State of Hawaii DEPARTMENT OF LAND AND NATURAL RESOURCES Division of Boating and Ocean Recreation Honolulu, Hawaii 96819

February 28, 2020

Chairperson and Members Board of Land and Natural Resources State of Hawaii Honolulu, Hawaii

Land Board Members:

SUBJECT: APPROVE INSTALLATION OF FIVE (5) DAY USE MOORING BUOYS

OUTSIDE OF AN ESTABLISHED OFFSHORE MOORING AREA, HILO, ISLAND OF HAWAII, HAWAII, FOR DLNR – DIVISION OF BOATING

AND OCEAN RECREATION

AND

DECLARE FIVE (5) DAY USE MOORINGS BUOYS EXEMPT FROM REQUIREMENTS OF CHAPTER 343, HAWAII REVISED STATUES, AND TITLE 11, CHAPTER 200.1, HAWAII ADMINISTRATIVE RULES

REQUEST:

The Division of Boating and Ocean Recreation ("DOBOR") is requesting that the Board of Land and Natural Resources ("Board") approve the installation of five (5) day use mooring buoys (DMBs) in Hilo on the Island of Hawaii: Four (4) within Hilo Bay and one (1) offshore of Richardson's Ocean Park, all of which are not within established offshore mooring areas as defined in HAR 13-235. As required by HAR 13-235-9, any applicant requesting to install moorings outside of an established offshore mooring area must obtain approval from the Board.

DOBOR is also requesting that the Board declare the installation of the DMBs exempt from the requirements of Chapter 343, Hawaii Revised Statutes (HRS), and Title 11, Chapter 200.1, Hawaii Administrative Rules, to prepare an Environmental Assessment ("EA"), due to the use of submerged State lands and funds.

There are over 200 DMBs installed around the State of Hawaii. DOBOR ("Applicant"), will install an additional five (5) DMBs in Hilo on the Island of Hawaii where ocean recreation will benefit from the availability of public moorings, particularly around coral reefs where other means of securing a vessel (anchoring) pose a risk to these sensitive benthic habitats. DOBOR is requesting that the Board approve the mooring installations outside of an established offshore mooring, as required by HAR 13-235-9, due to the DMBs not being within an established offshore mooring area as defined in HAR 13-235. The location of the proposed DMBs and mooring system components are shown in the Best Management Practices document in Exhibit A.

BACKGROUND

The purpose for the installation of five DMBs in Hilo is to assist the Department of Transportation with its compliance measures as outlined in the *Final Mitigation Plan for Dredging Phase for Construction of Interisland Cargo Terminal Facility at Hilo Harbor (December 2011)* and the Department of Army permit (POH-2006-0338). As a means of mitigating the project's impacts to nearshore habitat and recreational activities, the DOT will financially support DOBOR to install and maintain moorings around Hawaii Island and provide additional resources to facilitate the division's work within the DMB program.

PERMITS AND COMPLIANCE WITH STATE AND FEDERAL LAW:

In accordance with Federal Law (Section 10 of the Rivers and Harbors act of 1899), DOBOR has secured a permit from the U.S. Army Corps of Engineers ("USACE"). A copy of DOBOR's Final Letter of Permission, DA File No. POH-2019-00099, dated December 13, 2019 is attached with Exhibit A. Please note that the USACE permit also covers the installation of DMBs at manta ray viewing sites in Kona on the Island of Hawaii. DOBOR is in the process of preparing an EA for those sites due to the environmentally sensitive and controversial nature of those sites.

In accordance with Section 401 of the federal Clean Water Act, HRS 91, 92, and 342D, and HAR 11-54, a Water Quality Certification was obtained from the State Department of Health, which is also attached with Exhibit A.

In accordance with HRS 205A, Coastal Zone Management, a federal consistency review was completed by the State Office of Planning, Coastal Zone Management Program, and is also attached with Exhibit A.

In accordance with HAR 13-235-6, the National Marine Fisheries Service (NMFS) and DLNR, Division of Aquatic Resources (DAR) must determine whether an offshore mooring is detrimental to the habitat or spawning ground of marine life. Through the USACE permitting process, NMFS has been consulted and determined the DMBs have no detrimental effect to the habitat or spawning ground of marine life. DAR has also been consulted and concurred that the DMBs have no detrimental effect to the habitat or spawning ground of marine life.

ENVIRONMENTAL ASSESSMENT EXEMPTION:

In accordance with Hawaii Administrative Rule (HAR) Section 11-200.1-15(c) and the Exemption List for the Department of Land and Natural Resources (DLNR), approved by the Environmental Council, on June 5, 2015, it has been determined that the installation of the existing moorings is exempt from the preparation of an EA pursuant to the following exemptions:

<u>Item No. 13 of Exemption Class 6</u>: "Placement or construction of accessory structures such as utility sheds, storage or maintenance sheds, office trailers, trash enclosures, comfort stations or sanitation facilities and related individual wastewater disposal systems, bus shelters, pavilions or picnic shelters, parking and fee collection facilities, checking stations, interpretive kiosks and displays, dock boxes, mooring cleats, bumpers, and mooring buoys, blocks, and piles, and other similar structures accessory to existing facilities on state land and waters."

The State of Hawaii, Office of Planning, Coastal Zone Management Program and State of Hawaii, DLNR, Office of Conservation and Coastal Lands have been consulted for this EA Exemption and have no objections.

RECOMMENDATION:

Declare that, after considering the potential effects of the installation of five (5) Day Use Mooring Buoys in Hilo as provided by Chapter 343, HRS, and Chapter 11-200.1, HAR, this project will probably have minimal or no significant effect on the environment and is therefore exempt from the preparation of an environmental assessment and approve the installation of the Day Use Mooring Buoys within Hilo Bay and offshore of Richardson Ocean Park, Hilo, Island of Hawaii, located outside of established offshore mooring areas.

Respectfully Submitted,

EDWARD R. UNDERWOOD, Administrator Division of Boating & Ocean Recreation

APPROVED FOR SUBMITTAL:

SUZANNE D. CASE, Chairperson
Board of Land and Natural Resources

Attachment:

A. Best Management Practices Plan, U.S. Army Corps of Engineers Letter of Permission, Section 401 Water Quality Certification, Coastal Zone Management Federal Consistency Review

EXEMPTION NOTIFICATION

Regarding the preparation of an environmental assessment pursuant to Chapter 343, HRS and Chapter 11-200.1, HAR

| Chapter 11-200.1, HAR | | |
|--|--|--|
| Project Title: | Installation of Day Use Mooring Buoys for Hawaii Island, Hilo | |
| | Bay, Hilo, Hawaii | |
| Project / Reference No.: | N/A | |
| Project Location: | Hilo, Island of Hawaii | |
| Project Description: | Installation of five (5) Day Use Mooring Buoys within Hilo Bay | |
| Chap. 343 Trigger(s): | Use of State (submerged) lands | |
| Exemption Class No(s).: | Class No. 6, Item 13: "Placement or construction of accessory structures such as utility sheds, storage or maintenance sheds, office trailers, trash enclosures, comfort stations or sanitation facilities and related individual wastewater disposal systems, bus shelters, pavilions or picnic shelters, parking and fee collection facilities, checking stations, interpretive kiosks and displays, dock boxes, mooring cleats, bumpers, and mooring buoys, blocks, and piles, and other similar structures accessory to existing facilities on state land and waters." | |
| Cumulative Impact of | No. There are no planned successive actions to be undertaken at | |
| Planned Successive | the same location. | |
| Actions in Same Place | | |
| Significant? | | |
| Action May have Significant Impact on Particularly Sensitive Environment? | No. The environment in the vicinity of each mooring buoy is not environmentally sensitive. The buoy anchor pins will be installed in hard substrate in areas to avoid impacts to corals and other marine habitat. | |
| Analysis: | The materials installed for the moorings are chemically inert and do not pose a threat to essential marine habitat or endangered species and do not pose any hazard or obstruction to existing uses of the ocean in the area. | |
| Consulted Parties: | State Office of Planning, Coastal Zone Management State DLNR, Office of Conservation and Coastal Lands | |
| Declaration | The Board finds that this project will probably have minimal or no significant effect on the environment and declares that this project is exempt from the preparation of an environmental assessment. | |

