.4 Post Casualty Conditions:**

Not Applicable.

## 7. SALVAGE RESPONSE OPERATIONS / PLANS

As part of the salvage response plan, SEI completed an initial risk and environmental assessment on the tasks associated with various salvage efforts. SEI salvage plan will propose to dismantle the buoy in sections and float the hull off the reef at high tide. The chain will be recovered after the buoy is removed from the shoreline and brought to the support vessel. SEI has proposed a primary salvage plan (section 7.1.1) and secondary salvage plan (section 7.1.2).

### 7.1.1 SEI Primary Buoy and Chain Salvage Plan

SEI's primary salvage plan is based on completing the salvage efficiently, successfully and minimizing the impacts to the surrounding environment.

1. SEI crew to complete a survey swim of the anticipated tow route to identify the final tow route.
  - a. Pre salvage photos include the shoreline, tow route and seafloor in the vicinity of the chain.
2. NOAA Technician to clear the buoy of any explosive environment and remove all sensors and internal electronics. SEI crew to assist technician as directed.
3. Utilizing the pad-eye on the skyward end of the hull, SEI will secure a 3-ton chain fall come along to either a Bruce anchor secured in the rock or other approved structure on-land. Dunnage will then be secured under the buoy for a secondary safety holdback. This will secure the NOAA buoy in its current side-over configuration.

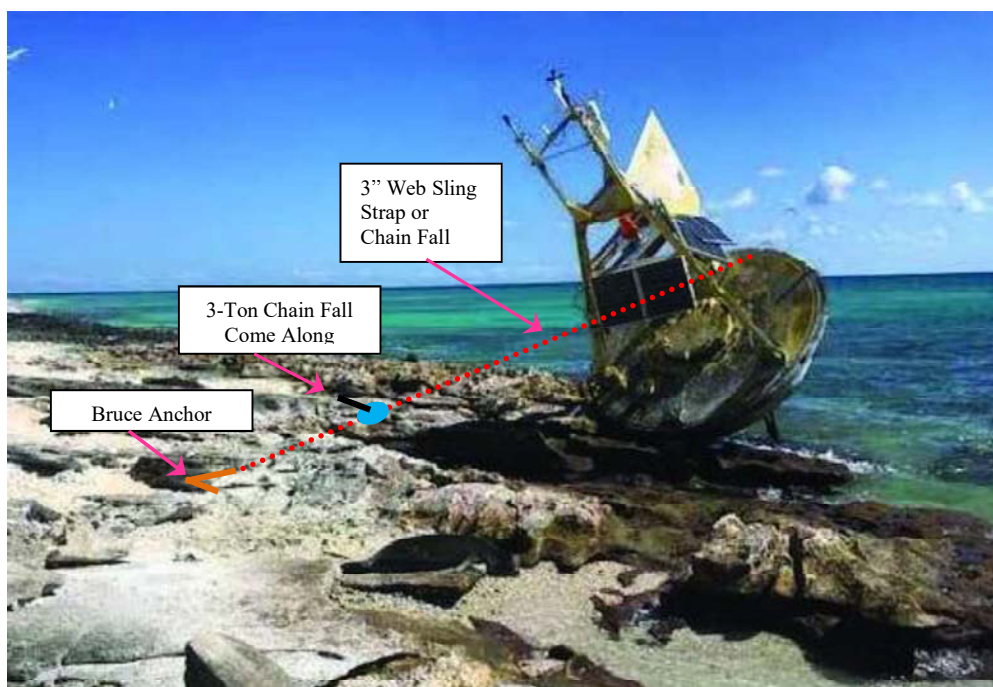


Figure 7-1: NOAA Buoy 3D61 Rigged for Lower Bridle Removal

4. SEI crew will remove the mooring tripod (bridle) using hand tools or 18V power tools,

- including the Milwaukee bandsaw and Milwaukee Impact Drill. The mooring tripod will be transferred by small boat back to the Imua.
5. SEI crew will slack the chain fall – Buoy will rest upright on the bottom hull section.
  6. SEI crew will rig a 1” shackle in the buoy pad-eye to accept the tow line from the RHIB.
  7. SEI crew will wait for high tide. It is expected, given the high tide at the edge of the growth, that the buoy will float once the tide fills in.
  8. SEI crew will tow along a pre-determined path back to Imua for recovery on-board.
    - a. All equipment, materials and hardware used during the salvage will be removed during this process.
    - b. Salvage crew will secure 1” floating tow line to the NOAA buoy hull at the most offshore pad-eye location.
      - i. GoPro will be secured to buoy and face the tow line for the salvage.
    - c. Salvage crew will swim the 1” floating line to the RHIB stationed offshore.
    - d. Using VHF communications, RHIB and crew will communicate the begin of tow with shoreside crew.
    - e. RHIB will begin pull of NOAA buoy off the shoreline as shoreline crew assists with guiding buoy. Communications between RHIB and shoreline crew will be made with VHF radios to assist in the directing of the pull.
    - f. Once in deeper water, the tow line will be shortened and the shoreline crew will swim ot the tow vessel.
    - g. The SEI RHIB will then make tow to HRG’s “Imua” positioned offshore.
  9. SEI crew will utilize large inflatable boards (12ft x 4ft x 8” thick). Salvage personnel will pickup and recover the chain onto the board. Once loaded, the chain will be strapped down and the board will be towed to HRG’s “Imua” positioned offshore.
  10. Post salvage photos of the site will be taken for documentation of completed job.
    - a. Post salvage photos include the shoreline, tow route and seafloor in the vicinity of the chain.
    - b. Pre and post photos to be included in the salvage completion action report for DAR and NOAA.

#### *7.1.2 SEI Secondary Buoy and Chain Salvage Plans*

In the event that any sections of the above salvage plan are not attainable, SEI has identified the following secondary salvage plan steps. These steps were not included in the primary salvage plan as they include slightly more intrusive steps to the surrounding environment. These secondary action steps are outlined below.

##### *Removal of the Lower Buoy Bridle Assembly*

In the event that no substrate can be utilized to secure the beach anchor, SEI crew will utilized an anchor wedge drilled into the substrate for the chain fall to be attached to.

*NOTE: The wedge anchor bolt and eye nut will replace the Bruce anchor in the primary salvage plan.*

1. SEI crew will identify suitable substrate to install a 1” stainless steel wedge anchor bolt.
2. SEI crew will drill 7/8” x 5” deep hole into the substrate.
3. SEI crew will install the wedge anchor bolt, tighten and install the 1” threaded eye nut.

4. Once the primary salvage plan steps to remove the lower bridle are complete, the eye nut and wedge anchor bolt will be removed. At a minimum, the eye nut will be recovered and the wedge anchor bolt will be broken off flush with the substrate.

#### *Recovery of 1" Buoy Mooring Chain*

In the event that the chain is not recoverable by personnel lifting up the chain and placing with the boards, SEI crew will follow the following steps:

- SEI crew will use Subsalve Enclosed Shallow Water Float Bags (EFB) and Subsalve SFB-300 cable floats to float the chain.
- The chain will be connected to the RHIB with the 1" floating tow line and and towed and transferred to Imua.

A secondary alternative for the buoy mooring chain includes the below:

- Sections of chain will be brought onto the recovery boards and cut using the 18V bandsaw.
- The chain sections will be secured on the board and recovered on Imua.

Major tasks were analyzed for their risk of failure, risk for additional pollution and environmental impact to the surrounding area. An overall risk assessment was then given to each task. The assessment is summarized in table 1, below.

**Table 1: Lisianski Island NOAA Buoy 3D61 Salvage Effort Task – Risk Assessment Table**

Salvage Operation Tasks	Risk of Failure	Pollution Risk	Environmental Impact Risk	Overall Risk Assessment
Clear Buoy of Explosive Gasses	L	M	M	M
Rig Buoy and Anchor in 'Side Over' Position	L	L	L	L
Remove Buoy Tower and Lower Bridle Assembly	L	L	L	L
Float Buoy Hull and Tow to Predetermined Location	L	L	M	L
Tripod Removal	M	L	L	L

\* Pollution Risk Associated with Discharge of Batteries or Battery Fluids During Salvage

\* Environmental Impact Risk Associated with Additional Bottom Interaction between Buoy and Seafloor beyond Initial Impact.

\* Risk Matrix Represents Relative Risk of Each Task Compared to the Other. Low Risk Tasks Represent a Minimum Chance of Failure or Negative Impact to the Surrounding Area.

SEI's crew will utilize the 185' IMUA for transit of crew and equipment to Lisianski Island. SEI gear, including lift bags, rigging slings, chain falls, hand tools and 18V power tools and 7-Meter Rigid Hull Inflatable Boat (RHIB) will be loaded onboard the IMUA in Honolulu Harbor or at Kewalo Basin prior to its voyage. The IMUA will also have a small RHIB given the remoteness of the project site, SEI believes that redundant RHIBS, with shallow draft and tow capability are important for the project. Specific equipment SEI proposes to utilize is included in the mobilization list section below.

## 7.2 SEI SALVAGE MOBILIZATION LIST

### 7.2.1 MARINE SUPPORT

- ☐ 7-Meter Rigid Hull Inflatable Boat (Figure 2)
  - Full Tank of Gas (100 Gallons)
  - 4ea. 20ft 3" Web Sling Straps and 4ea. 7/8" Shackles for Lifting Bridle
  - Dock Lines
  - 6ea. Boat Fenders
- ☐ 1000ft of 1 (one) Inch Floating Tow Line
- ☐ Salvage Spill Kit

### 7.2.2 DIVE EQUIPMENT AND MISC. RIGGING

- ☐ 4EA SCUBA Diving Equipment
- ☐ 16EA SCUBA Tanks
- ☐ 240V Bauer SCUBA Compressor
- ☐ SEI Diving Paperwork
  - Diving Safe Practices Manual
  - Dive Plan
  - Salvage Plan
  - Dive Logs
  - Pre/Post Dive Checklist and AHA
- ☐ Rigging
  - 8ea. Green Endless Loops
  - 8ea. 20ft 3" Web Slings
  - 8ea. 12ft 3" Web Slings
  - 8ea. 6ft 3" Web Slings
  - 100ft of 5/8" Spectra Line
  - 8ea. 1" Shackles
  - 8ea. 7/8" Shackles
  - 3/8" Adjustable 4 Leg Chain Sling (18,700lbs SWL)
- ☐ 2EA GoPro Cameras

### 7.2.3 BUOY PREPARATION AND BREAKDOWN

- ☐ 2EA 80SCF Bottle of Argon with Regulator and 50ft of Hose
- ☐ Small Tool Salvage Toolbox
- ☐ 2EA Mega Inflatable Stand Up Paddle Board
- ☐ 2EA. 3 ton Chain falls
- ☐ 1EA. Bruce Anchor
- ☐ 4EA 1(one) Inch Wedge Anchor Bolts
- ☐ 2EA 1 (one) Inch Threaded Lifting Eye
- ☐ CP-9 Pneumatic Drill, 50ft CP Hose and 7/8" and 1" Drill Bits, SCUBA to CP Tool Yoke

\*In the event the buoy maintains its current offshore orientation.

### Power Tools

- ☐ 18V Milwaukee Bandsaw
- ☐ 18V Milwaukee Grinder
- ☐ 18V Milwaukee Impact Drill
  - Impact Drill Bit Set

### 7.2.4 CHAIN RECOVERY

- ☐ 4EA EFB-500, Enclosed Shallow Water Flotation Bags (500lb lift capacity per float)
- ☐ 20EA SFB-300 Subsalve Cable Floats (330lb lift capacity per float)

## 7-Meter Ambar – Honolulu, HI.

### Specifications

- Builder: Silver Ships
- LOA: 23'-0"
- Beam: 8'-6"
- Draft/Light: 1'-6"
- Hull: Aluminum Rigid Hull Inflatable

### Propulsion

- Engines: Twin 115 Yamaha 4-Stroke Outboards
- Fuel: 100 Gallons
- Top Speed: 30 knots
- Cruising Speed: 20 knots



### Notable Facilities/Equipment

- Towing Bit
- Trailerable

### Safety

- EPIRB
- Flares
- Life Jackets

### Electronics

- GPS
- VHF

Figure 2: SEI 7-Meter Rigid Hull Inflatable Boat (RHIB)

### 7.3 Pre-Salvage Transit (Permits, Permit Briefings, AIS, Vessel/Hull/Gear Inspections)

SEI crew and equipment will be mobilized and loaded on-board Hawaii Resource Group's Imua in Honolulu Harbor. SEI's equipment, including 7-Meter RHIB, will be prepared for voyage to Lisianski Island following the Northwest Hawaiian Island Packing Guide (pages 9-11) found in appendix A.

Hawaii Resource Group will handle transit logistics to/from Honolulu, Hawaii to Lisianski Island , Northwest Hawaiian Islands. HRG will be responsible for environmental and pollution control aspects of their vessels and operations.

#### **7.4 Lightering**

There will be no lightering associated with this salvage effort

#### **7.5 Pulling / Beaching**

The NOAA buoy has washed ashore and is beached. Utilizing high tide, the buoy will be pulled back into the water and floated again for removal. Given the high tide line, noted to be at the vegetation and the fact that the buoy has rotated 180° SEI does not anticipate high grounding forces during the recovery.

SEIs 7-meter RHIB will be used to pull the buoy from the beach. The RHIB is outfitted with twin Yamaha 115 outboard motors and a high mounted towing bit ahead of the outboards. The height of the towing bit will keep the tow line above the outboard motors and assist in keeping the line out of the outboard propellers. The 7-meter RHIB is outfitted with a GPS chart plotter and

The twin outboards will allow the Captain to maneuver the vessel in tighter corridors and pivot the vessel, as needed to avoid pre-surveyed obstacles on the GPS. The location of the RHIB is planned to be offshore in sufficient water depth to not risk grounding.

#### **7.6 Pumping**

There should be no pumping required to float the buoy.

#### **7.7 Blowing Compressed Air**

##### *7.7.1 Source and Means of Inflation / Displacement*

SEI will utilize SCUBA bottles with CP hose and yoke for the filling of lift bags. 1 SCUBA bottle provides enough air for 2 tons of lift at ambient pressure. SEI will mobilize the 7-meter RHIB with 20 SCUBA bottles, ensuring that sufficient air for both diving and lift bags is available as needed. SCUBA bottles will be re-filled on-board the Imua using SEI's SCUBA compressor.

##### *7.7.2 Max Pressure to Be Used*

Subsalve lift bags come from the manufacturer with a pressure relief valve set to release at 2.5psi above ambient pressure. Maximum pressure will be governed by the lift bag release valve.

##### *7.7.3 Means to Control Air Pressure:*

Not Applicable.

##### *7.7.4 Location of Space to be Used:*

Not Applicable.

#### 7.7.5 Measures to Deal with Air Expansion as Vessel is Raised

Subsalve lift bags will be self-governing with a relief valve set to release at 2.5psi above ambient pressure.

#### 7.7.6 Standby Measures to Deal with Air Loss During Operation

Twice as many lift bags will be utilized as required to ensure that loss of 1 bag does not lead to a catastrophic loss of stability.

### 7.8 Lifting

SEI rigging, including straps, wire slings and shackles will be U.S Domestic and, when applicable, have lifting tags with lift ratings. No imported shackles or lifting straps will be used for the salvage effort. Any straps or slings without tags will be discarded.