EXHIBIT A

Day Mooring Installations Best Management Practices Hilo Bay 2019

Prepared for:



State of Hawaii Department of Land and Natural Resources Division of Boating and Ocean Recreation (DOBOR)

4 Sand Island Access Road Honolulu, HI 96819

Prepared by:

Hawaii Coral Reef Initiative Social Science Research Institute 2424 Maile Way #718 Honolulu, HI 96822 April 2019 MN File: xxx

Table of Contents

| 1.0 General Requirements | 2 |
|--|----|
| 2.0 Site Characterization | 3 |
| 3.0 Construction Sequence and Duration | 3 |
| 4.0 Construction Methods | 3 |
| 4.1 Demolition/Marine Debris Recovery and Disposal | 3 |
| 4.1.1 Recycled Materials | 4 |
| 4.1.2 Disposed Materials | 4 |
| 4.3 Epoxy Construction | 4 |
| 4.4 In Water Construction of Manta Anchors | 4 |
| 5.0 Characteristics of the Discharge | 4 |
| 5.1 Temporary | 4 |
| 5.2 Permanent | 4 |
| 6.0 Proposed Control Measures and/or Treatment | 5 |
| 6.1 General Site Best Management Practices | 5 |
| 6.1.1 Miscellaneous | 5 |
| 6.1.2 Materials Storage | 5 |
| 6.2 In-Water and Above-Water Work | 5 |
| 6.2.1 Turbidity Curtain Placement | 5 |
| 6.2.2 Turbidity Curtain Maintenance | 5 |
| 6.3 Spill Prevention | 5 |
| 6.4 Protected Species | 6 |
| 6.5 Protection of the Marine Environment | 7 |
| 6.6 Protection of Upland Resources | 8 |
| 6.7 Protected Species BMPs | 8 |
| APPENDICES | 10 |
| Appendix A: Site Maps | Ai |
| Appendix B: Mooring Buoy Systems | Bi |
| Appendix C: BMP Inspection & Maintenance Form | C1 |
| Appendix D: AMAP DOH Water Quality Certification | D1 |

1.0 General Requirements

This Best Management Practices (BMP) Plan is provided in preparation for the proposed Day-Use Mooring Installations project. This Plan summarizes the minimum BMPs that shall be implemented over the course of the project to avoid and minimize impacts to the marine environment, including impacts to threatened or endangered species. These BMPs are based on recommended practices by the U.S. Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA).

The contractor shall comply with this BMP Plan and the specific requirements of all federal, state, municipal, and any other necessary permits put in place for the work. All workers associated with this project, irrespective of their employment arrangement or affiliation (e.g., employee, sub-contractor, etc.) shall be fully briefed on the BMPs and the requirement to adhere to the BMPs for the duration of their involvement in this project. BMPs shall be covered in the weekly toolbox safety meetings. The Project Superintendent shall be responsible to ensure compliance with the BMP plan. The Project Superintendent shall appoint and train a minimum of two (2) alternate individuals to comply with all aspects of the BMP plan. The Project Superintendent or trained alternate shall ensure that the employees and subcontractors are trained in the use of BMP materials.

The Project Superintendent or trained alternate shall conduct a visual inspection of all BMPs daily. The contractor shall fill in the Best Management Practice Plan (BMP) Inspection and Maintenance Form daily and to submit it to the DOBOR Engineer by 12:00 noon on the next working day (See Appendix C). The inspection and maintenance report form will be used by DOBOR to ensure that the required BMPs are practiced and functioning properly. This form will be submitted to DOH — Clean Water Branch in a timely manner.

The DOBOR Engineer will be responsible to fulfill all conditions of the Department of Army Permit and Section 401 Water Quality Certification.

All minor repairs and maintenance of the BMPs shall be completed within 24 hours of the inspection. Major repairs shall be completed as soon as practical but should be no later that 48 hours after the inspection. Any work that requires the BMPs will be immediately stopped and shall not resume until the BMP has been repaired. Inspections of all BMPs shall be made within 24 hours of any rainfall of 0.25 inch or greater and after periods of prolonged rainfall. Likewise, the in-water BMPs shall be inspected after severe ocean conditions to ensure that they are functioning properly.

The Applicable Monitoring and Assessment Plan (AMAP; Appendix D) for Clean Water Act – section 401 Water Quality Certification for the day-use mooring (DMB) installations have been prepared to accompany this BMP plan. It describes the water quality sampling and analysis plan that will produce representative data to monitor potential project impacts. The construction monitoring data will be transmitted by email to the Clean Water Branch with 24 hours or close of the next business day.

The contractor shall notify the DOBOR Engineer immediately of any changes to the BMPs, a BMP that is not functioning properly, and if a plume outside of the decision unit is generated by their construction activity. The activity that is causing the plume shall be stopped immediately and shall not resume until the problem is addressed to the satisfaction of the DOBOR Engineer.

2.0 Site Characterization

The work will be conducted within five locations along the Hilo coast of Hawaii and at Hilo Harbor, each located on Hawaii Island. Hilo Harbor is located in Kuhio Bay, Waiakea, of South Hilo and is accessible from Kuhio Street. Four of the five installation locations are within the harbor, and the fifth site is off of Richardson's Ocean Park off of Kalanianaole Ave. and Uwau St. three miles east of Hilo Harbor. The Hilo Harbor site is adjacent to Pier 3 and to the east of State residential lots with industrial uses to the south. Richardson's Ocean Park is adjacent to Hale Kahakai Association and residential properties. The park is managed by the County of Hawai'i' and includes a seawall running along a rocky shoreline.

The Hilo Harbor site lies within the Hilo Harbor breakwater and is characterized by a steep mud slope with little benthic rugosity and a vertical ledge about 700 ft long that supports some marine life. The Richardson site sits 180 meters directly offshore from Richardson's recreation area. The mooring site at 56 feet depth is a steep bouldered slope that runs parallel to the coastline. The high-energy boulder habitat serves as substrate for some coral. This area can get significant swell in the winter months but serves as a very popular scuba diving site because of its lively marine life and usually favorable conditions.

3.0 Construction Sequence and Duration

The following is based on a likely sequence of general construction activities for the project. The construction could vary based on the contractor's operations and means and methods. Steps may occur concurrently or in a different order:

- 1. Place applicable construction BMPs prior to commencement of associated construction activities. BMPs, once placed, shall remain in place for the duration of the activities
- Construct new site civil works. (2 weeks concurrent with water activities)
 - a. Excavate 2 holes per mooring site.
 - b. Secure pin in place using cement or epoxy.
 - c. Let the installation sit for 24 hours.
- Demolish existing moorings.
 - a. Disassemble buoy, line, and ground tackle assemblies.
 - b. Pull existing pins.
- Assemble new moorings.
 - a. Buoy and line can be assembled topside.
 - b. Install ground tackle including pin shackles and chain.
 - c. Attach buoy/line assembly to ground tackle.
- 2. Remove temporary construction BMPs.

It is anticipated that the in-water work will require a total of 2 weeks to complete. The use of a turbidity curtain or vacuum will need only be deployed under the advisement of on-site DAR field agents. Topside activities are anticipated to occur concurrently with the in-water work. Construction for the moorings is anticipated to begin in July 2019 and end in August 2019.