#### 7.8.1 Description of Straps/Wire/Rope

##### Pontoon and Lift Bag Rigging

Sea Engineering will utilize Safeway nylon straps, wire rope pennants and Crosby shackles for securing Subsalve pontoon and lift bags to the buoy and chain. The NOAA buoy has a total weight of **XX** tons

The following rigging is anticipated for use during the salvage effort:

**Table 2: Lisianski Island NOAA Buoy Salvage Effort Task – Rigging and Capacity Table**

Rigging Type	SEI Slings Working Load Rated Capacity - Tons					
	Vertical	Choker	Basket	60°	45°	30°
¾" Wire Rope Sling	5.6	4.1	11.0	9.7	7.9	5.6
2" 2 Ply Nylon Web Slings	3.2	2.5	6.4	5.55	4.5	3.2
3" 2 Ply Nylon Web Slings	4.45	3.6	8.9	7.7	6.3	4.45
4" 2 Ply Nylon Web Slings	6.0	4.8	12	10.4	8.5	6
4" 2 Ply Nylon Web Slings	6.0	4.8	12	10.4	8.5	6
5/16" 4-Way Grade 100 Alloy Chain Sling*				7.4	6	4.25
½" 3-Strand Blue Steel Ice Blue Line	1.89					
1-1/2" 3-Strand Blue Steel Ice Blue Line	23.5					
Polyester Endless Green Loops	2.65	2.1	5.3			

\* Working Load is 4 to 1 Design Factor

**Table 3: Lisianski Island NOAA Buoy Salvage Effort Task – Shackle Capacity Table**

	Working Load Capacity - Tons
Crosby 5/8” Screw Pin	3-1/4
Crosby 3/4” Screw Pin	4-3/4
Crosby 1” Screw Pin	8-1/2
Crosby 1-1/4” Screw Pin	12

**7.8.2** *Number of Straps to be used*

SEI will utilize an endless loop straps choked around the chain and Subsalve cable floats to float the chain and allow it to be carefully towed and transferred to the Imua.

**7.8.3** *Location of Straps Relative to Vessel Length:*

Not Applicable.

**7.8.4** *External flotation (air bags, etc.) to be used during lift*

Location and Buoyancy

Subsalve EFB-500 with 500lbs of lift and SFB-300 cable floats with 300lbs of lift will be used to float the chain safely above the seafloor to allow for removal.

**7.8.5** *Other Issues (Bilge Radius, Bolsters, etc.):*

Not applicable.

**7.8.6** *Standby measures to deal with strap failure during operation*

Not applicable.

**7.9 Patching / Temporary Hull Repair:**

Not Applicable

**7.10 Afloat Towing / Post-Salvage Transit**

Once afloat, SEI will utilize the 7-Meter Silvership RHIB to tow the buoy to the Imua, outside the fringe reef of Lisianski Island . As a contingency, the Imua RHIB will be utilized as a backup vessel. The route will be programmed into the RHIB’s Furuno GPS system and Garmin handheld GPS as a contingency.

The RHIB will be positioned offshore from the NOAA buoy in waters deep enough to ensure it does not negatively impact the seafloor. A 1” floating line will be used to attach the RHIB to the NOAA buoy during the removal from the beach.

*7.10.1 Quantitative analysis to show towing vessel has adequate pulling capacity for area, weather, distance to be encountered*

SEI's 7-Meter RHIB is outfitted with twin 4-stroke 115 hp outboard motors and a 100-gallon gas tank. The combined horsepower, 230 hp, and fuel capacity will provide adequate pulling capacity and operating time for the work.

*7.10.2 Destination, route, estimated time (date of arrival), maximum and minimum speed, weather forecast during tow:*

The proposed tow route is presented in Figure 7-4 and Figure 7-5. NOAA's onsite personnel included the following discussion in their scope of work:

"The immediate area next to the buoy is described as being a hard-bottom and covered in algae with little or no coral present. The bottom conditions persist outward from the shoe to about 250 ft to 300ft with the relative absence of coral only confirmed to 75ft from shore. There is a deeper channel approximately 100ft from the buoy.."

The above observations and route will be verified by SEI crew on the first day of salvage efforts. The route will be mapped with large, shallow obstacles marked on the GPS chart. SEI's final route will be adjusted to reflect in-field observations as well as any discussion and input from agency personnel.

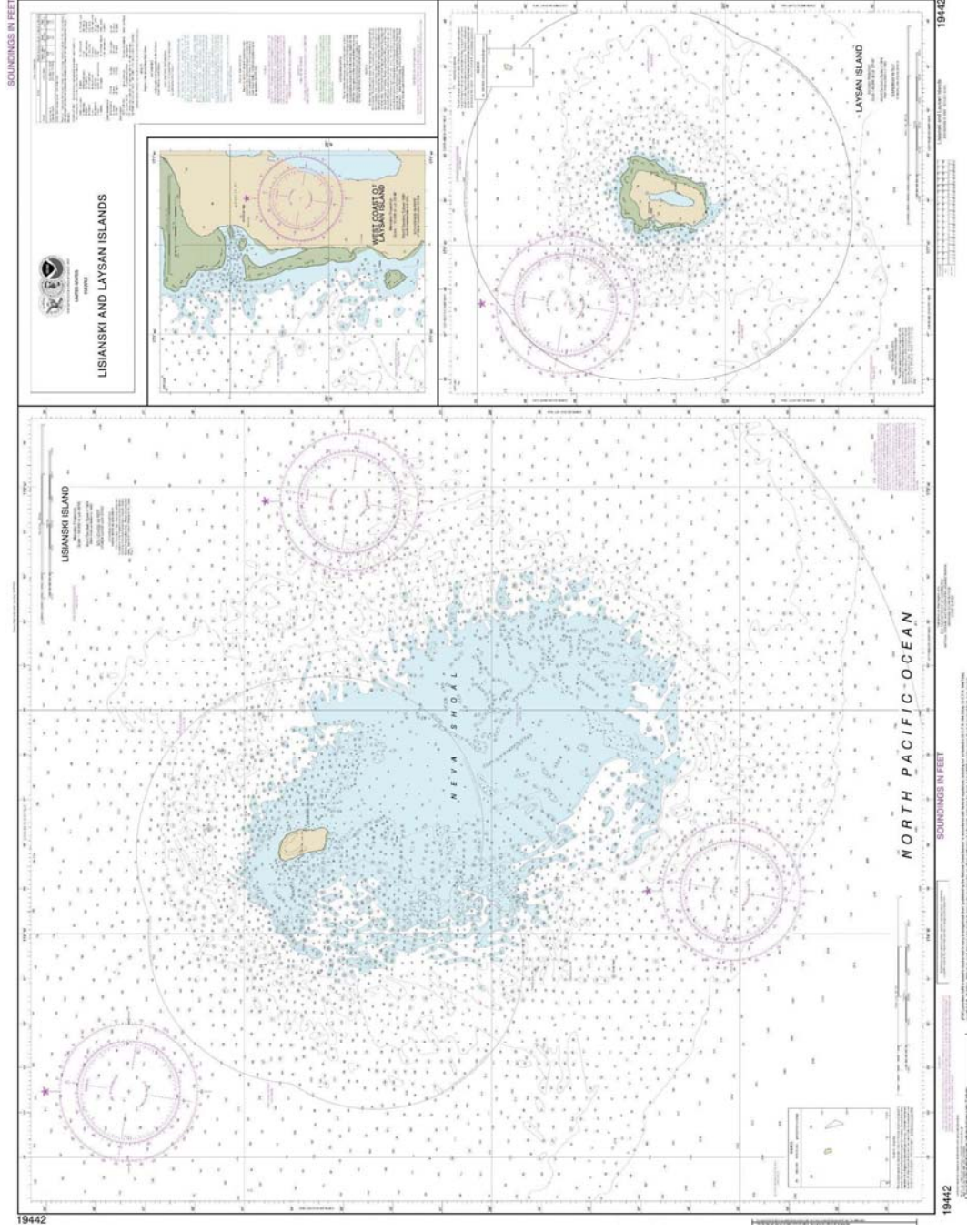


Figure 7-3: Lisianski Island NOAA Chart (2013)

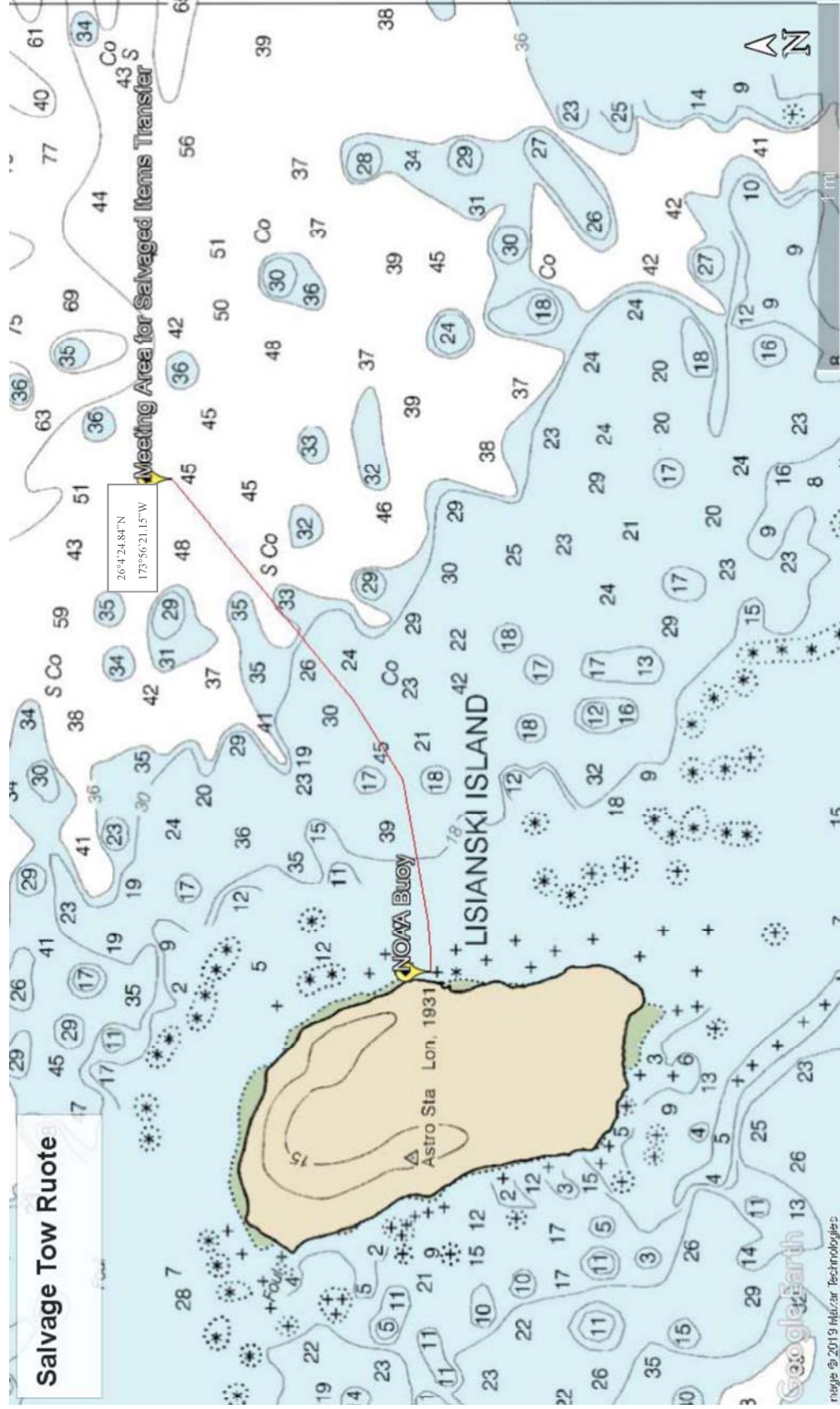


Figure 7-4: Tow Route for Salvage– NOAA Chart (2013) with Soundings

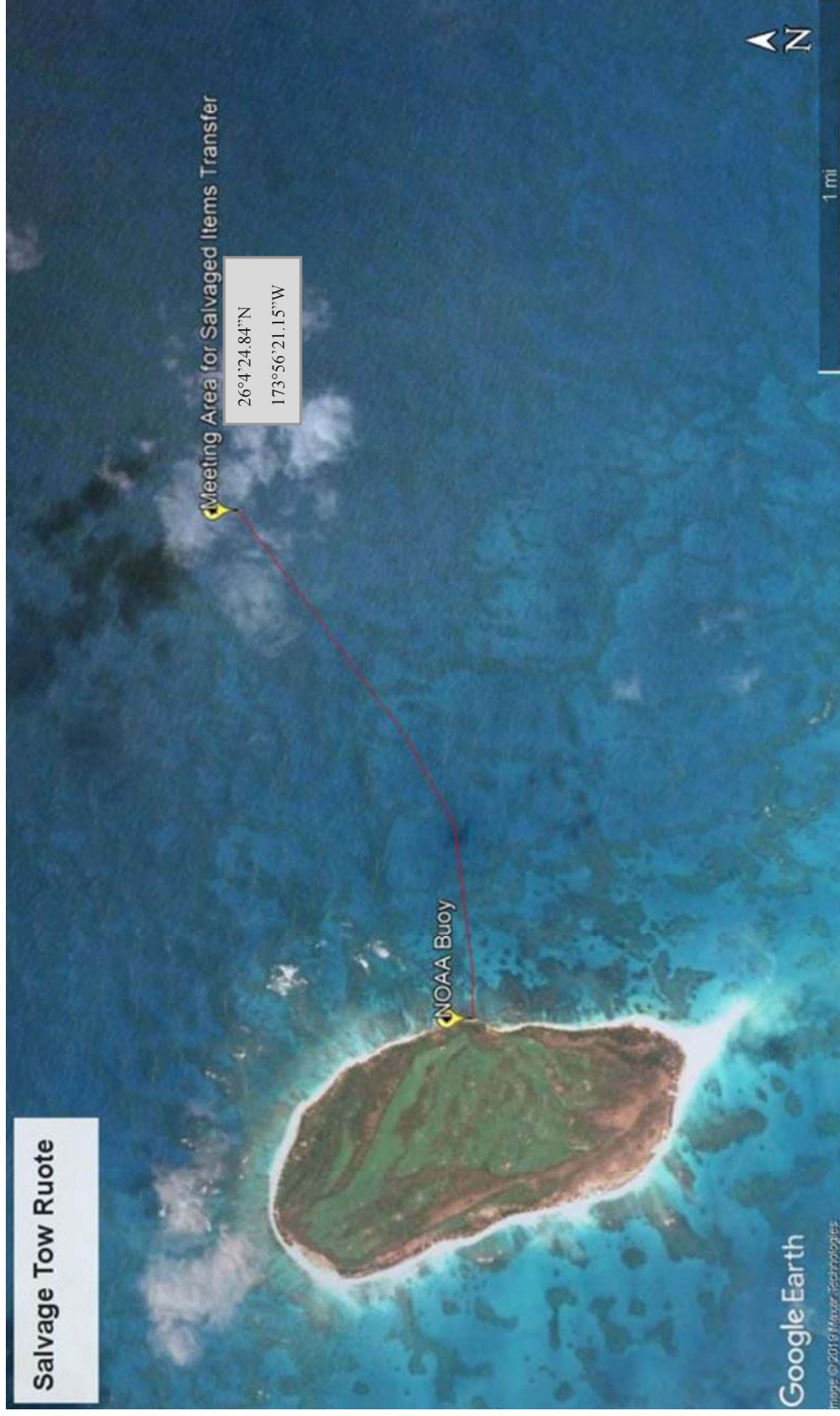


Figure 7-5: Tow Route for Salvage– Satellite Photo with Route

### *7.10.3 Standby measures to deal with tow failure during operation*

SEI will carry additional tow lines in the event there is a failure during tow.

In the event the 7-Meter RHIB experiences a propulsion failure, SEI will utilize the HRG RHIB capable of towing the buoy safely to the Imua. SEI will utilize the HRG RHIB to tow the 7-meter RHIB as well, if needed at the same time as the buoy is in tow. SEI will only attempt to anchor if the situation becomes critical and loss of the 7-Meter or the threat of running aground is eminent. To all extents possible SEI will anchor only in sandy substrate to refrain from damaging any environment.

## **8. ENVIRONMENTAL PROTECTION CONCERNS (MEASURES TO BE EMPLOYED DURING SALVAGE OPERATIONS TO MINIMIZE OR ELIMINATE DAMAGE OR NEGATIVE IMPACT TO THE FOLLOWING)**

SEI will follow industry standard Best Management Practices for operations at Lisianski Island .

### **8.1 Bottom Habitat**

As discussed above, the salvage plan is centered on minimizing additional interaction with bottom habitat. During the salvage every effort will be taken to minimize interaction between divers and equipment with the seafloor.

### **8.2 Coral and Live Rock**

SEI will survey the proposed route in the nearshore shallow waters for the anticipated pull of the buoy from the shoreline. The course will be selected which has the least coral and live rock.

### **8.3 Monk Seals (and other Marine Mammals)**

SEI operations, during close proximity with Monk Seals, will be determined based on the ESA consultations. Monk Seal BMPs will be provided as an appendices to this salvage plan prior to departure.

### **8.4 Sea Turtles**

Operations will cease if Sea Turtles are within 150 ft of the operation.

### **8.5 Sea Birds**

Salvage crew will take care when stepping foot above the high tide land to no disrupt any sea birds or go near any nesting while following the protocols set forth by the PNMM BMP's.

## **8.6 Other Protected Marine Resources**

SEI will practice industry standard Best Management Practices during the salvage operations in Lisianski Island.

## **8.7 Disposal Plans**

Disposal of the complete buoy or parts of the buoy at the discretion of the NOAA/NDBC upon return to Honolulu.

## **APPENDIX A: NORTHWEST HAWAIIAN ISLANDS PACKING GUIDELINES**

## MARINE ALIEN SPECIES INSPECTION STANDARDS FOR MARITIME VESSELS

### *Papahānaumokuākea Marine National Monument*

Vessels destined for operation within the Papahānaumokuākea Marine National Monument (PMNM) shall be inspected for the presence of marine alien species prior to approval for an entry permit. This inspection will involve the detection of marine alien species associated with following mechanisms of transport:

- 1) Ballast Water (See US Coast Guard regulations 36 CFR Part 151 and 46 CFR Part 162 Docket No. USCG-2001-10486 RIN 1625-AA32) <https://homeport.uscg.mil/mycg/nortal/en/home.do> then go to Environmental section
- 2) Biofouling associated with the primary vessel and tender vessels
- 3) Biofouling of scientific equipment and/or instrument arrays
- 4) Live organism transport

### **Standards for Compliance**

#### *Ballast Water*

Vessels must have a US Coast Guard and/or International Maritime Organization ballast water management plan on board. The records of ballast water operations for the previous month with source locations must be made available at the time of inspection. If inspectors have concerns, access to salt water ballast tanks must be provided to allow water sampling. If any salt water ballast on board is deemed unacceptable the vessels master must employ ballast water management practices described in 36 CFR § 151 and 46 CFR Part 162 prior to entry in the PMNM. **No ballast water discharge is allowed within the boundaries of the PMNM except in the case of emergencies as defined by the US Coast Guard: (33 CFR Subpart D 151.2040 “Discharge of Ballast Water in Extraordinary Circumstances”)**

#### *Biofouling*

All submerged and waterline surfaces must be free of macro-scale biofouling consisting of marine plants and animals. Surfaces must be free of any Chlorophyta (green-algae), Phaeophyta (brown algae), and Rhodophyta (red-algae) macro-algal species. Additionally, surfaces must be free of macro-invertebrate biofouling communities consisting of cnidarians (anemones and hydroids), arthropods (barnacles and macro-crustaceans), annelids (mobile and tube-dwelling worms), bryozoans, mollusks (clams, mussels and snails) and tunicates (sea squirts).

#### *Live Organism Transport*

There can be no transport of live or recently alive marine organisms associated with food stores, aquaculture/aquarium broodstock, or research activities aboard vessels departing for operations within the PMNM

## HUMAN HAZARDS TO SEABIRDS BRIEFING

### *Papahānaumokuākea Marine National Monument*

Most seabirds exhibit insular tameness, which is behavior characterized by a lack of the wariness you might observe in birds living in areas with terrestrial predators. Because of this, it sometimes appears by their actions as if humans pose no problems for them. In fact there are a number of potentially serious consequences every time a seabird colony is entered, even by experienced researchers.

**Mechanical** – At most seabird colonies in the central Pacific you will see birds nesting on three different levels, under the ground, on the surface, and in the shrubs and trees. At many times of the year it is difficult to walk in some parts of the colony without stepping on eggs or caving in the burrows of the petrels and shearwaters. Chicks of several of the tern species hide in vegetation so you should be careful about setting your foot where you cannot see the surface of the ground. Ground-nesting Grey-backed Terns and Brown Noddies are often most affected by your activities because they are very timid and nest in open areas that may be travel pathways. If you have occasion to have to walk in burrow areas you must be prepared to rescue a shearwater or petrel by digging if you accidentally cave in its home. Special care should be taken never to leave string or line anywhere in the colony. Seabirds have an uncanny ability to find it and get tangled in any material of this kind.

**Thermal** – The climate of the tropical and subtropical islands seems mild but the eggs and small chicks of all the species live a precarious life on the edge of thermal disaster. The attendance patterns of adults reflect this, with eggs and tiny chicks virtually never left unattended. Great care and attention must be given to never keeping a bird off its egg or chick for more than a few minutes. Keep this in mind if you must spend more than 3 or 4 minutes in any area. This is an issue when it is hot as well as when it is cool and wet. When first approaching a site look for any nest or adult flushed from an inconspicuous nest and plan your work to minimize keeping birds from attending their eggs or chicks.

**Biological** – In some colonies, one species may learn to take advantage of human disturbance to prey upon others. Frigate birds will take chicks and steal nest material from booby nests and other Frigate bird nests when the owners of the nest are frightened off by human disturbance. In colonies inhabited by finches of various species the minute an egg is exposed the finch will rush in and peck a hole and consume the contents. Unattended eggs of ground-nesting species are often eaten by shorebirds such as Ruddy Turnstones. All small seabirds are at great risk in colonies where there are introduced rats. It is possible that going up to isolated or cryptic nest and handling the eggs will provide a trail that might lead rats to the nest.

*U.S. Fish and Wildlife Service  
Papahānaumokuākea Marine National Monument*

PMNM BMP #004

## **BEST MANAGEMENT PRACTICES (BMPs) FOR BOAT OPERATIONS AND DIVING ACTIVITIES**

### ***Papahānaumokuākea Marine National Monument***

The National Marine Fisheries Service recommends the following BMPs be followed to reduce or eliminate adverse effects on protected marine species through potential interactions with in-water activities such as boat operations or diving. They are primarily aimed at small-scale projects such as research dives, marine debris removal, or small buoy placement or repair projects conducted by resource agencies or contracted personnel. These BMPs are not necessarily comprehensive for major construction activities:

1. Constant vigilance shall be kept for the presence of Federally-listed marine species;
2. When piloting vessels, vessel operators shall alter course to remain at least 100 yards from Hawaiian monk seal mom-pup pairs and humpback whales, and at least 50 yards from other marine mammals and sea turtles;
3. Reduce vessel speed to 10 knots or less when piloting vessels in the proximity of marine mammals;
4. Reduce vessel speed to 5 knots or less when piloting vessels in areas of known or suspected turtle activity;
5. Marine mammals and sea turtles should not be encircled or trapped between multiple vessels or between vessels and the shore;
6. If approached by a marine mammal or turtle, put the engine in neutral and allow the animal to pass;
7. Unless specifically covered under a separate permit that allows activity in proximity to marine protected species, all in-water work will be postponed when whales are within 100 yards, or other protected species are within 50 yards. Activity will commence only after the animal(s) depart the area;
8. Should marine protected species enter the area while in-water work is already in progress, the activity may continue only when that activity has no reasonable expectation to adversely affect the animal(s); and
9. Do not attempt to feed, touch, ride, or otherwise intentionally interact with any marine protected species.

*Adopted by Papahānaumokuākea Marine National Monument*

**SPECIAL CONDITIONS AND RULES FOR MOVING BETWEEN ISLANDS /  
ATOLLS  
AND  
PACKING FOR FIELD CAMPS**

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***Papahānaumokuākea Marine National Monument***

The islands and atolls of the Papahānaumokuākea Marine National Monument (Monument) and the Hawaiian Islands National Wildlife Refuge are special places providing habitat for many rare, endemic plants and animals. Many of these species are formally listed as Endangered under the Endangered Species Act. Endemic plants and insects, and the predators they support, are especially vulnerable to the introduction of competing or consuming species. Such introductions may cause the extinction of island and reef endemics, or even the destruction of entire island or reef ecological communities. Notable local examples include: the introduction of rabbits to Laysan Island in 1902 which caused the extinction of numerous plant and insect species, and 3 endemic landbird species; the introduction of rats to many Pacific Islands causing the elimination of many burrowing seabird colonies; the introduction of the annual grass, sandbur, to Laysan Island where it has crowded out native bunch grass thus, eliminating nesting habitat for the Endangered Laysan finch; and, the introduction and proliferation of numerous ant species throughout the Pacific Islands to the widespread detriment of endemic plant and insect species.

Several of the islands within the Monument are especially pristine, and as a result are rich in rare and special plants and animals. Nihoa Island has at least 17 endemic and rare insect species, 5 Endangered plants and 2 Endangered birds. Necker Island has Endangered plants and 11 endemic insects. Laysan Island has Endangered plants, 9 endemic arthropods and the Endangered Laysan finch and Laysan duck. Other islands in the Monument such as Lisianski, and islets in Atolls such as Pearl and Hermes Reef and French Frigate Shoals provide homes for a variety of endemic and/or endangered species and require special protection from alien species.

Other Pacific Island such as Kure and the “high islands” (Oahu, Hawaii, Maui, Kauai, etc.) as well as, certain islands within Midway Atoll, Pearl and Hermes Reef and French Frigate Shoals have plants and/or animals that are of high risk for introduction to the relatively pristine islands discussed above. Of special concerns are snakes, rats, cats, dogs, ants and a variety of other insect and plant species. Harmful plant species of highest concern that we know of are *Verberina encelioides*, *Cenchrus echinatus*, and *Setaria verticillata*.

The Co-trustees are responsible for the management and protection of the islands, reefs and wildlife of the Monument. No one is permitted to set foot within the Monument without the express permission of the Co-trustees through the permitting process. Because of the above concerns, the following restrictions on the movement of personnel and materials throughout the Monument exist.

**The Following Conditions and Rules apply to the all islands within the Monument with the exception of those at French Frigate Shoals and Midway Atoll:**

**Definitions:**

"new" means off the shelf and never used anywhere but the island in question.

"clothing" is all apparel , shoes, socks, over and under garments.

"soft gear" is all gear such as daypacks, fannypacks, packing foam or similar material, camera bags, camera/binocular straps, microphone covers, nets, holding or weighing bags, bedding, tents, luggage, or any fabric, fiber, paper or material capable of harboring seeds or insects.

1. Any personnel who will be landing boats, and staying within the boats, at any island should have clean clothes and shoes.
2. Any personnel going ashore at any island and moving inshore from the immediate area in which waves are breaking, or beyond the intertidal area, at the time of landing must have new footwear, new or island specific clothes and new or island specific soft gear. All must be frozen for at least 48 hours prior to landing.
3. Any personnel entering any vegetated area, regardless of how sparse the vegetation, must have new footwear, new clothes and new soft gear all frozen for at least 48 hours prior to landing.
4. To avoid transport of seeds from within small boats the following protocol should be followed. For islands with safe or sandy landing conditions, one should keep quarantine shoes/socks inside quarantine containers until the island is reached. One should go ashore bare foot, and then don the quarantine shoes. Non-quarantine shoes should be removed in the small boat, put into a bucket or some kind of sealed container, and left enclosed in that container until the person departs the island. The sealed container, if clean on the outside, may go ashore, but should not be opened ashore. For landings which are rocky, rough, and relatively unsafe (such as Necker and Nihoa) for safety reasons, quarantine shoes should be donned when inside the small boats, but care should be taken to look for seeds and insects which may be in the small boat.
5. Soft gear may not be moved between islands. Hard gear must be thoroughly cleaned and frozen for at least 48 hours between islands.
6. During transit, clothing and gear coming off Kure, Midway, or any islet of French Frigate Shoals must be carefully sequestered to avoid contamination of gear bound for cleaner islands. Special care must be taken to avoid contaminating gear storage areas and quarters aboard transporting vessels with seeds or insects from these islands.
7. Regardless of origin or destination, inspect and clean all equipment, supplies, etc., just prior to any trip to the Monument. Carefully clean all clothing, footwear and softgear following use to minimize risk of cross contamination of materials between islands.

8. Pack supplies in plastic buckets with fitted lids or other sealable metal or plastic containers since they can be thoroughly cleaned inside and out. **Cardboard is not permitted on islands.** Cardboard boxes disintegrate in a short time and harbor seeds, animals, etc., which cannot be easily found or removed. **Wood is not permitted unless sealed (painted or varnished) on all surfaces and frozen for 48 hours.**

Wooden boxes can also harbor insects and seeds and therefore are only allowed if well-constructed (tight fitting seams are required). All wood must be treated, and inside and outside surfaces must be painted or varnished to provide a smooth, cleanable finish that seals all holes.

9. Freeze or tarp and fumigate then seal all equipment (clothes, books, tents, everything) just prior to departure. Food and cooking items need not be fumigated but should be cleaned and frozen, if freezable. Cameras, binoculars, radios, and other electronic equipment must be thoroughly cleaned, including internal inspection whenever possible, but do not need to be frozen or fumigated. Such equipment can only be packed in wooden crates if treated as in #2 above. Any containers must contain new, clean packing materials and be frozen or fumigated.
10. At present, Tern Island is the singular exception to the above rule, having less stringent rules due to the large number of previously established alien species. Careful inspection of all materials and containers is still required. However, it is acceptable to use wooden and cardboard containers for transporting supplies to Tern Island. Also, there is no requirement for freezing or fumigating items disembarked at Tern. Although requirements for Tern Island are more lax, the Refuge is still concerned about the possibilities of new introductions. Do not wear clothing to Tern Island that has been worn at Pearl and Hermes, Midway Atoll or Kure Atoll.