4.0 Construction Methods

4.1 Demolition/Marine Debris Recovery and Disposal

In-water demolition and removal work will be conducted with hydraulic-operated equipment mounted on support vessels.

4.1.1 Recycled Materials

Debris and demolition waste from the shall be recycled to the maximum extent possible at Atlas Recycling, Big Island Scrap Metal, or other commercial metal recycling facility.

4.1.2 Disposed Materials

Acceptable waste material shall be disposed at the South Hilo Sanitary Landfill, West Hawai'i Sanitary Landfill, or other approved local waste management facility. Material that is not acceptable at a local facility shall be shipped and disposed at an approved, mainland waste management facility.

4.3 Epoxy Construction

The cast-in-place epoxy elements are constructed by excavating the substrate, placing the pins, and then pumping the mixed epoxy into the excavation site by hand-held plunger style pump. Epoxy should be injected deep enough to prevent fresh epoxy from entering the water.

4.4 In Water Construction of Manta Anchors

In water construction of manta anchors will be driven under the sea bed using hydraulic and manual hammers. The anchor will be set using a hydraulic pull. This should not produce much disturbance. As above, the use of a turbidity curtain will be optional based on the recommendation of a DAR field agent.

5.0 Characteristics of the Discharge

Materials to be placed in State waters: temporary and permanent placement.

5.1 Temporary

The Contractor shall work from a motorized support vessel. This vessel will also be used to install and maintain any turbidity curtains and to transport personnel to the work site.

A turbidity curtain may be installed based on the advice of a DAR representative. Should a curtain be deemed necessary, it will remain installed for the duration of the in-water work. It will be secured using small steel anchors.

5.2 Permanent

The following permanent discharges are associated with the intended construction activities

Contractor will place manta anchors in the sandy bottoms of the sites. Manta anchors consist of a central galvanized steel shaft and 2 galvanized locking plates.

The Contractor will place pins in hard substrates. The pins are ¾ galvanized rods.

The pins or manta anchors will connect to a series of stainless steel chain, shackles, thimbles, nylon line, and foam filled mooring buoys.

6.0 Proposed Control Measures and/or Treatment

6.1 General Site Best Management Practices

6.1.1 Miscellaneous

Construction debris and trash are to be disposed of at an appropriate facility.

6.1.2 Materials Storage

Materials shall be properly stored in a container, on dunnage, or as required by the manufacturer to avoid contact with storm water in order to control spills.

6.2 In-Water and Above-Water Work

6.2.1 Turbidity Curtain Placement

A weighted turbidity curtain shall be used when deemed necessary by DAR staff to enclose the work area to control turbidity during the performance of in-water work such as bottom drilling and epoxying pins. Harbor waters within and outside the turbidity curtain shall be monitored (visually) and sampling shall be performed in accordance with the Applicable Monitoring and Assessment Plan. In addition to water sampling, the contractor will be required to inspect the BMPs and submit a daily inspection report of their findings to the Engineer, as exhibited in Appendix C. If construction results in turbidity outside the turbidity curtain, immediate corrective action shall be taken to repair or adjust the curtain. The activity suspected to generate the turbidity shall be stopped immediately and the Engineer notified.

6.2.2 Turbidity Curtain Maintenance

The contractor shall inspect the turbidity curtains at the start of the day's construction to assess their condition and shall monitor the effectiveness of the turbidity curtains throughout the construction period. If a failure of the turbidity curtain to contain turbidity within the enclosed area is identified, in-water work that may result in turbidity will not continue until the problem has been resolved. The contractor shall maintain at least 200 feet of additional turbidity curtain on-site in case emergency containment of turbidity outside of an installed turbidity curtain or eventual replacement of an installed turbidity curtain (once the turbidity has subsided) is needed. If turbidity curtain replacement is required, in-water construction that may result in turbidity will not continue until successful installation, repair, or replacement of the turbidity curtain is achieved. Maintenance of turbidity curtains shall be in accordance with the turbidity curtain manufacturer's recommendations.

6.3 Spill Prevention

Precautions shall be taken to prevent spills of oil and other hazardous substances from entering the water. All waste and hazardous materials shall be properly managed, stored and handled, and secondary containment shall be provided as applicable. Fueling, lubricating, and maintenance of equipment, motor vehicles, and vessels shall be conducted in such a manner to prevent spills, and these shall not be conducted over water unless secondary containment is provided. Bulk fuel storage containers shall be provided with a secondary containment system. A spill kit will be kept on site.

Oil Spill Contingency Plan: In the event of a spill, the following actions shall be taken:

1. STOP FUELING/OILING IMMEDIATELY!

- 2. Reduce the amount of the spill by shutting down the equipment, shutting off the valve, shutting off the pump or up righting the container, etc. Place a pan or bucket under the leak to catch as much of the spill as possible.
- 3. Confine fuel to containment areas as much as possible. If on a crane barge, then confine the fuel to the deck and out of the water.
- 4. Should an overboard spill occur on the crane barge, use sorbent pads and deploy 200-foot long (minimum) oil containment boom to minimize the limits of thespill.
- 5. Immediately notify the contractor's company Spill Response Safety Officer by radio or telephone. He/ She shall take over coordination of operations and further notifications. Whether assistance is required or not, all supervisors and personnel shall follow these notifications steps.
- 6. If the spill is too large to handle with on-site resources, then the Emergency Spill Clean-up Contractor, a subcontractor of the prime contractor, shall be notified and mobilized.
- 7. Notify the Department of Transportation, Harbors DivisionEngineer immediately.
- 8. The Emergency Spill Clean-up Contractor shall take over containment, clean-up and disposal of the spill and any contaminated material in accordance with their established procedures. The contractor shall provide whatever aid the Emergency Spill Clean-up Contractor requires

6.4 Protected Species

Project personnel shall be briefed on the recognition of protected species such as: green sea turtles, hawksbill sea turtles, humpback whales, and Hawaiian monk seals.

Active areas of operation shall incorporate the following site-specific avoidance and minimization measures:

- 1. Surveys for marine life shall be made prior to the start of work each day, and periodically during the day, including prior to resumption of work following any break of more than one half hour.
- All in-water work shall be postponed or halted when ESA-listed marine species are within designated standoff distances of the proposed work, and may only begin/resume after the animals have voluntarily departed the area. If ESA-listed marine species are noticed after work has already begun, that work must stop and may only begin / resume after the animals have voluntarily departed the area beyond the designated standoff distances. The designated standoff distances shall be established through coordination with appropriate federal agencies.
- 3. When piloting vessels, vessel operators shall alter course to remain at least 100 yards from whales, and at least 50 yards from other marine mammals and sea turtles.
- 4. Reduce vessel speed to 10 knots or less when piloting vessels in the proximity of marine mammals and turtles. If practicable, reduce vessel speed to 5 knots or less when piloting vessels in areas of known or suspected turtle activity.
- 5. If approached by a marine mammal or turtle, put the engine in neutral and allow the animal to pass.
- 6. Marine mammals and sea turtles should not be encircled or trapped between multiple vessels or between vessels and the shore.
- 7. Do not attempt to feed, touch, ride, or otherwise intentionally interact with any ESA-listed marine species.

- 8. All on-site project personnel must be apprised of the status of any listed species potentially present in the project area and the protections afforded to those species under Federal laws. Information explaining laws and regulations for listed species in Hawaii may be downloaded at http://www.nmfs.noaa.gov/pr/education/hawaii. The contractor's designated point-of-contact (POC) shall ensure that protocols and observers to avoid the potential for contact or harassment with ESA- listed species of record are followed during all periods of in-water work.
- Records of observations of ESA-listed species observed in the project area for the duration of in- water activities shall be documented in daily construction inspection and maintenance reports.
- 10. Any incidental take of marine mammals must be reported immediately to NOAA Fisheries' 24-hour hotline at 1-888-256-9840. Any injuries to sea turtles must be reported immediately to NOAA Fisheries at 1-808-725-5730, Monday Friday, 7 a.m. 4 p.m., and 286-4377 on weekends, holidays and after-hours. Information reported must include the name and phone number of a point of contact, location of the incident, and nature of the take and / or injury.

6.5 Protection of the Marine Environment

Specific measures shall be employed to prevent contamination of the marine environment from project-related activities.

- 1. The contractor is prohibited from storing hazardous materials on-site.
- 2 Appropriate materials to contain and clean potential oil/fuel spills shall be stored at the work site and be readily available.
- 3. The contractor's superintendent and heavy equipment operators shall perform daily prework 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. Fueling of land-based vehicles and equipment shall take place at least 50 feet away from harbor waters over an impervious surface with drip pans.
- 4. No project-related materials (fill, sediment stockpile, rock, etc.) shall be stockpiled within 50 feet of harbor waters. Material staging and storage area(s) shall be designated within project's facility footprint and equipped with sediment control BMPs to prevent loss of material due to erosion or leaks.
- 5. Any materials or equipment to be used to carry out the authorized work must be cleaned of pollutants before use on-site. The contractor is required to use stone that is free of organic matter, clay, silt, dirt, or any deleterious material as stated in the contract specifications.
- 6. No land-based heavy equipment shall be operated directly in State waters. Work adjacent to State waters must occur above the mean higher high water level.
- 7. Revetment construction activities (excavation and rock placement) landward of the existing shoreline shall occur during relatively calm wave conditions.
- 8. Turbidity and siltation from project-related work shall be minimized and contained through the appropriate use of erosion control practices and the curtailment of work

- during adverse weather and tidal/flow conditions. Erosion control practices shall include a silt fence around all disturbed areas landward of the existing shoreline. A double sediment control silt fence shall be maintained along the waterfront edge of the project site.
- 9. The contractor shall conduct daily visual observations to ensure that all BMPs and erosion control measures shown on the BMP plans are in place and functioning properly. If an activity-related turbidity plume is observed outside of the turbidity curtain during periods of in-water construction, the contractor shall stop that activity and take immediate corrective action by repairing the turbidity curtain. Activity shall resume only after the problem is corrected.
- 10. Water quality monitoring shall be performed in accordance with the 401 Water Quality Certification issued for the project by the Department of Health (see Appendix D).
- 11. All debris removed from the marine/aquatic environment shall be disposed of at an approved upland waste management site.

6.6 Protection of Upland Resources

Additional measures shall be employed to prevent contamination of upland areas using appropriate "good housekeeping" BMPs for site management and storm water management BMPs for erosion and sediment control.

- 1. The construction entrance and roadways shall be stabilized to prevent tracking of materials to/from the project site.
- 2. Specific and contained areas shall be designated for vehicle and equipment cleaning and fueling to prevent discharges of polluted wash water, fuel spills or leaks.
- 3. The discharge of pollutants from material delivery and storage areas to the storm water system or marine environment shall be prevented by minimizing the storage of hazardous materials on-site, storing materials in watertight containers and/or a completely enclosing designated areas, installing secondary containment, conducting regular inspections, and training employees and subcontractors.
- 4. Stockpiles shall be located away from the marine environment and any storm water facility. Stockpiles shall be equipped with erosion prevention BMPs such as plastic coverings to protect against wind or rainfall and containment BMPs such as berms, silt fences, or dikes to protect stockpiled material from run-on or runoff discharges.
- 5. Existing vegetation shall be preserved to the extent possible to avoid any unnecessary disturbance to native materials.
- 6. During earthwork activities, sediment control BMPs such as silt fences, fiber rolls/wattles, and sandbags shall be used to prevent discharge of sediment-laden water.
- 7. At the completion of work, hydraulic mulch or hydroseed shall be applied to unpaved areas to encourage re-establishment of vegetation.

6.7 Protected Species BMPs

(Taken from National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Pacific Island Regional Office, Protected Resources Division)

The National Marine Fisheries Service, Pacific Islands Regional Office recommends that the following measures, as appropriate and germane to specific projects, be incorporated into projects to minimize impacts on protected resources. These supplement, but do not supersede the BMPs above.

- 1. Turbidity and siltation from project-related work should be minimized and contained to within the vicinity of the site through the appropriate use of effective silt containment devices and curtailment of work during adverse tidal and weather conditions.
- 2 Any construction-related debris that may pose an entanglement hazard to marine protected species must be removed from the project site if not actively being used and / or at the conclusion of the construction work.
- 3. All project-related materials and equipment placed in the water should be free of pollutants.
- 4. No project-related materials (fill, revetment rock, pipe, etc.) should be stockpiled in the water (intertidal zones, reef flats, stream channels, etc.).
- 5. No contamination (trash or debris disposal, alien species introductions, etc.) of marine environments (reef flats, lagoons, open ocean, etc.) adjacent to the project site should result from project-related activities.
- 6. Fueling of project-related vehicles and equipment should take place away from the water. A contingency plan to control the accidental spills of petroleum products at the construction site should be developed. Absorbent pads, containment booms, and skimmers will be stored on-site to facilitate the cleanup of petroleum spills.
- 7. Return flow or run-off from material stored at inland dewatering or storage sites must be prevented.

APPENDICES

Appendix A: Site Maps

Figure 1: Location of five planned mooring installations for Hilo Harbor

Appendix B: Mooring Buoy Systems

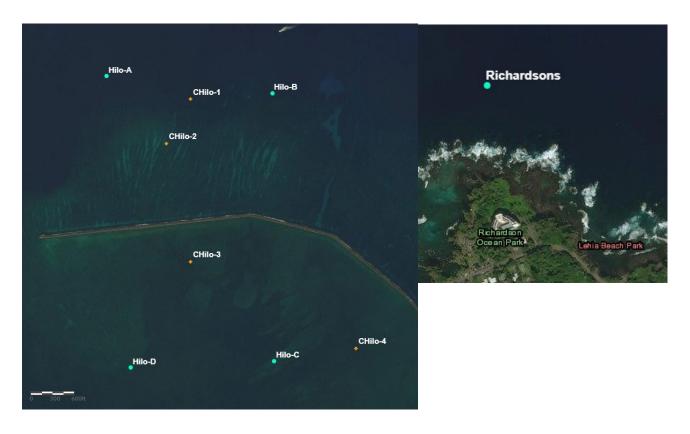
Figure 2: Hawaiian Eye Mooring

Figure 3: Manta Mooring

Appendix C: BMP Inspection & Maintenance Form Appendix D: AMAP DOH Water Quality Certification

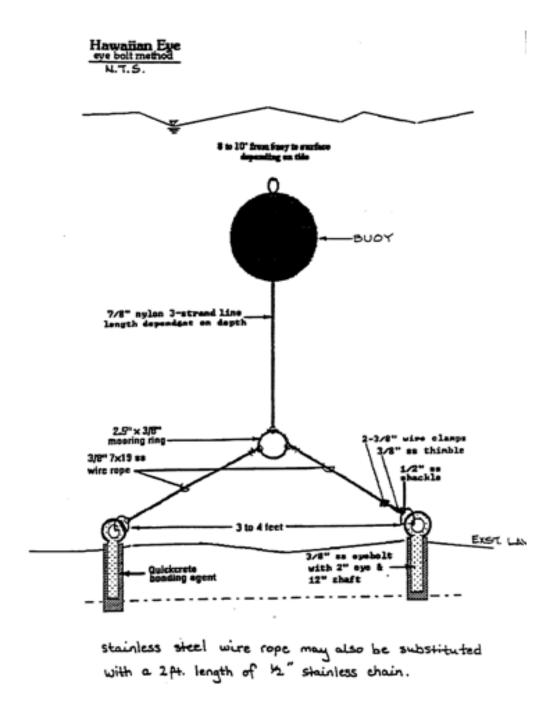


Figure 1: Location of five planned mooring installations for Hilo Bay (above) and zoomed images of the mooring arrangements (below)