**Additional Special Conditions for Travel to Nihoa and Necker (Mokumanamana) Islands:**  
Nihoa and Necker are the most pristine locations in the Monument. Nihoa is home to the highest number of federally listed endangered species in the Monument. Many areas of these small rugged islands are inaccessible. Introduction of any alien species could have disastrous results in a very short time. It would be almost impossible to mount any kind of control or eradication program on these islands should an alien species become established. Because of these reasons, access to Nihoa and Necker are strictly limited, and rules governing entry are more stringent.

1. Access to Nihoa and Necker by permittees will only be allowed under the accompaniment and supervision of a U.S. Fish and Wildlife Service (USFWS) Representative. The representative, who shall be appointed by the U.S. Fish and Wildlife Service Monument Manager will work with permittees to assure careful compliance with all rules for inspection, handling and preparation of equipment. The USFWS Representative will have the authority to control and limit access to various parts of the island to protect animals, plants and archaeological sites, especially endangered species. The USFWS Representative will have the authority to disallow access to the island, or order an immediate departure from the island if conditions for working on the island are not met or are violated in some way.

2. All field equipment made out of fabric material or wood must be new, and never previously used in the Northwestern or main Hawaiian Islands. Equipment previously purchased or made for use on Nihoa and Necker that has been carefully sealed and stored while away from Nihoa and Necker, and not used elsewhere, may also be brought onto the island. Rules for freezing and/or fumigating are as described for other sites in the Monument (see above).
3. Clothing, footwear (shoes, slippers, socks, etc.), daypacks (soft gear) must be new, unused, or previously only used on Nihoa (or Necker) and carefully sealed and stored while off of the island. Hard gear such as camera, and equipment must be thoroughly cleaned and inspected.

**Additional Special Conditions for Travel within Pearl and Hermes Atoll:**

In recent years *Verbesina encelioides* has been introduced to Southeast Island within Pearl and Hermes Atoll. This noxious weed has taken over a large portion of the island. To prevent the further spread of this weed to the other islets within this atoll the following precaution must be taken:

1. Every person should have one set of quarantine gear and clothing for Southeast Island and one set of quarantine gear and clothing for all other islets in the atoll. For instance, the same clothing, and if needed camping gear, may be used at north and seal Kittery, but anything used at southeast needs to stay off all other islets in the atoll. Do not use the outer islet clothing and gear on Southeast Island.
2. Carefully inspect small boats and their associated equipment when traveling between islets at Pearl and Hermes Atoll. Since folks likely take one anchor ashore and put one anchor in the water there is potential for seed dispersal on anchor lines as well as from within the small boats. This needs to be watched very carefully.

**Additional Special Conditions for Food:**

Fresh foods such as fruits, vegetables, leafy vegetables and tubers are not permitted on quarantine enforced islands (Necker, Nihoa, Laysan, Garner Pinnacles, Lisianski and Pearl and Hermes Reef). Concern is not only that certain species such as tomatoes could easily become established but that decomposing organic waste can also harbor microbes and insects and can act as an introduction vector. Soil can contain many seeds, eggs, larvae, etc., and cannot be transported to or between islands.

All other food that can be safely frozen (this does not apply to food in cans or glass jars) must be packaged in air tight containers just as all other gear and frozen for 48 hours.

PMNM BMP #009

## BEST PRACTICES FOR MINIMIZING THE IMPACT OF ARTIFICIAL LIGHT ON SEA TURTLES

### *Papahānaumokuākea Marine National Monument*

NOAA's National Marine Fisheries Service (NOAA Fisheries) and the U.S. Fish and Wildlife Service are jointly responsible for the protection of threatened and endangered sea turtles. In Hawai'i, the agencies are especially concerned about the impact of shoreline activities on the successful nesting and basking of green and hawksbill sea turtles.

Over 90 percent of nesting activity for the Hawaiian population of the threatened green sea turtle (*Chelonia mydas*) occurs at French Frigate Shoals in the Northwestern Hawaiian Islands (NWHI). Green turtles nest from May through September, peaking in June and July. Hatchlings continue to emerge from nests through November. Large numbers of green turtles are also known to bask throughout the NWHI. The endangered hawksbill sea turtle (*Eretmochelys imbricata*) also nests in Hawai'i, with over 90 percent of documented nests occurring on the Island of Hawai'i. Regular nesting also occurs on Maui and Moloka'i. Hawksbills appear to nest and forage primarily within the main Hawaiian Islands, though they have been sighted in the Northwestern Hawaiian Islands.

Many factors affect the potential survival of these turtles, including the loss or destruction of nesting and basking beaches, and other human shoreline activities such as the use of artificial lights. The following set of measures should be adopted as appropriate, to minimize the impacts of lighting on sea turtles:

**A. Avoid the use of artificial lighting near beaches, where possible, particularly during nesting and hatching seasons.**

Artificial light sources on a nesting beach may deter adult females from exiting the water to lay eggs on the beach, cause abandonment of nesting attempts, or disorient adult females and disrupt their natural behavior of returning to the sea after nesting. Artificial light will disorient hatchlings that use light cues to find their way to the sea, making them more vulnerable to predation, exhaustion, and desiccation. Artificial light may also disturb basking turtles.

**B. Do not use excessive or unnecessary amounts of light, or leave lights on or allow campfires to burn longer than necessary.**

Basking behavior may help turtles avoid marine predators. If artificial lighting causes a basking turtle to return to the sea, it may be more vulnerable to predation.

**C. Shield or redirect lights to reduce as much as possible the amount of light that can be seen from the nesting or basking beach.**

Effective light shields should be completely opaque, sufficiently large, and positioned so that light from the shielded source does not reach the beach.

**D. Where possible, use low-intensity light sources that emit long wavelength light (yellow, red) and avoid sources that emit short wavelengths (ultraviolet, blue, green, white).**

Long wavelengths are the least disturbing to sea turtles. Red light-emitting diodes (LEDs) are the

best option and one of the light sources least disruptive to sea turtles. Amber or yellow filters placed on light sources are less desirable than red lighting, as they vary in effectiveness and will fade over time.

**E. Aboard vessels at sea, use the minimum lighting necessary to comply with navigation rules and best safety practices.**

Sea turtles of all life stages may be attracted to lights from vessels at sea. These turtles may be vulnerable to vessel activities, as well as being vulnerable to predators that may also be attracted to the same lights.



## **DISEASE AND INTRODUCED SPECIES PREVENTION PROTOCOL FOR PERMITTED ACTIVITIES IN THE MARINE ENVIRONMENT**

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### *Papahānaumokuākea Marine National Monument (Revised July 9, 2018)*

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Papahānaumokuākea Marine National Monument (Monument) was established to conserve and protect the unique biota of the islands, atolls, reefs and waters in the Northwestern Hawaiian Islands (NWHI). Endemic flora and fauna are especially vulnerable to the introduction of alien and/or invasive species, and the spread of disease. The introduction of disease and alien species may contribute to the extinction of native species and the destruction of ecosystems. The following protocols have been developed to protect these fragile resources.

#### **Definitions:**

**Clothing:** all apparel, hats, socks, over and under garments

**Disinfected:** the item has been (1) rinsed and is 100% free of encrusted mud, dirt, and sand, (2) closely inspected for seeds and insects, (3) soaked or wiped with an appropriate disinfecting solution as outlined below, and (4) rinsed if directed

**Dive Gear:** all gear such as wetsuit, booties, gloves, mask, snorkel, fins, regulator, buoyancy compensation device, tanks, weight belt, and dive flag

**Equipment:** includes gloves, chisels, forceps, drill bits, shears, clippers, spear tips, nets, chain, clipboards, slates, mesh gear bags; includes research equipment that may contact the benthos such as reels, tape measures, transect lines, etc.

**Footwear:** anything worn on the foot that contacts the substrate. Once you stand up a dive booty is considered footwear (footwear with spikes are prohibited)

**Hard Gear:** all gear taken to the intertidal zone made of a hard and non-porous surface such as plastic, glass, or metal and can be cleaned using a cloth type material or by soaking

**Intertidal Zone:** the area of substrate emergent during low tide and fully submerged during high tide, extending upwards from the mean low low-tide mark to the top of the splash zone during winter months (areas that are impacted by wave action, not including tsunamis)

**New:** off the shelf and never used

**Non-Sensitive Equipment/Gear:** equipment and gear that will not be damaged by freezing or submerging in water

**“One-Island” Dedicated Gear:** items that are purchased new, and have ONLY ever been used on a specific island, and nowhere else. When it is not being used on the specific island, gear should be quarantined and stored separated from all other gear

**QACs:** quaternary ammonium compounds; chemical group belonging to the surfactants, which possess both a cleaning and disinfecting effect. QACs spectrum of activity is limited to vegetative bacteria and enveloped, lipophilic viruses (incl. HIV); an example of an acceptable QAC solution is Lysol® All Purpose Cleaner at manufacturer's recommended dilution source:

(<http://www.bode-science-center.com/center/glossary/quaternary-ammonium-compounds.html>)

**Quarantine Enforced Islands:** all islands excluding Midway Atoll

**Sensitive Equipment/Gear:** computers, optical equipment, GPS, cameras, and other sensitive equipment that would be damaged by freezing or submerging in water

**Soft Gear:** all gear taken to the intertidal zone such as, daypacks, fanny-packs, camera bags, camera/binocular straps, microphone covers

**Transition Zone:** the area of land between the intertidal zone and the terrestrial zone identified by presence of vascular terrestrial plants, soil etc.

#### **General disinfection procedures**

- Disinfect all equipment and gear at least daily if used.
- Only disinfected equipment and gear may be transported either direction between the Monument and the main Hawaiian Islands or other point of origin/destination.
- Dispose of organic matter, used disinfection solution, and rinse according to the ship's solid waste disposal or other approved secure holding system.
- Acceptable Disinfection Solutions:
  1. Levels One, Two, Three and Four (levels defined below): a 1 :32 dilution of commercial bleach in freshwater (1/2 cup bleach per gallon of freshwater), yielding a 1000 ppm dilution of sodium hypochlorite, or 3% free chlorine solution; and
  2. Levels Two, Three and Four: the manufacturer's recommended disinfection strength dilution of QACs.
- Rinse after disinfection: All gear in close proximity to the face or skin, e.g. masks, regulators, gloves, should be rinsed with potable water following disinfection.

#### **A. Equipment and Dive Gear Disinfection**

Equipment and gear are treated according to four levels that correspond to the potential for the spread of disease and/or introduced species.

General points applicable to all the levels and acceptable disinfection solutions are listed above.

**I. Level One: Equipment in direct contact with diseased coral tissue or other diseased organisms.**

- Require multiple sets of equipment: Use a disinfected set of equipment for diseased organisms and another disinfected set of equipment for non-diseased organisms at each dive site.
- Disinfect all equipment between uses: Use a disinfected set of equipment at each dive site.
- Approved disinfection method:
  - 1) Remove any organic matter from the equipment;
  - 2) Soak equipment for a minimum of ten minutes in a 1:32 dilution of commercial bleach in freshwater (1/2 cup bleach per gallon of freshwater), yielding a 1000 ppm dilution of sodium hypochlorite, or 3% free chlorine solution.
- Secure all samples: Seal all samples in bags or jars under water and place sample bags and jars in secure holding container.

**II. Level Two: Equipment not used to sample diseased coral tissue or other diseased organisms**

- Disinfect all equipment between sites: Use a disinfected set of equipment at each dive site.
- Approved disinfection method: 1) Remove any organic matter from the equipment. 2) Soak and or wipe equipment as specified for equipment type, below. See list of acceptable disinfection solutions above.
  1. Non-porous equipment must be wiped or soaked. If wiping, use wipes in which the active ingredient is a quaternary ammonium compound (QAC). Acceptable wipes include Clorox® wipes or Lysol® wipes. If soaking, soak for a minimum of ten minutes in an acceptable disinfectant solution.
  2. Porous equipment must be soaked for a minimum of ten minutes in an acceptable disinfectant solution.

**III. Level Three: All dive gear used in the Monument**

- Disinfect dive gear daily (if used)
- Approved disinfection method: 1) Remove any organic matter. 2) Disinfect by submerging for a minimum of ten minutes in an acceptable disinfection solution, followed by a thorough fresh water rinse, and hanging to dry.
- Rinse after disinfection: Rinse all gear in close proximity to the face or skin, e.g. masks, regulators, gloves, etc. with potable water following disinfection.

#### **IV. Level Four: Conditions and Rules for accessing specified intertidal zones within the Monument**

The intertidal zone is the area of substrate emergent during low tide and fully submerged during high tide, extending upwards from the mean low low-tide mark to the top of the splash zone during winter months (areas that are impacted by wave action, not including tsunamis).

The transition zone is the area of land between the intertidal zone and the terrestrial zone identified by presence of vascular terrestrial plants, soil etc.

- All personnel entering the intertidal zone on quarantine enforced islands must have disinfected, new, or island dedicated footwear, clothing and gear.
- To avoid transport of alien and/or invasive species, propagules, and seeds from vessels and their small boats, vessel crew and small boat operators must carefully inspect and clean vessel deck and common areas and small boats daily during an expedition to the Monument. Care should be taken to look for seeds, insects, and animals which may be in the small boat.
- Equipment/Gear (with the exception of island dedicated gear) may be moved between islands, however all gear must be inspected and disinfected per the relevant cleaning and disinfection methods described above. Dry bags can be disinfected by wiping.
- Underwater cameras, binoculars, radios, GPS units, and other electronic equipment must be disinfected, including internal inspection whenever possible.
- Pack supplies in plastic buckets with fitted lids or other sealable metal or plastic containers since they can be thoroughly cleaned inside and out.
- Special requirements are required if transitioning outside the intertidal zone towards terrestrial habitat. See BMP #007 for details.

#### **B. Cleaning Tender Vessels**

- Prior to entry into the Monument the tender must be washed inside and out, to remove all loose dirt, seeds, organic material, invertebrates, algae, etc. The bottom of the tender should have no growth, organic films or fouling on it.
- At least daily, if tender vessel is used, inspect for and remove any algal fragments and other organisms.
- Dispose of organic matter and used solution according to the ship's solid waste disposal or other approved secure holding system.
- Inspect and clean anchor, anchor chain, and anchor line if used.

- Rinse tender vessel internal and external surfaces with fresh water between islands, including during transits in either direction between the Monument and the main Hawaiian Islands or other point of origin/destination.
- Allow tender vessel to dry before redeployment.

**C. Disinfection of Shipboard Wet Laboratory**

- At least daily if used, disinfect entire laboratory, including sinks, countertops, walls, doors, and floors.
- Acceptable Disinfection Solutions and Wipes:
  1. a 1:32 dilution of commercial bleach in freshwater (1/2 cup bleach per gallon of freshwater), yielding a 1000 ppm dilution of sodium hypochlorite, or 3% free chlorine solution;
  2. The manufacturer's recommended disinfection strength dilution of QACs;
  3. commercially available wipes containing QACs (e.g. Clorox® wipes, Lysol® wipes); and
  4. 70-80% ethanol.
- Dispose of all materials generated during cleaning according to the ship's solid disposal or other secure holding system.
- The laboratory must be clean between islands, including during transits in either direction between the Monument and the main Hawaiian Islands.