HAWAII DAY-USE MOORING BUOY SYSTEM INSTALLATION PROCEDURES AND MAINTENACE GUIDE¹

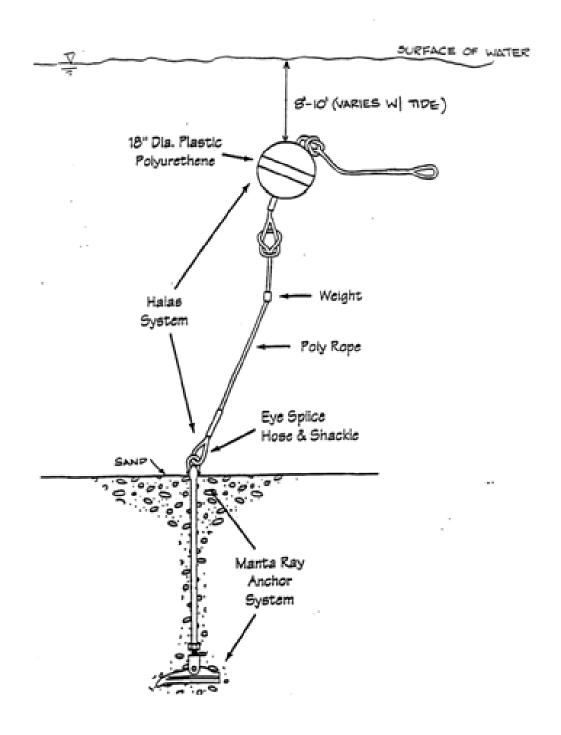
FIGURE 6. HAWAIIAN EYE ("PIN") MOORING SYSTEM



¹ This appendix is adapted from, Hawaii Day-Use Mooring Buoy System Background, Site Selection Criteria, Installation, and Maintenance Procedures Manual, Malama Kai Foundation February, 2009; and Mooring Buoy Planning Guide, International PADI, Inc., March 2005.

HAWAII DAY-USE MOORING BUOY SYSTEM INSTALLATION PROCEDURES AND MAINTENACE GUIDE²

FIGURE 7. MANTA RAY MOORING SYSTEM



² This appendix is adapted from, Hawaii Day-Use Mooring Buoy System Background, Site Selection Criteria, Installation, and Maintenance Procedures Manual, Malama Kai Foundation February, 2009; and Mooring Buoy Planning Guide, International PADI, Inc., March 2005.

Best Management Practice (BMP) Plan Inspection and Maintenance Report Form

| Report No | Weather: | | Tide: | Date: | |
|-------------|-------------------------------|------------------|---------------------|--------------------|------------------|
| Type of Rep | ort: Daily Within 24 I | nours of a rainf | all event of 0.5 | inches or more | |
| N-WATER TUF | RBIDITY CONTROL MEASUR | ES (Provide Da | ite Stamped Pho | otograph): | YES NO N/A |
| Are t | curbidity curtains functionin | g properly? | | | |
| Are t | he bin(s) on the support pla | atform, landing | craft or barge v | vater tight? | |
| Are t | he control measures on the | e platform, land | ding craft or bar | ge adequate to pre | event |
| Wate | er/sediment from being disc | charged into th | e ocean? | | |
| CORI | RECTIVE MEASURES REQUI | RED: | | | |
| PERF | ORMED BY: | | | | |
| PROTECTIO | N AROUND CRITICAL AREA | S (Provide Date | e Stamped Phot | ograph): | YES NO N/A |
| Are b | perm or dike properly instal | led/maintained | 1? | | |
| Are r | un-on/run-off controls inst | alled to preven | t discharge to s | urrounding areas a | nd harbor? 🔲 🔲 🔲 |
| CORI | RECTIVE MEASURES REQUI | RED: | | | |
| PERF | ORMED BY: | | | | |
| HOUSEKEEP | ING: | | | | YES NO N/A |
| Are a | areas kept clean of rubbish, | construction d | ebris, spills, etc. | ? | |
| CORI | RECTIVE MEASURES REQUI | RED: | | | |
| PERF | ORMED BY: | | | | |

| | NT: Y | ES | NO | N/A |
|---|--|-------------------------------|-------------------------|--|
| Are material stored under sh | helter or covered and above ground? | 1 | П | П |
| Are flammable/reactive mat | terials stored properly? | 1 | | |
| Are material containers in go | ood condition (not rusted, damaged or leaking)? |] | | |
| Are all construction debris co | ollected and placed daily in covered dumpster? |] | | |
| CORRECTIVE MEASURES RE | QUIRED: | | | |
| PERFORMED BY: | | | | |
| VEHICLE AND EQUIPMENT MAN | IAGEMENT: | | | |
| | | ES | NO | N/A |
| Are vehicles and equipment | cleaned before brought on-site? |] | | |
| Are equipment fueled away | from any drain or edge of harbor? $\hfill \Box$ |] | | |
| Are spill cleanup material re | radily accessible? |] | | |
| Are all equipment leak free of | or if leaking, a spill pan placed to catch the leaks? |] | | |
| CORRECTIVE MEASURES RE | QUIRED: | | | |
| PERFORMED BY: | | | | |
| PROTECTED OR ENDANGERED SPI | ECIES MANAGEMENT: | ES | NO | N/A |
| Did the on-site observer observe | e any protected and/or endangered species (i.e. green sea turtle, ha | wks | sbill | sea turtle, |
| | | ٦. | | |
| Hawaiian monk seal, etc.) prior t | to start of work? Time? : | J | Ш | |
| | ecies present, were photographs taken to assist with identification of | | ப ne pr | otected and |
| | | | ⊔ ne pr □ | otected and |
| If protected and endangered spe | ecies present, were photographs taken to assist with identification o | | ⊔ ne pr | otected and |
| If protected and endangered speed endangered species? | ecies present, were photographs taken to assist with identification of Photo IDs: | f th | | |
| If protected and endangered species? CORRECTIVE MEASURES REQUIPERFORMED BY | ecies present, were photographs taken to assist with identification of Photo IDs: | f th | | |
| If protected and endangered species? CORRECTIVE MEASURES REQUIPMENT OF THE PERFORMED BY Photographs shall be date stam I certify under penalty of law supervision in accordance will evaluate the information submit hose persons directly responsion knowledge and belief, true, | ecies present, were photographs taken to assist with identification of Photo IDs: Photo IDs: | r m per ge to | ny di | irection or rather and system, or best of my nalties for |
| If protected and endangered species? CORRECTIVE MEASURES REQUIPMENT PERFORMED BY Photographs shall be date stam I certify under penalty of law supervision in accordance will evaluate the information submithose persons directly responsion knowledge and belief, true, submitting false information, in | Photo IDs: Date: ped and attached to the applicable Report Form. that this document and all attachments were prepared unde ith a system designed to assure that qualified personnel promitted. Based on my inquiry of the person or persons who manasible for gathering the information, the information submitted is, accurate, and complete. I am aware that there are signific | r m per ge to ant | ny dirly g the the ons. | irection or rather and system, or best of my nalties for |

APPLICABLE MONITORING AND ASSESSMENT PLAN FOR CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION

Installation of Day Use Mooring Buoys on Hawaii Island Hilo Harbor, Island of Hawaii, Hawaii