## **APPENDIX B: BEST MANAGEMENT PRACTICES**

In order to reduce the potential for adverse effects on the environment, best management practices (BMPs) would be incorporated into the construction and operation of the Proposed Action. For example:

- A. Constant vigilance shall be kept for the presence of ESA-listed marine species during all aspects of the proposed action, particularly in-water activities such as boat operations, diving, and deployment of anchors and mooring lines.
  1. The project manager shall designate an appropriate number of competent observers to survey the areas adjacent to the Proposed Action for ESA-listed marine species.
  2. During salvage, surveys shall be made prior to the start of work each day, and prior to resumption of work following any break of more than one half hour. Periodic additional surveys throughout the work day are strongly recommended.
  3. Personnel shall remain alert for marine mammals before and during operations
  4. All on-water work shall be postponed or halted when ESA-listed marine species are within 50 yards (yd) (46 m) of the proposed work, and shall only begin/resume after the animals have voluntarily departed the area. If ESA-listed marine species (other than Hawaiian monk seals on land) are noticed within 50 yd (46 m) after work has already begun, that work may continue only if, in the best judgment of the project supervisor, that the activity would not affect the animal(s). For example; divers performing surveys or underwater work would likely be permissible, whereas operation of heavy equipment is likely not.
  5. All personnel will stay more than 150 ft (46 m) from Hawaiian monk seals and sea turtles that haul out on the beach.
  6. Special attention will be given to verify that no ESA-listed marine animals are in the area where equipment or material is expected to contact the substrate before that equipment/material may enter the water.
  7. All objects will be lowered to the bottom (or installed) in a controlled manner. This can include the use of buoyancy controls such as lift bags, or the use of cranes, winches, or other equipment that affect positive control over the rate of descent.
  8. In-water tethers, as well as mooring lines for vessels and marker buoys shall be kept to the minimum lengths necessary, and shall remain deployed only as long as needed to properly accomplish the required task.
  9. When piloting vessels, vessel operators shall slow their speed to the minimal allowable speed while still maintaining control of the vessel and equipment being towed.
  10. Reduce vessel speed to 10 knots (18.5 kilometers per hour [kph]) or less when piloting vessels at or within the ranges described above from marine mammals and sea turtles.

Operators shall be particularly vigilant to watch for turtles at or near the surface in areas of known or suspected turtle activity, and if practicable, reduce vessel speed to 5 knots (9.3 kph) or less.

11. Marine mammals and sea turtles shall not be encircled or trapped between multiple vessels or between vessels and the shore.
  12. Do not attempt to feed, touch, ride, or otherwise intentionally interact with any ESA-listed marine species.
  13. Vessel and barge operators will strive to anchor project-related vessels/barges only in sandy substrate or limestone devoid of corals.
- B. Effects to the marine and terrestrial environment (including cultural resources) from project-related activities would be minimized.
14. Employ industry-standard BMPs to avoid discharge of pollutants into the marine environment. These include:
    - Sufficient absorbent materials (sorbent boom and diapers) on-site
    - No leaking equipment (fuel / engine oil / fluids)
    - No discharge of contaminated bilge water
    - No drainage of oil to the bilge
    - If a spill occurs, stop the spill at the source and contain the leak
  15. Appropriate materials to contain and clean potential spills shall be stored at the work site (including aboard project-related vessels), and be readily available.
  16. All project-related materials and equipment placed in the water shall be free of pollutants.
  17. The project manager and heavy equipment operators shall perform daily pre-work equipment inspections for cleanliness and leaks. All heavy equipment operations shall be postponed or halted should a leak be detected, and shall not proceed until the leak is repaired and equipment cleaned.
  18. Spill containment areas would be established and used for refueling of small portable equipment.
    - Refueling if needed will be at the source of the piece of equipment and utilize sorbent boom and diapers, with a portable catchment pan

## **APPENDIX D: SEA ENGINEERING, INC – NOAA BUOY PLANS**

## **APPENDIX E: SEA ENGINEERING, INC – LISIANSKI ISLAND SALVAGE DIVE PLAN**





# Sea Engineering, Inc.

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**April 13, 2020**

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**RE: NOAA Buoy Salvage at Lisianski Island – Response to Questions**

Below are the responses to NOAA, U.S Fish and Wildlife Service and State of Hawaii Department of Aquatic Resources (DAR) comments and questions. Comments are briefly addressed in the table and a page reference in the salvage plan is provided.

NOAA Review Comments	SEI Edits and Corrections	Page # in Plan
“In the event the 7-Meter RHIB experiences a propulsion failure, SEI will utilize the HRG RHIB capable of towing the buoy safely to the Imua.” Will SEI attempt to anchor in the rare event of a propulsion failure?	SEI will utilize the HRG RHIB to tow the 7-meter RHIB as well, if needed at the same time as the buoy is in tow. SEI will only attempt to anchor if the situation becomes critical and loose of the 7-Meter or the threat of running aground is eminent.	24
If so, will anchorage occur in sandy substrate to avoid damaging coral reef to the extent possible?	To all extents possible SEI will anchor only in sandy substrate to refrain from damaging any environment. Anchoring will only take place if loss of vessel on the shore or the threat of running aground is eminent.	24
How is the eye bolt going to be secured into substrate? Assuming they will have a power tool exemption to allow them to drill and utilize the 18V tools mentioned.	If an eye bolt is to be secured power tools will be required. The eye bolt will be a 1” wedge anchor bolt.	16
Setting anchor in substrate	If an anchor is to be placed in the substrate or	16



during removal operations?	rock it will be an anchor similar to a Bruce type, this will be used to hook a rock or substrate feature and be utilized as a pull back attachment point for operations.	
AHA for Tripod removal	AHAs are included in the dive plan. A risk assessment table is included in the salvage plan.	18
Draft of RHIB is 1.5 ft? Is that without engine legs lowered? It is a suitable boat for a tow but it might have a tough time finding a path all the way into the beach.	<p>That is without engine legs lowered. The RHIB is an aluminum hull with foam and air filled skirt. It is maneuverable for it's size and the legs can be lifted to lessen its draft in the water if needed. The RHIB will be positioned inshore as far as is safely possible for crew and environment. If needed, the crew will use the large inflatable rafts to carry gear onto the shoreline to close the distance between the RHIBs location and shoreline.</p> <p>Additionally, the RHIB will use a floating tow line to attach to the buoy. The RHIB will not start the tow in the shallow waters at the shoreline. The line length will allow the RHIB to remain offshore of the buoy at a depth where the vessel can operate without impact to the surrounding seafloor. While this exact location and distance is unknown, SEI plans to bring 1000ft of tow line, which, based on the nautical charts should put the RHIB into 10feet water depth</p>	N/A
USFWS REVIEW COMMENTS	SEI Edits and Corrections	Page # in Plan
Noting the large-scale tow route shown on page 24 figure 5, could you describe the proposed route for towing in the nearshore environment (i.e. within the first 50m from shore)? If no <i>specific</i> near-shore tow route is currently proposed, could you describe the decision making that will go into this on the ground?	The salvage plan includes discussion on how the route will be surveyed by divers ahead of the tow. The route will be selected based on the seafloor and will work to identify areas with minimal coral. Per NOAA, the immediate area next to the buoy is hard-bottom and covered in algae with no coral present. These conditions persist outward from shore to about 250ft to 300ft with the relative absence of coral only confirmed to 75ft from shore. There is a deeper channel approximately 100ft from the buoy.	24
Will any potential holdback anchor and/or eye bolts installed in the substrate be	The holdback anchor and/or eye bolt are discussed in greater detail in the salvage plan. The holdback anchor will not leave anything	16-17



removed at the completion of the operation? If not, please give additional details and photos including a list any glues, concretes, or other substances that may be used to secure them if applicable.	hardware behind post-salvage and is the reason for the primary plan. The anchor may leave behind a small section of bolt, flush with the substrate. This is why it is considered for the contingency plan only.	
Do you plan to potentially use any power tools above the high tide line for drilling anchors or otherwise? If so, this will require a Minimum Requirements Analysis (MRA) be completed as we have previously for the chain decoupling.	The salvage plan identifies the power tools that may be incorporated during the work, including 18Volt Milwaukee band saw, grinder and impact drill.	20
If logistics allow, it may be beneficial to include the Kahana and/or Kahana II as potential support vessels in this plan and subsequent PMNM permit so you are covered in the event that delays push this project outside of the narrow timeframe the Imua is available in July.	Per our discussion with Mark Delventhal, the Kahana will not be used. However, SEI will include Kahana II for vessel info in the permit application.	
To the extent possible, USFWS recommends PMNM monument staff be heavily involved, if not leading, coral surveys of the proposed nearshore route. At a minimum surveyor(s) must be able to identify species present.	SEI will be sure to coordinate and discuss the proposed salvage route with USFWS onsite prior to the tow. The goal is to avoid coral colonies during the tow by selecting the route and monitoring during operations.	
The USFWS continues to request one berth space for a USFWS resource monitor	No problem.	
Section 8.3 states "Operations will cease if Hawaiian Monk Seal adults	This section has been revised to state: SEI operations, during close proximity with Monk Seals, will be determined based on the ESA	28



// are observed within 50 yards (150 feet) of the operation”. From the recorded abundance of monk seals in the area, this likely will not be possible. Numerous monk seals are typically observed within 50 yards of the buoys current location and proper permitting should be in place prior to these operations.	consultations. Monk Seal BMPs will be provided as an appendices to this salvage plan prior to departure.	
The Hyperbaric Treatment Facility info on page 21 of the dive plan was last verified in 2015 and some names are no longer associated with Kuakini.	This is updated in the current dive plan.	
The USFWS understands the need to maintain flexibility in any proposed salvage plan of this nature.	Thank you!	
<b>DAR Review Comments</b>	<b>SEI Edits and Corrections</b>	<b>Page # in Plan</b>
Can a GoPro be mounted and document the buoy while being pulled.	Yes. A Go Pro has been added to the mobilization list and incorporated into the salvage plan.	16, 18
Provide more detail on the backup plans and equipment needed for each scenario	This has been completed	16-18
How many links of chain will be removed at any given time.	Updated salvage plan provides more input that all chain will be removed at once.	16-18
What are the specifics on the mechanics of controllability with use of one vessel.	Updated salvage plan discusses vessel maneuvering.	21
Ensure you have pre and post survey photos of the jobsite and tow route	Included clarification in the salvage procedure for pre and post photos and post action report	16 & 17



*Sea Engineering, Inc.*  
HONOLULU, HAWAII

**COVID-19 (Corona Virus) Return to Work**

Effective Immediately for Sea Engineering, Inc.

Including all affiliates and subsidiaries

Rev 0. May 22, 2020



## REVISION HISTORY

Revision	Date	Changes
0	May 18, 2020	Original – Plan includes the original Covid-19 policies and incorporates return to work procedures for offices and jobsites.
		■
		■
		■

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## OVERVIEW

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### Company Approach

Sea Engineering, Inc. will be returning to work for remaining employees over the month of June, with all employees back to work by June 30, 2020. During this transition, SEI will continue assessing and responding to the Covid-19 events, City and County of Honolulu as well as State of Hawaii Emergency Proclamations. SEI senior management will monitor the changing conditions and make recommendations and adjustments to operations based on government guidance as well as peer groups to ensure the safety and health of all our employees.

The approach will follow the original Covid19 policy and consists of:

- Monitoring recommendations from the World Health Organization (WHO) and the Center for Disease Control (CDC).
- Following regulatory directive from the US Coast Guard.
- Conducting regular meetings to reassess the situation and make necessary changes and communicate.
- Continually communicating changes to the policy or any other pertinent information through email and posters
- Implementing additional steps as needed to minimize the spread of the disease, and protect our employees and business, as they return to work.

High risk employees, or employees with concerns about returning to work, should discuss the option to continue working from home with their direct supervisor.

### Symptoms

Known symptoms of the virus are as follows:

- Dry Coughing
- Shortness of breath and/or difficulty breathing
- Fever (100.4° or greater)
- Chills
- Muscle Pain
- Headaches
- Sore Throat
- New loss of taste or smell

These symptoms affect individuals differently. If you feel sick, or exhibit symptoms, stay home and consult a medical professional.

## RETURN TO OFFICE

As employees return to the office, SEI will have in place measures to assist in limiting the risk of Covid-19, should an employee be exposed. Each office and/or jobsite shall identify a Covid-19 liaison to coordinate PPE requirements, questions, and concerns to management.

The success of the return to work action plan will be based on our ability to continue to follow the health and safety guidance. These include;

### Social Distancing

Employees should follow best practices throughout the office and field, following social distancing guidelines. These include:

- Staying 6 feet away from other employees.
- Avoiding job tasks that require face-to-face with others when possible.
- Avoiding contact with others (handshake etc..).
- Minimizing, or avoiding, touching surfaces that have been touched by others.
- Avoiding gathering in communal areas.
- Following any posted signage regarding Covid-19 social distancing practices.

### Office Space and Desk Utilization

Upon return to work, employees will need to ensure that proper social distancing during office activities is possible. This includes;

- Six-foot separation – Adjust desks and chairs to be six feet apart. When possible, adjust seating positions to be facing away from each other.
- Reduce seating in common use areas (break room, lunch room) so that 6ft separation is achieved.

Where desk assignment does not allow for 6ft of social distance, alternative options should be considered, including;

- Relocation of employee's desk to another area of the office
- Staggered work from home schedules
- Creation of physical barriers between work spaces

### Common Use Areas

Common use areas present the highest risk for Covid-19 transfer. Use of common use areas should employ the following steps;

- Minimized time and number of people utilizing one area at any given time.

- At least 6ft of separation between personnel
- Wipe down of common touch areas (microwave, sinks, door handles, tables) prior to and after use.
- Use of mask

## Meetings and Group Gatherings

Employees shall take precautions when planning meetings and attending group functions. The company continues to follow State of Hawaii guidelines until further notice.

Meetings or gatherings of groups greater than ten people shall not be conducted. This includes all conferences, business meetings, or any other formal gathering for business purposes.

Whenever possible, conduct all meetings by utilizing Microsoft Teams.

## Stagger Shift Starts and End

Supervisors should take efforts to stagger start and end times of crews by a few minutes to limit group gathering. Some employees can wait outside while other employees head into the office. The variation can be as little as 10 minutes per crew.

## Individual and Company Vehicles

Supervisors should ensure that crews individually drive to meetings and jobsites, using personal vehicles, or, when necessary, multiple company trucks during the field work. Company vehicles should be disinfected by the driver before and after use. Personal items and trash should not be left in the vehicle. At a minimum, soap and water should be used to scrub common use areas including the steering wheel, shifter, armrests, door handles and seatbelts before and after use.

Employees are not to share a company vehicle unless approved by their direct supervisor, and only then, with the proper PPE, including wearing a mask.

## Stagger Lunch Breaks

Lunch breaks should be staggered into multiple shifts to limit group size. Consider staggering lunch every half hour around 11 to 11:30.

Specific guidelines for field work, including diving operations, vessel operations and construction work are outlined in further detail below.

## Use of Personal Protective Equipment

PPE will be utilized to minimize the exposure to employees as they return to the office.

- Hand Sanitizer – hand sanitizer will be available in the offices for employees to use after touching common use areas
- Disinfecting Wipes or Spray – As available, the office will stock disinfecting wipes and/or spray.
  - Common touch areas should be wiped down after use. The following guidelines can be applied:
    - Copy Machine / Fax Machine / Microwave / Fridge / Conference Phones – before and after every use
    - Door handles – at the beginning and end of every shift.

## Personal Hygiene

Personal hygiene will remain important in the ability to limit any exposure to Covid-19.

- Avoid sharing pens, phones or other tools with employees or customers.
- Use a foot, shoulder, elbow, hip or forearm whenever possible to open doors.
- Avoid touching eyes, nose or mouth
- Wash your hands regularly with soap and water for at least 20 seconds. Use hand sanitizer when soap and water are not available. Key times to clean hands are;
  - Before, during and after preparing food
  - Before eating food.
  - After using the bathroom
  - After blowing your nose, coughing or sneezing.
    - Medical professionals recommend sneezing into your elbow rather than hands.
  - Before and after work shifts and breaks
  - After putting on, touching or removing a mask
  - After touching common surface areas
  - Before and after pumping gas

## Masks

A key step to personal hygiene is the use of a face mask.

**Workers will be required to wear a face mask (non-medical or KN95/N95 when needed) when working on SEI property, including offices, shop, laydown yard, vessels and project jobsites with the following exceptions.**

- **If personnel are seated at their desk with at least 6ft of separation between them and their officemate(s)**

**Masks are to be worn whenever an employee gets up from their desk to move around the office.**

### Acceptable mask types include:

- Non-Medical Mask – Cloth or other material that can be purchased or homemade. Per the CDC this can help slow the spread of virus. The mask needs to cover the mouth and nose to be effective.
- N95/KN95 – Manufactured mask that blocks 95percent of very small (0.3 micron) test particles. These are required when crews are chipping concrete or other job specific PPE requirements, determined by your supervisor.

Non-medical masks may be used when work is conducted in the open and crew or personnel are greater than 6ft apart.

N95's or KN95s, supplied by the company, should be used in place of cloth face masks when work requires long-term interaction of personnel closer than 6ft or when the operations themselves require additional PPE protection for the employee.

*Social distancing and separation should continue to be practiced whenever possible.* Masks are not a replacement for social distancing and separation, but an additional PPE requirement on top of.

Proper mask handling and CDC guidelines are included at the end of the policy.

If you have any questions on use of non-medical vs. KN95/N95 please talk with your direct supervisor.

## TRAVEL

### Inter-Island Travel:

Domestic business travel shall be limited to business-critical, and all elective travel shall be cancelled until further notice. Business-critical travel includes travel determined by the division manager to be conducted to maintain the functionality of the company. For business-critical travel, use only direct flights when feasible. It is encouraged for employees to travel to a further airport if direct flights are available to lessen exposure to public places. Contact your division manager prior to scheduling to determine the necessity of the travel plans (excluding traveling to and from the site). Proper hygiene should be practiced during travel. Use of a face mask in public places is required during travel.

### Outside Hawaii Travel:

Business travel outside of Hawaii shall be limited to business-critical only and approved in advance by your division manager. If you choose to travel outside of Hawaii for personal reasons, your itinerary shall be reported to your division manager prior to commencing your travel. Upon returning from travel, all employees are required to contact their division manager prior to reporting back to work to agree on a work reintegration plan. Employees will not be allowed onsite for 14 days, or if you feel ill. Hawaii quarantine guidelines and practices shall be employed.

### Housemate / Partner High Risk Exposure Due to Travel or Work:

As return to work, travel and businesses open up, it is anticipated that personnel will be in contact with partners, housemates or family members that travel to the mainland or return to work in high risk exposure environments. These employees are asked to;

- Take their temperature, **prior to coming to the office**, for 14 days after interaction with parties above
- Remain vigilant on use of PPE and hygiene
- Minimize use of common areas and practice disinfection and hygiene steps outlined above
- Remain home if they, the parties they interacted with, or any 3<sup>rd</sup> party tracers are identified as ill
  - A schedule will be worked out with your direct supervisor if this is required

## CDC Travel Guidelines:

The CDC monitors health-related issues worldwide and categorizes countries on three levels based on health risks. The CDC classified countries list is dynamic. See the link below to verify current travel notices.

### [CDC Map and Travel Notices](#)

#### CDC Level 1 Classified Countries (lower risk)

Employees are encouraged to be vigilant in practicing personal precautions as it relates to their health and minimize the risk of exposure to the virus

#### CDC Level 2 Classified Countries

Employees are strongly discouraged from traveling to any country in which there is a CDC Level 2 warning.

#### CDC Level 3 Classified Countries (high risk)

Employees should not travel to any country in which there is a CDC Level 3 warning.

Out of an abundance of caution, Sea Engineering, Inc. employees will not be allowed to return to any project sites or office until 14 days after your return to Hawaii. You may work remotely during this period if approved by your supervisor, or you will be required to utilize your annual vacation, comp time, or unpaid leave during this period. Requests to work remotely through the 14-day incubation period will be individually assessed and must be *approved by your respective division manager*.

## VISITOR RESTRICTIONS

### [Operational Locations: Projects/Yards/Vessels](#)

To prevent additional exposure, access to any operational location continues to be restricted to essential employees who routinely work at that location, or business-critical functions. This includes all *day to day operations personnel, maintenance staff, or other essential functions*.

Visitors are strictly prohibited. Visitors include office staff not typically associated with the project, vendors, suppliers, or any other non-essential personnel. Government officials or owners' representatives are not prohibited but strongly discouraged if not conducting official business. It is the responsibility of the project manager to speak with their owner/client representative to come to a consensus regarding the necessity for visitation.

### Office Locations

Visitors to office locations are strictly prohibited. Employees should use the guidance above regarding virtual meetings to prevent additional exposure to office locations.

If a business-critical visitor needs to visit the office, divisional manager approval is required.

## JOBSITE LOCATIONS AND FIELD OPERATIONS

Jobsite SOPs should follow the vehicle, social distancing, PPE and hygiene guidelines above. In addition, job specific guidelines are outlined below.

Limiting access to our sites will lower our exposure and risk of shutdown. The determination of a business-critical subcontractor shall be made by the divisional manager.

Any subcontractor working at our sites shall follow all the same guidelines outlined in this policy. Sea Engineering supervisors shall disseminate this policy to the appropriate subcontractor representative.

Infrared non-touch thermometers are available for use on jobsites or SEI vessels and should be used in accordance with the guidelines below and/or in the return to work policy for a sick employee.

Supervisors should take efforts to stagger start and end times of crews by a few minutes to limit group gathering. Some employees can wait outside while other employees change and head to work. The variation can be as little as 10 minutes per crew.

### Business-Critical Subcontractors

Business-critical subcontractors, such as 3<sup>rd</sup>. party staffing, maintenance, transportation, etc., shall be allowed to access production sites and yards. Caution should be taken by supervisory staff to ensure only necessary subcontractors are allowed.

When non-SEI employees are also on a jobsite, a Sea Engineering supervisor must be identified to be a liaison between the subcontractor and Sea Engineering. This liaison and the SEI person in charge must communicate daily with each other regarding any symptomatic employees.

Should any non-SEI employees exhibit symptoms, the liaison shall notify SEI immediately and the affected employee shall be removed from the site immediately. Any other employees (SEI and non-SEI), who may have had direct, or close contact with the affected person should be removed from the jobsite.

For delivery drivers, access to the site should be limited. When feasible, truck drivers shall always stay in their vehicles. Drivers shall not be allowed access to any buildings at the yard or project.

## DIVING OPERATIONS

As part of SEI's critical infrastructure support, SEI's divers are being employed to continue supporting oil and gas offshore mooring work, emergency call-outs for tug and barge and container ship support as well as supporting critical infrastructure on the waterfront. To ensure that proper hygiene and social distancing is employed during these operations the following, in addition to the requirements above will be adhered to:

- 1) Toolbox talks and foreman meetings shall be conducted in smaller groups to meet the 10-person limit while practicing social distancing techniques, including at least 6 feet of distance between crew members. These meetings must be performed outside.
- 2) Crews will utilize personal and/or multiple company trucks when transiting to/from a jobsite.
- 3) Crews will keep personal gear and equipment outside and refrain from an extended use of interior spaces on SEI or third part vessels.

- 4) Crews will not intermix dive equipment or gear throughout the extent of this policy.
- 5) Crews will keep gear at the maximum possible distance from each other during operations.
- 6) Dive trailers, dive vessels, company trucks and equipment will be wiped down with an approved cleaning solution, as available.

## CONSTRUCTION JOBSITES

As part of SEI's critical infrastructure support, SEIs construction crews are being employed to continue supporting Hawaii's critical infrastructure projects:

- 1) Toolbox talks and foreman meetings shall be conducted in smaller groups to meet the 10-person limit while practicing social distancing techniques, including at least 6 feet of distance between crew members. These meetings must be performed outside.
- 2) Crews will utilize personal and/or multiple company trucks when transiting to/from a jobsite.
- 3) Crews will keep personal gear and equipment outside and refrain from an extended use of interior spaces on SEI job trailers and job boxes.
- 4) Crews will not intermix PPE gear, including masks, gloves, eye protection or life jackets..
- 5) Crews will keep gear at the maximum possible distance from each other during operations.
- 6) Jobsite trailers, job boxes, company trucks and equipment will be wiped down with an approved cleaning solution, as available.

## VESSELS

As part of SEI's critical infrastructure support, SEIs marine crews are being employed to continue supporting Hawaii's critical infrastructure projects:

- 1) Vessel selection for the project should include the ability of crews to maximize social distancing during operations.
- 2) The wheelhouse should be limited to critical crew only. This is limited to the Captain of the vessel, unless additional personnel are required for operational reasons. Additional crew in the wheelhouse should be limited to a minimum amount of time.
- 3) Toolbox talks and meetings shall be conducted on the outside decks of the vessels. There should be no large gatherings of personnel and crew within enclosed areas of the vessel; including wheelhouse, salons, galley, berths or any other space.
- 4) Crews will utilize personal and/or multiple company trucks when transiting to/from a jobsite.
- 5) Crews will keep personal gear and equipment outside and refrain from an extended use of interior space.
- 6) Crews will not intermix PPE gear, including masks, gloves, eye protection or life jackets..
- 7) Crews will keep gear at the maximum possible distance from each other during operations.
- 8) Common use areas, will be wiped down with an approved cleaning solution, as available.

## EMPLOYEE HEALTH SCREENINGS

To lessen the risk of exposing operations personnel to potentially infected employees, we will be implementing mandatory health screenings for all employees at all projects, yards, and vessels.

## Routine Health Screenings

All employees returning to work after a leave of absence must submit to a temperature reading (when available) each day for the first week of being back to work. Project employee's temperatures are taken at the beginning of each shift prior to entering the site or vessel. Any employee exhibiting a temperature of 100.4° or greater must be isolated or removed. Follow the procedures below.

Employees conducting the screenings shall be trained and authorized by their divisional team and be provided with latex/nitrile gloves and face shields.

Employees refusing health screenings will be not be permitted to remain at the project location or board the vessel.

## Returning to Work After Sick Leave

Prior to employees returning to work, for any leave of absence associated with being sick in any form, a doctors note, clearing the employee for return to work must be provided in addition to the screening questionnaire discussed below.

## Sea Engineering Covid-19 Screening Questionnaire

When employees arrive on site for a crew change or return to work from time off, they must complete the Sea Engineering Covid-19 Screening Questionnaire (See Appendix). Employees are not to fill out their own questionnaires. Direct supervisors conducting the screenings shall ask the employee the questions and complete the questionnaire, to lessen possible exposure due to pens and pencils. Questionnaires will be kept on-file at the office.

If an employee answers yes, employee may not access the site or vessel until you receive further guidance from the division manager. Keep all completed forms onsite until further notice.

## WHAT TO DO IF AN EMPLOYEE DEVELOPS SYMPTOMS

### **Employees Exhibiting Symptoms**

If any employee on a project site, office, or vessel exhibits any flu-like symptoms, they are to immediately isolate themselves from other employees until arrangements can be made to get them to a medical facility for testing. Testing facilities include, but may not be limited to:

- Windward Urgent Care - (808) 234-1094
- Kaiser Permanente - 808-432-2000
- Queens Medical Center - (808) 691-2619
- Doctors of Waikiki - (808) 922-2112

Provide the affected employee with a respirator, if available, to prevent additional exposure.

Any employee interacting with the affected employee must wear an N95 respirator, if available.  
*Employees should always practice social distancing techniques.*

Each project has been provided a local clinic that is screening for COVID-19. Employees are required to receive a return to work slip prior to coming back to the site.

### Isolation Procedures

When feasible, utilize the following isolation procedures for potentially infected employees.

Employees should be placed in their POV or a room without contact with others until the employee can be removed.

Once the employee is removed, disinfect the room utilizing an approved product for human corona. If no approved product is available, a bleach-based dilution should be used.

All employees encountering the infected employee, or conducting decontamination, shall wear latex/nitrile gloves, disposable coveralls, an N95 respirator (when available), and face shield.

For vessels, employees are to remain outside until return to dock.

All rooms and touch areas of the vessel must be disinfected immediately after the employee is removed from the vessel.

All project sites and yards shall remove employees immediately. Supervisors should recommend their employee wait in their car until direction can be provided.

## Disinfection and Isolation

If an employee develops Covid related symptoms, all common areas must be disinfected by the project, office or vessel crew. This includes lunch areas, tools, door handles, bathrooms etc..

Utilize approved products or a bleach-based dilution.

Your immediate supervisor should be consulted to determine if further crew isolation is warranted based on the employee's interaction with other employees.

## Industrial Cleaning Companies

If an employee is confirmed to have Covid-19, management, when feasible, should utilize an industrial cleaning company to disinfect project sites, offices and vessels, depending on the employees work area and traced interaction through the office.

## Isolation of a Vessel

If an employee tests positive for Covid-19, while underway on an extended offshore deployment, isolation of the vessel may be necessary. Wait from guidance from your upper management.

# IF AN EMPLOYEE TESTS POSITIVE

## Refusing a Test

If an employee refuses a test, treat the employee as if they have tested positive.

## Communication

If an employee tests positive, quick and effective communication will be our best defense for containing a further outbreak among employees.

- Consider the employee's privacy when communicating any information associated with the employee.
- Contact your immediate supervisor and provide as many details as possible.
  - When did the symptoms begin?
  - When did the employee begin their hitch/shift?
  - What is their job position?
  - What areas may they have frequented on the vessel/project/yard?
  - Has the employee been removed or isolated?

- The division manager will notify company executives, project manager, captain, yard manager, or another supervisor of the situation.
- If the employee is union, notify the divisional manager.
- Keep other employees calm. Ensure that Sea Engineering is taking all necessary precautions to disinfect the area.

Any positive tests for a jobsite or boat will result in immediate suspension of operations and quarantine for 14 days for all personnel involved with the project or who may have come into contact with the person in the lead up to of the project within 5 days prior.

### Evaluate Other Employees

Determine where the infected employee regularly works and who they may have been in contact with. Notify the other employees that they have potentially been exposed and to self-monitor their health in the coming days.

Direct all employees with concerns regarding their exposure to their division manager.