APRIL 2019

Table of Contents

| 1.0 Introduction | 3 |
|---|----|
| 2.0 Project Description | 3 |
| 3.0 Methodology | 4 |
| 3.1 Monitoring Parameters | 4 |
| 3.1.1 Monitoring Parameters | 4 |
| 3.1.2 Data Storage | 4 |
| 3.1.3 Photo Documentation | 4 |
| 3.1.4 In-Situ Measurements | 4 |
| 3.2 Personnel | 4 |
| 3.3 Field Log | 5 |
| 3.4 Sampling Locations | 5 |
| 3.5 Sampling Frequency | 5 |
| 3.5.1 Pre-construction Sampling | 5 |
| 3.5.2 During-construction Sampling | 5 |
| 3.5.3 Post-construction Sampling | 5 |
| 3.6 Sampling and Documentation Protocols | |
| 3.7 Reporting | 6 |
| 4.0 Data Quality Objectives | 7 |
| 4.1 State the Problem | 7 |
| 4.2 Identify the Goals of the Study | 7 |
| 4.3 Identify the Information Inputs | 7 |
| 4.4 Define the Boundaries of the Study | 8 |
| 4.5 Develop the Analytical Approach | 8 |
| 4.6 Specify Performance/Acceptance Criteria | 9 |
| 4.7 Develop the Plan for Obtaining Data | 9 |
| 4.7.1 Chain of Custody Procedures | 9 |
| 4.7.2 Field Analysis Quality Control | 10 |
| Reports/Assessment | 10 |
| 5.0 Quality Assurance | 11 |
| Draw conclusions from the data | 11 |
| 6 O Poforoncos | 11 |

1.0 Introduction

This Applicable Monitoring and Assessment Plan (AMAP) details implementation of a monitoring and assessment program before, during, and after project construction to both ensure that implemented Best Management Practices (BMPs) are effective, and to facilitate response if indications of a release are discovered through monitoring. Monitoring includes visual observation and photo documentation of the project site including BMPs and surrounding areas. Assessment includes both qualitative and quantitative measures. Decision criteria for exceeding water quality criteria are specified in Section 4.5.

This AMAP accompanies the Section 401 Water Quality Certification (WQC) application for the proposed Installation of Day Use Mooring Buoys on Hawaii Island ("the project"). This plan has been prepared in accordance with water quality regulations promulgated in Hawaii Administrative Rules (HAR) Chapter 11-54 (HDOH 2014) and guidance from the General Monitoring Guideline for Section 401 WQC projects (HDOH 2000). This AMAP relies upon systematic planning using the data quality objectives process (EPA 2006).

2.0 Project Description

There are five project sites (below), four within Hilo Harbor on the windward side of Hawaii Island and one within Hilo Bay offshore of Richardson's Ocean Park, 3 miles to the east of the other four sites. The sites are in state of Hawaii waters and would fall under management by the Department of Land and Natural Resources (DLNR) Division of Boating and Ocean Recreation (DOBOR). DLNR-DOBOR is proposing to install five moorings at Hilo Bay, each of which would require drilling two holes in the ocean substrate that measure 1.5" x 18", or 318.10 cubic inches. The activities are expected to occur over 30 days.

Site-specific BMP, attached separately, may recommend the use of a full-depth turbidity curtain for inwater work under specific site conditions.



3.0 Methodology

This section reviews the water quality parameters to be sampled, analyzed and monitored, sampling locations, and finally, the specific sampling protocols that will be performed on a routine basis over the project duration.

3.1 Monitoring Parameters

WQC monitoring and analysis parameters are detailed in the General Monitoring Guideline for Section 401 Water Quality Certification projects (HDOH CWB 2000). Based on the proposed construction schedule, pre-construction sampling will consist of the following:

3.1.1 Monitoring Parameters

Monitoring, sampling, and analysis will be performed for the following parameters and by the following methods at every pin installation.

- Photo documentation
- Visual observation
- pH
- Turbidity
- Dissolved Oxygen
- Salinity
- Temperature

3.1.2 Data Storage

All digital data will be stored on both a computer and external storage hard disk, and will be backed up on a daily basis. All field logs will be photocopied on a weekly basis and copies stored with the water quality monitoring firm assigned to the project.

3.1.3 Photo Documentation

Photographs of the sampling locations, turbidity curtains, and work site prior to each sampling event will be tagged with the date and time of the photograph, and a log kept of all photographs with a description of any particular observations made at the time. This complete set will be made available in the daily and final reports along with a photo-orientation map displaying the locations of photographs taken.

3.1.4 In-Situ Measurements

Two field instruments will be used to measure the water quality parameters at the project site. A nephelometer will be used to measure turbidity from sampled aliquots. The YSI, model 556 MOPS or similar, will be used to measure pH, temperature, conductivity (i.e., salinity) and dissolved oxygen.

3.2 Personnel

The contractor awarded the dredging contract will determine the personnel assigned to perform the various functions of the water quality monitoring for this project. Pre-approved water quality monitoring firms include: AECOS, Inc., Bow Engineering & Development, Inc., and Myounghee Noh & Associates, L.L.C., all of whom have previously provided AMAP water quality monitoring services for DLNR-DOBOR and are approved to do so by DOH-CWB.

3.3 Field Log

The selected water quality monitoring firm will store a single field log that will contain pertinent information noted at each sampling event including, but not limited to, date and time, weather (i.e., ambient temperature, approximate wind speed and direction, precipitation, etc.), condition of turbidity curtain, construction activities, if any, and other events such as vessel passage, data, time, and value of each parameter measured and log of each water sample taken.

3.4 Sampling Locations

Sampling will be performed using an iso-kinetic sampler. Sampling for each decision unit will be performed from surface to bottom within 1 meter directly outside of the BMP.

Impact Decision Units 1 and 2 will follow a one-meter wide path along the exterior of Hilo Bay extending out beyond the breakwall to encompass installation locations Hilo-A, B, C, and D, and offshore from Richardson's Ocean Park to encompass installation location Hilo-E (Richardson's).

Control Decision Units 1 and 2 will cover a one-meter wide, 10-meter in length area centered 50 feet Northeast of the BMPs.

3.5 Sampling Frequency

3.5.1 Pre-construction Sampling

Prior to construction, a minimum of ten sampling events will be performed over at least a two-week period preceding commencement of construction activities. All decision units will be sampled during this period. Sampling will not be performed during storm events.

3.5.2 During-construction Sampling

All decision units will be sampled three times per week during drilling activities for the period of construction activities

3.5.3 Post-construction Sampling

Post-construction samples are taken after the BMPs are removed to verify there is no net increase in pollutants as a result of the project. Post construction sampling will be first performed in order to determine that the control area water quality is not distinguishable quantitatively from the water outside of the turbidity barrier after BMPs are removed. Post-construction sampling will include three sampling events after one week post-construction at impact and control DUs.

3.6 Sampling and Documentation Protocols

Multi-increment 3sampling will be performed using an iso-kinetic sampler (e.g., a US DH-81 sampler). Sampling for each decision unit will be performed of the entire water column from surface to bottom.

This section describes the procedures that will be followed during all sampling events. These protocols assume that the water sampled will not be hazardous and will not require personal protective equipment. If two personnel are used, "clean hands, dirty hands" protocol will be implemented. If one person is

^{3 1}Multi-increment is a registered trademark of EnviroStat, Inc.

performing the sampling they will rinse and dry hands before and between sampling events. Sampling will be in a manner compliant with SM 1060B (Standards and Methods, 2011) and will be conducted according to the following requirements and constraints:

Equipment Calibration will be performed at the beginning of each week at a minimum.