### Return to Work

Once removed from the site/vessel, the infected employee shall not return to work for at least 14 days, following with a doctor's note. Exempt Employees out sick for Covid-19 can put in time-off under Covid-19 sick leave.

### If an Employees Family Member Tests Positive

For employees who have a family member in the same household test positive, the employee should not return to work for 14 days, even if they do not show any symptoms. Have the employee speak with their direct supervisor regarding sick pay during their leave.

## QUESTIONS

### Questions Regarding This Plan

Any questions regarding this plan or implementation of this plan should be directed to your division manager.

## All Additional Questions

Additional questions, such as those from field workers regarding pay, sick leave, etc., should be directed to your division manager.

## RESOURCES

For general information, utilize the [CDC](#) or [WHO](#) website. Information is updated daily so ensure you are referencing the most up to date information.



## Sea Engineering Covid-19 Screening Questionnaire

The safety of our employees is the Sea Engineering number one priority. As the coronavirus pandemic 2019 (COVID-19) outbreak continues to evolve and spreads globally, SEI is monitoring the situation closely and will periodically update company guidance based on current recommendations from the CDC and WHO.

To prevent the spread of COVID-19 and reduce the potential risk of exposure to our workforce, we are conducting a simple screening questionnaire. Your participation is required to allow access to the site.

Employee Name:	Personal Phone Number (mobile/home)
Facility/Project Name:	Today's Date:

Circle Yes or No in each question below.	
1	Have you traveled outside the Hawaii in the last 14 days? Yes No If Yes, Where? _____
2	Have you had close contact with or cared for someone diagnosed with COVID-19 within the last 14 days? Yes No
3	Have you been in close contact with anyone who has traveled outside the Hawaii in the last 14 days? Yes No If Yes, Where? _____
4	Have you experienced any cold or flu-like symptoms in the last 14 days (to include fever, cough, sore throat, respiratory illness, difficulty breathing, GI/stomach symptoms)?
5.	Are you currently taking any of the following medication [ibuprofen (Advil), acetaminophen (Tylenol), aspirin (Bayer), naproxen (Aleve), etc]? Yes No

For more information, see the Sea Engineering privacy statement in the employee handbook.

Any questions should be directed to your immediate supervisor



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**March 23, 2020**

**To Whom This May Concern:**

Sea Engineering, Inc. (SEI) employees are considered critical infrastructure workers as defined in the Department of Homeland Security's March 19, 2020 Memorandum on Identification of Essential Critical Infrastructure Workers During COVID-19 Response.

This guidance states that: "if you work in a critical infrastructure industry, as defined by the Department of Homeland Security...you have a special responsibility to maintain your normal work schedule."

The DHS memorandum identifies "Maritime transportation workers – port workers, mariners, equipment's operators," and "employees who repair and maintain marine vessels" as essential critical infrastructure personnel.

Sea Engineering, Inc's employees are actively engaged in maritime support operations including infrastructure repairs, emergency response for maritime cargo handling and maintenance and support to PAR Hawaii's single point mooring and oil and refinery infrastructure and Hawaiian Electric Company. As such, SEI's employees are critical infrastructure workers. SEI respectfully requests that the employee bearing this letter be allowed to proceed to or from his/her place of employment to ensure this critical infrastructure is not impacted.

Please reach out to the undersigned below with any questions.

Thank you.


Andrew Rocheleau

President

[arocheleau@seaengineering.com](mailto:arocheleau@seaengineering.com)

808-561-2629

# CDC GUIDELINES ON USE OF MASKS



Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives. Protecting People™

Search

Coronavirus -

All A-Z Topics

Coronavirus Disease 2019 (COVID-19)

CDC

Coronavirus Disease 2019 (COVID-19)

Prevent Getting Sick

Coronavirus Disease 2019 (COVID-19)

Symptoms & Testing

Prevent Getting Sick

How It Spreads

Protect Yourself

Cloth Face Covers

Cleaning Your Home

Social Distancing

Daily Life & Coping

If You Are Sick

People Who Need Extra Precautions

Frequently Asked Questions

Travel

Cases & Surveillance

Schools, Workplaces & Community Locations

Healthcare Professionals

Health Departments

Laboratories

Communication Resources

Get Email Updates

To receive email updates about COVID-19, enter your email address:

[What's this?](#)

Use of Cloth Face Coverings to Help Slow the Spread of COVID-19


Other Languages

Printer friendly version

How to Wear a Cloth Face Covering

Cloth face coverings should—

- fit snugly but comfortably against the side of the face
- be secured with ties or ear loops
- include multiple layers of fabric
- allow for breathing without restriction
- be able to be laundered and machine dried without damage or change to shape



CDC on Homemade Cloth Face Coverings

CDC recommends wearing cloth face coverings in public settings where other social distancing measures are difficult to maintain (e.g., grocery stores and pharmacies), especially in areas of significant community-based transmission.

CDC also advises the use of simple cloth face coverings to slow the spread of the virus and help people who may have the virus and do not know it from transmitting it to others. Cloth face coverings fashioned from household items or made at home from common materials at low cost can be used as an additional, voluntary public health measure.

Cloth face coverings should not be placed on young children under age 2, anyone who has trouble breathing, or is unconscious, incapacitated or otherwise unable to remove the mask without assistance.

The cloth face coverings recommended are not surgical masks or N-95 respirators. Those are critical supplies that must continue to be reserved for healthcare workers and other medical first responders, as recommended by current CDC guidance.

Should cloth face coverings be washed or otherwise cleaned regularly? How regularly?


Yes. They should be routinely washed depending on the frequency of use.

How does one safely sterilize/clean a cloth face covering?

A washing machine should suffice in properly washing a face covering.

How does one safely remove a used cloth face covering?

Individuals should be careful not to touch their eyes, nose, and mouth when removing their face covering and wash hands immediately after removing.




Sew and No Sew Instructions

Sewn Cloth Face Covering

Materials

- Two 10"x6" rectangles of cotton fabric



Rev0

25

May 22, 2020



## **Papahānaumokuākea Marine National Monument Compliance Information Sheet**

### **1. Updated list of personnel to be covered by permit. List all personnel names and their roles here (e.g. John Doe, Diver; Jane Doe, Field Technician, Jerry Doe, Medical Assistant):**

Sea Engineering, Inc. (SEI)

- Salvage Master, Vessel Operator (TBD)
- Dive Supervisor, Diver, Standby Diver, Tender (TBD)
- Dive Supervisor, Diver, Standby Diver, Tender (TBD)
- Dive Supervisor, Diver, Standby Diver, Tender (TBD)

Hawaii Resource Group (HRG)

- Imua Captain (TBD)
- Imua Mates x2 (TBD)
- Imua Deckhands x3 (TBD)
- Imua Engineer (TBD)

Additional Persons

- Agency staff: 2

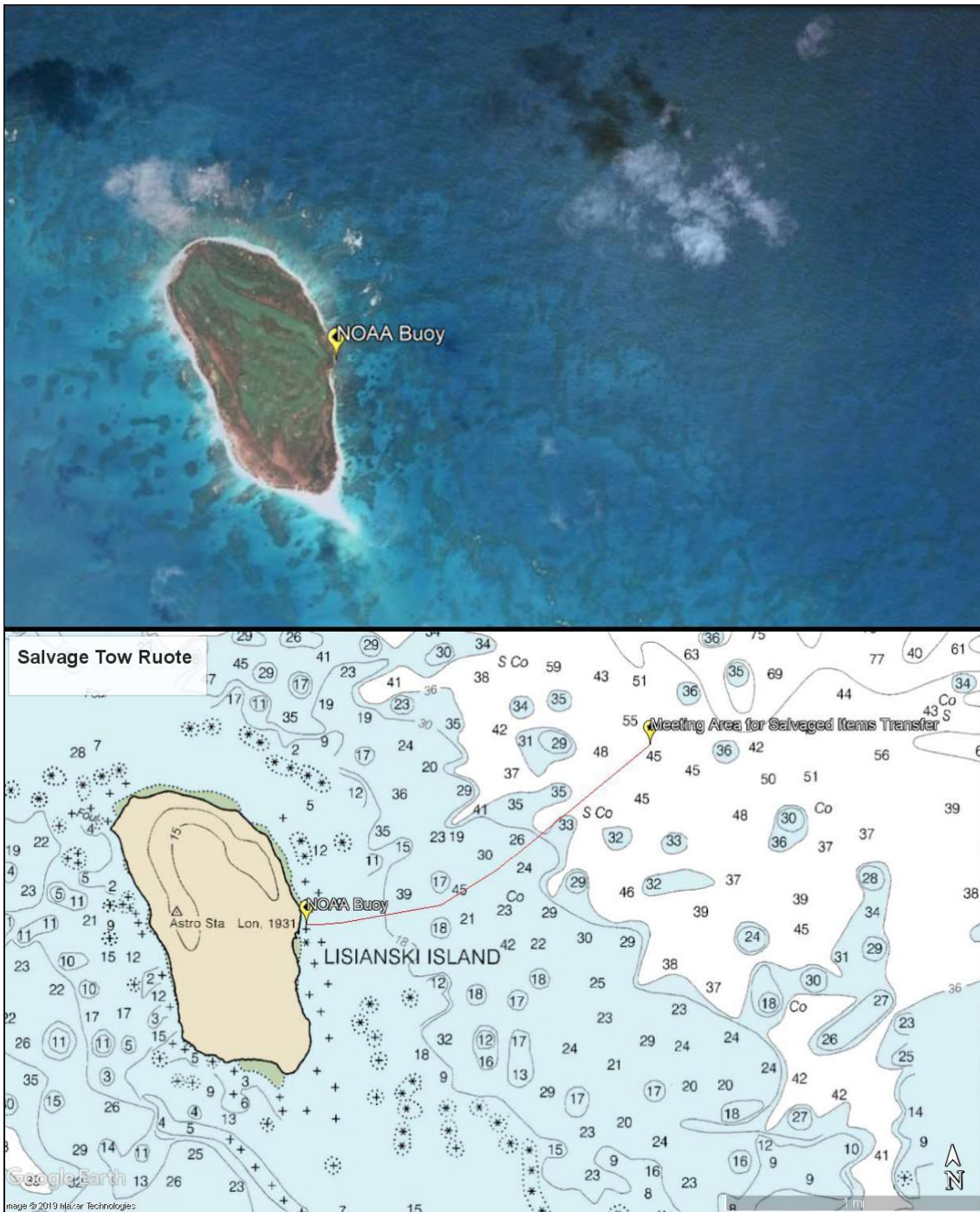
### **2. Specific Site Location(s): (Attach copies of specific collection locations):**

NOAA Buoy Location

- 26°3'52.5594"N, 173°57'38.88"W

Salvage Vessel Transfer Location

- 26°4'24.84"N, 173°56'21.15"W



**3. Other permits (list and attach documentation of all other related Federal or State permits):**

**3a. For each of the permits listed, identify any permit violations or any permit that was suspended, amended, modified or revoked for cause. Explain the circumstances surrounding the violation or permit suspension, amendment, modification or revocation.**

**4. Funding sources (Attach copies of your budget, specific to proposed activities under this permit and include funding sources. See instructions for more information):**

NOAA/ERAD

**5. Time frame:**

Activity start: August 27, 2020

Activity completion: September 9, 2020

Dates actively inside the Monument:

From: TBD

To: TBD

Describe any limiting factors in declaring specific dates of the proposed activity at the time of application:

Dates inside monument cannot be determined at time of application. Dates are pending due to weather and ship travel dates. Intervals of time we propose to enter monument is during the spring/summer season as soon as the North swells subside allowing safe access to the Eastern shore for buoy salvage.

Personnel schedule in the Monument:

Sea Engineering, Inc. (SEI)

- Salvage Master, Vessel Operator (TBD)
- Dive Supervisor, Diver, Standby Diver, Tender (TBD)
- Dive Supervisor, Diver, Standby Diver, Tender (TBD)
- Dive Supervisor, Diver, Standby Diver, Tender (TBD)

Hawaii Resource Group (HRG)

- Imua Captain (TBD)
- Imua Mates x2 (TBD)
- Imua Deckhands x3 (TBD)
- Imua Engineer (TBD)

Additional Persons

- Agency staff: 2

**6. Indicate (with attached documentation) what insurance policies, bonding coverage, and/or financial resources are in place to pay for or reimburse the Monument trustees for the necessary search and rescue, evacuation, and/or removal of any or all persons covered by the permit from the Monument:**

Attached in Separate document.

**7. Check the appropriate box to indicate how personnel will enter the Monument:**

- ☒ Vessel  
☐ Aircraft

Provide Vessel and Aircraft information:

CHARTER VESSEL CHARACTERISTICS FORM	
<b>1. GENERAL VESSEL CHARACTERISTICS</b>	<b>OFFEROR RESPONSE</b>
Vessel Name	IMUA
USCG Registration No.	1117720
Vessel Owner/Manager	P&R Water Taxi LTD
Vessel Owner/Manager Contact Information (Office and cell numbers, email address)	Mark Delventhal, cell: 808-330-1673, <a href="mailto:mdelventhal@hawaiiirg.com">mdelventhal@hawaiiirg.com</a>
Location and Dates Vessel Available for Pre-award Inspection	Kewalo Basin, Honolulu Hawaii
Hull Type	Monohull, Steel Construction
Year Built	2001
Vessel Length (LOA)	185 FT
Vessel Length (Registered)	152 FT
Vessel Draft	12 FT
Vessel Beam	46 FT
Gross Register Tonnage (GRT)	92 GRT
Fuel Capacity (gal)	64,857 GAL
Cruising Speed	10 knots
Minimum Maneuvering Speed	2 knots
Range (nmi)	6500 plus miles
Endurance (minimum 7 continuous days)	30 plus days
Is Certificates of Inspection or Documentation attached and up to date? (YES/NO) Submit copies of certificates.	Yes. USCG COI is attached.
Are most recent Classification Society Certificates attached and up to date? (YES/NO) Submit copies of certificates.	Yes. ABS Load Line is attached.
DESIRED ITEM: Ability to declutch propeller or otherwise silence ship for underwater acoustic release communications.	Propeller can be declutched from main engine.
<b>2. MAIN &amp; AUXILIARY POWER</b>	<b>OFFEROR RESPONSE</b>
Main Engines (No.)	Two
Main Engines Mfg & Model	Caterpillar 3512