Log book entry data will include date and time, weather, status of construction activities, and other pertinent observations made including, but not limited to, qualitative observations of water quality, and condition of turbidity barrier. A sample field data log sheet is shown in Appendix B. Logging of field activities will be consistent with the manner described in SM 1060 (Standards and Methods, 2011).

Photo documentation will consist of digital, date/time-tagged photographs of the construction site and turbidity curtains. It is important that these be regular, with the same perspectives viewed each day, in addition to photographs taken of other pertinent situations. A photo-orientation map will be provided in each daily report.

Multi-Increment samples will be taken for each decision unit (DU) in the following order: (1) Impact DU; (2) Work DU; (3) Control DU. This order will be applied to each of the 2 decision units and reversed 5 times during the pre-construction period in order to assess systematic errors as a result of the time between sampling events.

- Chain-of-custody protocols will be observed (Appendix A).
- Instruments will be calibrated weekly, and secondary checks will be conducted prior to and after each day's sampling.
- Samples will be taken when work operations are in progress.
- Raw data and photos shall be submitted to CWB by the end of the next business day (see section 3.7).

Thus all monitoring parameters will be measured immediately after sampling. Cooler and refrigerator temperature will be monitored using field equipment or a different calibrated thermometer. Analytical methods will conform to those specified in HAR Section 11-54-10 and SM 1060B.

3.7 Reporting

Reports summarizing 1) previous data and 2) new data including all analytical data, logs, and photo documentation will be submitted to DOH on a bi-weekly basis.

The bi-weekly reports may be submitted via email with the approval of the Clean Water Branch to cleanwaterbranch@doh.hawaii.gov.

4.0 Data Quality Objectives

In this section we utilize the EPA's iterative Guidance on Systematic Planning Using the Data Quality Objectives Process (EPA 2006) as a tool to establish performance and acceptance criteria to ensure that the data collected serve the purpose of the study. The Data Quality Objective (DQO) process has the following seven steps followed in the remainder of this section:

- State the Problem
- Identify the Goal of the Study
- Identify Information Inputs
- Define the Boundaries of the Study
- Develop the Analytic Approach
- Specify Performance or Acceptance
 Criteria
- Develop the Plan for Obtaining Data

_

4.1 State the Problem

The proposed project will involve the excavation of 300 cubic inches of powdered basalt over the course of 2 weeks of construction. Removal of material will be achieved by mechanical grinding with a hydraulic drill. Therefore, the project has the potential to release small particles into Class A waters of Hilo Bay. Although the release of fine sediments is not anticipated, they can be toxic to aquatic organisms and contribute to turbidity that can modify aquatic habitats by essentially compacting the photic zone near the surface.

The problem is to recognize changes in water quality due to the project, to distinguish changes in water quality from events, both natural and artificial, that are external to the project activities, and to monitor for water quality changes that may indicate failure of the primary project Best Management Practice (BMP), the turbidity curtain and silt pump.

4.2 Identify the Goals of the Study

The goals of the Applicable Monitoring and Assessment Plan (AMAP) is to conduct water sampling and analysis that will monitor the effects of the project on water quality, both within and without the turbidity curtain. More specifically, the goals are to (1) ensure that BMPs are functioning properly (2) to detect if BMPs are failing so that mitigation can be accomplished (3) demonstrate that water quality is not impaired before removal of BMPs (i.e., the turbidity curtain) and (4) establish thresholds.

4.3 Identify the Information Inputs

Information inputs are of two forms: 1. Visual observation and photo documentation; and 2. Analytical data. The first represent more qualitative data forms and the latter represent more quantitative data forms.

Pre-construction monitoring will be used to assess baseline conditions and the degree of natural and artificial variability in the monitoring parameters.

During-construction monitoring will be used to determine if the BMPs are properly functioning and if thresholds are not exceeded.

Post-construction monitoring will be conducted three times over the week after construction has been completed.

Pre-construction monitoring data will be submitted to HDOH CWB within two weeks of completion of all analyses and before the commencement of project work. During construction field monitoring data will be sent to HDOH-CWB by fax or email within 24 hours or by the next business day. TSS samples will be submitted for analysis on a weekly basis, but if on-site data exceed the thresholds established in Section 4.5, the TSS samples will be delivered for analysis the same day and results reported on rapid laboratory turnaround.

Within two weeks of completing all analyses, the selected water quality monitoring firm will submit a report of results to the HDOH-CWB via fax or email. These reports will have a running statistical summary for each phase of the project and will include field notes.

The selected water quality monitoring firm will prepare a final monitoring and assessment report that will be submitted to HDOH-CWB within 60 days of completion of post-construction monitoring and analysis. The final monitoring report will include a summary of all water quality monitoring results (preconstruction, during construction, and post-construction) for the project. The final report will state if there was an increase in pollutants as a result of the project.

4.4 Define the Boundaries of the Study

The temporal boundaries of the study are 30 calendar days in total, to commence sometime after receipt of all required regulatory permits. Pre-construction monitoring will take place over a period of two weeks that much be completed two weeks prior to start of construction. Post-construction monitoring will take place for one subsequent week. Thus, as construction activities are expected to occupy 30 calendar days, this AMAP applies to this period plus 5 weeks, or 65 calendar days in all.

The construction activities are limited to two areas, both less than 700 feet in their longest dimension, the sampling locations (decision unites) are in this general physical area. The use of turbidity curtains is pending review by Division of Aquatic Resources staff. Work Decision Units 1&2 represent conditions inside the work area and any BMPs in place. Impact Decision Units 1&2 represent conditions directly outside of the work area and installed BMPs. Control Decision Units 1&2 are expected to be representative of a randomly collected sample taken throughout each decision unit collected using a Multi-increment sampling approach. Work Decision Units 1&2 span the length of the work area from the surface to the bottom. Impact Decision Units 1&2 span the exterior length of the work areas, from the surface to the bottom. Control Decision Units 1&2 are centered 50 feet southeast and southwest, respectively, of the corner of the work area covering a one-meter wide path, 110 meters in length, from the surface to the bottom.

Pre-construction sampling includes ten sampling events over a minimum two-week period to be completed two weeks prior to start of construction. Sampling during construction will be performed three times per week and post-construction will be performed over one week with one sampling event per week. Pre and post construction sampling will be performed during daytime work hours. Construction period sampling will be performed when work is being performed, which will be limited to daytime work hours.

4.5 Develop the Analytical Approach

Threshold for pH is considered exceeded if results at the Impact Decision Units:

Fall outside of the range of 7.0 to 8.6.

- Deviate more than 0.5 units from the control units, or
- Deviate more than 0.5 units from the pre-construction range.

Additionally, if a turbidity plume is observed being discharged from the construction area, it will be sampled as a separate decision unit.

If any of these thresholds are exceeded then a determination must be made whether the cause is attributable to construction. If field personnel observe a problem that may be related to the results, they will notify the crew boss or designated point-of-contact. Field personnel and foreman will attempt to ascertain the cause of the exceeded threshold. Data collected from the control station and observations from the field personnel will be used in the investigation to aid in determining whether construction is impacting water quality. If it is determined that construction is causing the problem, then the construction will cease until the problem is corrected or BMPs are adjusted to contain the plume. HDOH-CWB will be notified by the next business day.

4.6 Specify Performance/Acceptance Criteria

The impact decision unit will be sampled in triplicate. The percent relative standard deviation (%RSD) will be calculated for the triplicate samples. If 20% RSD is exceeded the sampling protocol will be reevaluated to determine the cause of the deviation.

All field meters will be calibrated prior to use and calibration procedures will be recorded in the field book or a special notebook used only for recording meter calibrations and maintenance procedures.