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Main Engines Total HP (continuous)	2400 HP
Auxiliary Engines (No.)	Two
Auxiliary Engines Mfg & Model	Caterpillar 3304 and 3406
Auxiliary Engines HP	200 & 300 HP
Auxiliary Engines kVA or kW	99 kW
<b>3. PIER/LOCATION PREFERENCE FOR LOADING AND UNLOADING EQUIPMENT</b>	<b>Kewalo Basin</b>
<b>4. DATES AVAILABLE FOR CHARTER WORK</b>	
<b>5. CRANES AND DECK GEAR</b>	<b>OFFEROR RESPONSE</b>
Location of Crane	Main Deck, STBD fwd of midships
Safe Working Loads of Crane	10 T
Location of Capstan for Mooring Line Deployment	N/A
Size and Speed and Safe Working Load of Capstan	N/A
Location of A-Frames	Stern Mounted
Safe Working Load and dimensions of A-Frames	10 T
Location of Fairleads and Pad Eyes on Deck	Misc
Safe Working Load of Fairleads and Pad Eyes on Deck	Misc
DESIRED EQUIPMENT: Describe vessels Small Boat, capacity and operational limits (sea state)	7M RHIB and 35 FT Aluminum Landing Craft Available.
Additional Deck Equipment Location and Safe Working Loads (tuggers, capstans, cleats, turning blocks, winches, net reels)	Misc
<b>6. DECK, OFFICE AND STORAGE SPACES</b>	<b>OFFEROR RESPONSE</b>
Describe deck space for buoy recovery and deployment operations including space for two buoys	3900 FT <sup>2</sup> of space on main deck.
Describe location and work areas in wet and dry lab space.	
<b>5. CREW REQUIREMENTS</b>	<b>OFFEROR RESPONSE</b>
Describe Crew size and capability to conduct scientific operations	6 crew
Describe experience of vessel master.	Extremely experienced in Hawaiian Waters.
Describe crew's experience	All have significant experience in Hawaiian Waters.
Describe ability/experience of deck hands to safely operate deck equipment and assist with science operations	Deckhands are available and able to support science operations.
Describe crews ability/experience in preparing meals	Dedicated cook onboard.
Names of crew with survival and fire-fighting training: Provide certification and date.	All crew have required by USCG to have training. Specific crew will be identified once charter dates are confirmed.
Names of crew with MEDPIC/CPR/ First Aid training. Provide certification and date.	All crew have required by USCG to have training. Specific crew will be identified once charter dates are confirmed. Captain and Mate have advanced first aid training.
Are copies of certificates documenting master and crew's experience and qualifications provided? (Yes/No)	Available onboard.
<b>6. NAVIGATION ELECTRONICS</b>	<b>OFFEROR RESPONSE</b>
GPS #1 Make and Model	FURUNO
GPS #2 Make and Model	FURUNO
Radar #1 Make, Model, and Range	FURUNO
Radar #2 Make, Model, and Range	FURUNO
<b>7. COMMUNICATIONS EQUIPMENT</b>	<b>OFFEROR RESPONSE</b>
Fixed VHF Radio Type, Make, Model,	Standard Horizon.
Fixed 1-18 MHz SSB radio Make and Model	ICOM
Description of fax machine capable of receiving weather information, or equivalent	Weather Fax FURUNO FAX-30

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Vessel's Radio Call Sign	WKD2768
Description of system for switching to backup power (e.g., battery) for radio operation in the event of interruption of the normal power supply	Automatically switches over.
INMARSAT C Number, Make, and Model	n/a

9. SAFETY EQUIPMENT	OFFEROR RESPONSE
Number of immersion suits and Type I Personal Floatation Devices	No Immersion Suits. 22 PFDs.
List number by class of EPIRBs	One EPIRB
Is stability letter/report attached (Yes/No)?	Yes
Other Safety features:(i.e. alarms, fire fighting system, emergency communications, Etc):	Engine Alarms on bridge, fire & smoke detection, GA system,

Satellite Telephone Number, Make, and Model	Sat Phone: 870773169818
Cellular Telephone Number, Make, and Model	n/a

8. SCIENTIFIC STAFF AND CREW ACCOMMODATIONS	OFFEROR RESPONSE
Total number of heads and number available for use by scientific staff.	Three heads available.
Total number of showers and number available for use by scientific staff.	Three showers available.
Describe ability to provide three balanced, nutritious meals per day. All meals shall include fresh fruits and vegetables. Vegetarian meals may be required for some members of the party. Any food allergy information of prospective scientific party members or other special food requirements will be provided to the contractor at least one (1) week prior to sailing to allow for proper provisioning. Water, juice, soft drinks, fruit, and snacks shall be available throughout the day.	Dedicated cook onboard.
Is Smoking prohibited in all interior spaces occupied or utilized by the Scientific Field Party (YES/NO)?	Yes

**8. The certifications/inspections (below) must be completed prior to departure for vessels (and associated tenders) entering the Monument. Fill in scheduled date (attach documentation):**

- ☐ Rodent free, Date: To be established closer to departure date.
- ☐ Tender vessel, Date: To be established closer to departure date.
- ☐ Ballast water, Date: To be established closer to departure date.
- ☐ Gear/equipment, Date: To be established closer to departure date.
- ☐ Hull inspection, Date: To be established closer to departure date.

**9. Vessel information (NOTE: if you are traveling aboard a National Oceanic and Atmospheric Administration vessel, skip this question):**

Vessel name: Imua

Vessel owner: P&R Water Taxi LTD

Captain's name: Dennis Hans Bishop

IMO#: 8968193

Vessel ID#: 1117720

Flag: Master Boat Builders

Vessel type: Freight Vessel

Call sign: WDK2768

Embarkation port: Honolulu

Last port vessel will have been at prior to this embarkation: Midway Atoll

Length: 185'

Gross tonnage: 92 GRT

Total ballast water capacity volume (m3): 422 m<sup>3</sup>

Total number of ballast water tanks on ship: 9 Ballast Tanks

Total fuel capacity: 64,857 gallons

Total number of fuel tanks on ship: 6 fuel tanks

Marine Sanitation Device: None Installed. Vessel has adequate holding capacity for black and gray water.

Type: None

Explain in detail how you will comply with the regulations regarding discharge in the Monument. Describe in detail. If applicable, attach schematics of the vessel's discharge and treatment systems:

IMUA has adequate holding capacity to remain discharge free while transiting and working in the Monument Zone. IMUA has been approved to make several voyages for Fish and Wildlife Service through the monument in the last 18 months. IMUA is keel cooled, so there is no engine water overboard discharge. The crew on IMUA are extremely familiar with the rules and regulations regarding discharges in the Monument. IMUA will not need to discharge or treat any discharge overboard while in the Monument.

Other fuel/hazardous materials to be carried on board and amounts: None.

Provide proof of a National Oceanic and Atmospheric Administration (NOAA) Office of Law Enforcement-approved Vessel Monitoring System (VMS). Provide the name and contact information of the contractor responsible for installing the VMS system. Also describe VMS unit name and type: To be established closer to departure date.

VMS Email: To be established closer to departure date.

Inmarsat ID#: To be established closer to departure date.

\* Individuals MUST ENSURE that a type-approved VMS unit is installed and that its automatic position reports are being properly received by the NOAA OLE system prior to the issuance of a permit. To make sure your VMS is properly configured for the NOAA OLE system, please contact NOAA OLE at (808) 725-6110 or (808) 725-6100.

\* PERMITS WILL NOT BE ISSUED TO INDIVIDUALS ENTERING THE MONUMENT VIA VESSEL UNTIL NOAA OLE HAS CONTACTED THE MONUMENT PERMIT COORDINATOR WITH A 'POSITIVE CHECK' READING.

#### **10. Tender information:**

On what workboats (tenders) will personnel, gear and materials be transported within the Monument? List the number of tenders/skiffs aboard and specific types of motors:

- SEI 7-Meter Ambar Rigid Hull Inflatable Boat (RHIB)
  - Twin Outboard 115 Yamaha Four Strokes
- HRG 35 ft aluminum hulled landing craft "ALEWA"
  - Twin cummings diesel engines.
- HRG 7M fiberglass hulled (RHIB) "WAIAU"
  - Single cummings diesel engine.

### **Additional Information for Land Based Operations**

**11. Proposed movement of personnel, gear, materials, and, if applicable, samples:**

Personnel will be transported to Lisianski Island via vessel. Personnel and gear will be transported to shore via a small rigid hull inflatable (RHIB). Only one island will be visited.

**12. Room and board requirements on island:** None required, room and board is supplied on the ship.

**13. Work space needs:** None.

DID YOU INCLUDE THESE?

- ☒ Map(s) or GPS point(s) of Project Location(s), if applicable
- ☐ Funding Proposal(s)
- ☐ Funding and Award Documentation, if already received
- ☐ Documentation of Insurance, if already received
- ☐ Documentation of Inspections
- ☐ Documentation of all required Federal and State Permits or applications for permits

DAVID Y. IGE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF AQUATIC RESOURCES  
1151 PUNCHBOWL STREET, ROOM 330  
HONOLULU, HAWAII 96813

SUZANNE D. CASE  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT MASUDA  
FIRST DEPUTY

M. KALEO MANUEL  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

August 14, 2020

TO: Division of Aquatic Resources File

THROUGH: Suzanne D. Case, Chairperson

FROM: Maria Carnevale  
Papahānaumokuākea Marine National Monument

DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200 HAR, FOR PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT CONSERVATION AND MANAGEMENT PERMIT TO MR. ANDREW ROCHELEAU, SEA ENGINEERING, INC., FOR ACCESS TO STATE WATERS TO CONDUCT SALVAGE ACTIVITIES.

The following permitted activities are found to be exempted from preparation of an environmental assessment under the authority of Chapter 343, HRS and Chapter 11-200, HAR:

Project Title:

Papahānaumokuākea Marine National Monument Conservation and Management Permit to Mr. Andrew Rocheleau, Sea Engineering, Inc., for Access to State Waters to Conduct Salvage Activities at Lisianski Island.

Permit Number: PMNM-2020-007

Project Description:

The Conservation and management activity would allow entry and activities to occur in Papahānaumokuākea Marine National Monument, including the NWHI State waters from August 25, 2020 through August 24, 2021.

The applicants propose to salvage NOAA Buoy equipment and materials that were deposited into the nearshore waters and shoreline at Lisianski. A brief summary of the grounding is as follows and a more detailed summary including maps can be found in the approved salvage plan as part of this hearing package.

NOAA Buoy 3D61 was deployed at station 51101 (186 NM NW of Kauai Island, HI) on October 19, 2016. On March 28, 2018 the buoy was reported outside of its watch circle and

considered to be adrift trailing an unknown length of its mooring. The buoy drifted into the Papahānaumokuākea Marine National Monument (PMNM) on October 21, 2018. While transiting through the Monument the mooring became entangled in the seafloor thereby re-mooring itself in three distinct locations. On February 8th, 2019 the buoy went ashore on the eastern (windward) side of Lisianski Island at 26.0646N 173.9608W and has been reporting a near constant 45-degree tilt angle indicating that the buoy is out of the water and is being supported by the bridle and the hull at this heeled over angle. The buoy is disconnected from the mooring at the 3rd Class Split-Key Shackle closest to the bridle. The remainder of the mooring nearshore to the buoy consists of 75ft of 1" chain and approximately 1ft of synthetic line. Both ends of this chain have been marked with a small float. This section is described as heading 41 degrees Northeast from the buoy in 2-3ft of water. The chain is not hung up on any subsurface structures.

The immediate area next to the buoy is described as being a hard-bottom and covered in algae with little to no coral present. The bottom conditions persist outward from the shore to about 250ft-300ft with the relative absence of coral only confirmed to 75ft from shore. There is a deeper channel approximately 100ft from the buoy.

Permitting such proposed activities are clearly outlined in the Monument Management Plan's Natural Resource Damage Assessment Action Plan (NRDA): *"While Monument and State regulations regulate access, they also provide a general exemption for activities necessary to respond to emergencies. The general exemption for emergencies allows for individuals responding to emergencies threatening life, property, or the environment to conduct necessary activities without the need for a permit. The general exemption applies only to the emergency response activity itself and not to the ancillary activities, such as training for emergency response, salvage operations, remediation, or restoration. These ancillary actions also require a timely response and would be covered under the appropriate agency's conservation and management permit."* (PMNM MMP Vol. 1, 2008, page 224).

In addition, such activities are addressed in the Monument Management Plan Environmental Assessment. This EA mentions that while emergency response and natural resource damage actions could have an immediate negative impact, Monument BMPS could help minimize such impact. The EA also goes on to say that appropriate response is anticipated to have long term beneficial effects to response and listed species in particular. (PMNM MMP Vol 2, p.179).

#### Consulted Parties:

The permit application and ***associated salvage plan*** was sent out for review and comment to the following scientific and cultural entities: Hawai'i Division of Aquatic Resources, Hawai'i Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

#### Exemption Determination:

After reviewing HAR § 11-200-8, including the criteria used to determine significance under HAR § 11-200-12, DLNR has concluded that the activities under this permit would have minimal or no significant effect on the environment and that issuance of the permit is categorically exempt from the requirement to prepare an environmental assessment based on the following analysis:

1. All activities associated with this permit, including deployment of an underwater camera, have been evaluated as a single action. As a preliminary matter, multiple or phased actions, such as when a group of actions are part of a larger undertaking, or when an individual project is precedent to or represents a commitment to a larger project, must be grouped together and evaluated as a single action. HAR § 11-200-7. This permit does not involve an activity that is precedent to a later planned activity.

2. The Exemption Class for Scientific Research with no Serious or Major Environmental Disturbance Appears to Apply. Chapter 343, HRS, and § 11-200-8, HAR, provide for a list of classes of actions exempt from environmental assessment requirements. HAR § 11-200-8.A.5. exempts the class of actions which involve “basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource.” This activity falls within Exemption Class #1, Exempt Item #3 which allows “Removal of boulders, rocks, hazardous trees, marine debris, and other similar hazards necessary to maintain state lands and waters in a safe condition.” which is listed on the DEPARTMENT OF LAND & NATURAL RESOURCES, EXEMPTION LIST (June 5, 2015).

As discussed below, no significant disturbance to any environmental resource is anticipated in the salvage operation. Thus, so long as the below considerations are met, an exemption class should include the action now contemplated.

3. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Potentially Particularly Sensitive Environment Will Not be Significant. Even where a categorical exemption appears to include a proposed action, the action cannot be declared exempt if “the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment.” HAR § 11-200-8.B. To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. HAR § 11-200-12. Examples of actions which commonly have a significant effect on the environment are listed under HAR § 11-200-12.

Previous salvage operations have occurred to date in the PMNM and have had no deleterious effects on Monument resources. The outcome of the salvage action actually diminishes completely any future risks posed by the debris to Monument resources. With this in mind, significant cumulative impacts are not anticipated as a result of this activity, and numerous safeguards further ensure that the potentially sensitive environment of the project area will not be

significantly affected. All activities will be conducted in a manner compatible with the detailed salvage plan, management direction of the Monument Proclamation in that the activities do not diminish monument resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects. The review process did not reveal any anticipated indirect or cumulative impacts, nor did it raise any cultural concerns, that would occur as a result of these activities.

The proposed project would be supported by either the Kahana, or a separate vessel. There will be no other concurrent activities that would pose a further impact to the resources. The culmination of all issues/active PMNM permits, and their disparate activities, occurring throughout the Monument, is not anticipated to have significant cumulative impacts.

Since no significant cumulative impacts or significant impacts with respect to any particularly sensitive aspect of the project area are anticipated, the categorical exemptions identified above should remain applicable.

4. Overall Impacts will Probably be Minimal and Insignificant Any foreseeable impacts from the proposed activity will probably be immediate, at the time of the salvage and minimal, and further mitigated by general and specific conditions attached to the permit. Specifically, all activities covered by this permit will be carried out with strict safeguards for the natural, historic, and cultural resources of the Monument as required by Presidential Proclamation 8031, other applicable law and agency policies and standard operating procedures.

Conclusion. Upon consideration of the permit to be approved by the Board of Land and Natural Resources, the potential effects of the above listed project as provided by Chapter 343, HRS and Chapter 11-200 HAR, have been determined to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.