Secondary checks will be performed prior to and after each day's sampling activities. If secondary checks fail then calibration will be performed. If calibration is successful re-sampling will be performed and water quality parameters compared to the pre-calibration values. If there is no change the two sets of parameters will be recorded as valid data. If calibration is unsuccessful the data for that day's field activities will be considered invalid and backup instruments will be procured from a certified laboratory, such as GeoTek Hawaii, via overnight delivery, or rented from an on-island environmental consultant, and sampling will be performed again as soon as possible.

4.7 Develop the Plan for Obtaining Data

The sampling locations and sampling frequency were developed in accordance with water quality regulations promulgated in Hawaii Administrative Rules (HAR) Chapter 11-54 (HDOH 2014) and the General Monitoring Guideline for Section 401 Water Quality Certification Projects (HDOH 2000). Modifications to optimize the sampling design may be necessary if variance in triplicate samples is excessive. Representative samples will be collected in each decisions unit by randomly moving a multi-increment sampler throughout each decision unit.

4.7.1 Chain of Custody Procedures

Once water samples have been obtained and site conditions and field measurements have been properly documented in the field notebook, a written record of the chain of custody of the samples must be made for the laboratory analyses. A chain-of-custody (COC) form (see Appendix A) serves the purpose of accompanying the samples to the laboratory and directing laboratory analysts on the analyses to be performed. The form also identifies the samples, so the laboratory can report the analytical results by sample ID. When transferring possession of samples, the sampler should sign and record the date and time on the COC record. Each person who subsequently takes custody will complete the appropriate

section of the COC record. The COC will be filed with the laboratory data and become a part of the permanent record.

4.7.2 Field Analysis Quality Control

All instrument calibration procedures will be undertaken prior to field measurements and documented in the field notes. The pH meter and turbidity meter will be maintained and calibrated according to manufacturer instructions (YSI 2009, Hach 2008 or approved equal) and standard operating procedures.

Personnel who have been properly trained will calibrate and operate equipment and instruments. Documentation of calibration and any maintenance information will be maintained in appropriate field or logbooks including data on calibration failures. All calibrations will be made prior to analyzing the samples. Measurements of pH and temperature will be made immediately following collections of samples. Turbidity values will be measured with the turbidimeter. Measurement must be made with the instrument on a level, still surface with the sampled aliquot at ambient temperature. Measurements will be made in triplicate for each sample and the arithmetic mean reported. All measurements will be logged with date and time on the standard field log. Prior to and after turbidity analysis in each monitoring event, the nephelometer will be checked with turbidity calibration standards and noted in the project field notes to verify the meter is operating within the range of designed specifications as per the manufacturer or the SOP. The time of collection and time of measurement shall be recorded.

Any item of field equipment that has shown by calibration or otherwise to be defective is to be taken out of service until it has been repaired. The equipment is placed back in service only after verifying by calibration that the equipment performs satisfactorily. If at any time calibration and maintenance is beyond the capability of the trained personnel, the selected water quality monitoring firm will be notified. An attempt will be made to solve the problem. If the equipment or instrument still cannot be repaired, the equipment will be taken out of service and sent for repair and replacement equipment will be obtained at the laboratory.

Reports/Assessment

The results and field notes for daily monitoring will be faxed (808-586-4352) or emailed (cleanwaterbranch@doh.hawaii.gov) to HDOH-CWB. A final report for submittal to HDOH-CWB will be prepared within two weeks of completion of analysis. In addition to analytical results, the report will include time and date of sampling, name of the person who collected the samples, date each analysis was conducted, and identification of the laboratory and analyst(s) that conducted the work. The reports will contain a running statistical summary for each phase of the project AMAP.

A final report and water quality assessment will be prepared upon completion of the monitoring plan. This report will be submitted to HDOH within 60 days following completion of post- construction monitoring and analysis. The final report will identify the methods and procedures for analytical measurements and include all data collected as well as statistical summaries of results by station and activity phase (preconstruction, during construction, and post-construction). This report will also assess whether water quality was affected by the construction activity. Upon completion of the monitoring plan, the contract laboratory will retain the original data and field notebook for a minimum of five years.

5.0 Quality Assurance

AMAP Quality Assurance will be achieved through implementation of the Data Quality Assessment (DQA) process as described in EPA (2000) which establishes the following steps:

- 1. Review the project's objectives and sampling design
- Conduct a preliminary data review
- 3. Select the statistical method
- 4. Verify the assumptions of the statistical method

Draw conclusions from the data

The DQA will be done after completion of the project, the conclusions of which will be included in the final report.

6.0 References

Environmental Protection Agency (EPA). 2006. U.S. EPA Guidance on Data Quality Objectives. EPA QA/G-4.

GK Environmental LLC. 2015. Standard Operating Procedures for Field Activities: Surface Water Sampling.

Hach Co. 2008. Portable Turbidimeter Model 2100P, Instrument and Procedure Manual. Downloaded October 6, 2015 from

file://server/users/Graham/Desktop/2100P%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Turbidimeter%20Instrument%20&%20Portable%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20Instrument%20&%20Portable%20

Hawaii Department of Health (HDOH). 2014. Hawaii Administrative Rules, Title 11, Department of Health, Chapter 54, Water Quality Standards. State of Hawaii Department of Health.

Hawaii Department of Health (HDOH). 2000. General Monitoring Guidelines for Section 401 WQC Certification Projects.

YSI Environmental. 2009. YSI 556 MPS Multi Probe System Operations Manual. Downloaded October 6, 2015 from https://www.ysi.com/File%20Library/Documents/Manuals/655279-YSI-556-Operations-Manual-RevD.pdf.

DAVID Y. IGE



BRUCE S. ANDERSON, Ph.D.

In reply, please refer to: EMD/CWB

WQC1012.FNL.19

January 10, 2019

The Honorable Suzanne Case Chairperson Department of Land and Natural Resources 1151 Punchbowl Street Room 220 Honolulu, Hawaii 96813

Dear Ms. Case:

Subject: Section 401 Water Quality Certification (WQC) for

Installation of Day Use Mooring Buoys for Hawaii Island

Island of Hawaii, Hawaii

File No. WQC1012/DA File No. POH-2016-00235

In accordance with the provision of the Clean Water Act, as amended (33 U.S.C. 1251 et seq.; the "CWA"); Hawaii Revised Statutes (HRS), Chapters 91, 92, and 342D; Part 121 of Title 40, Code of Federal Regulations (CFR); and Hawaii Administrative Rules (HAR), Chapter 11-54; the Department of Health (DOH), Clean Water Branch (CWB) issues this Section 401 WQC for your project based on your Section 401 WQC application (hereinafter referred to as the "Application"), dated November 5, 2018 (received on January 8, 2019). The activities associated with the subject project, including preconstruction, construction, and post construction monitoring (hereinafter referred to as the "Activities") will be authorized under the U.S. Department of the Army, Pacific Ocean Division, Honolulu District Office permit, File No. POH-2016-00235.

1. The DOH has examined the Application with respect to water quality considerations and asserts that when all requirements and conditions contained in this Section 401 WQC are fully complied with, there is reasonable assurance that the water pollutant discharges resulting from the Activities will be conducted in a manner which will not violate the applicable State water quality standards (WQS) and will comply with the applicable provisions of the CWA, Sections 301, 302, 303, 306, and 307.

- 2. This Section 401 WQC becomes effective on **January 10, 2019** and shall expire on midnight **January 9, 2021**. The DOH may, upon written request from the Applicant who is either the Owner or its Duly Authorized Representative, administratively extend the expiration date of this Section 401 WQC. The decision by the DOH to allow an administrative extension will be made on a case-by-case basis taking into account compliance history and impact to receiving State water quality.
- 3. This Section 401 WQC may be revoked when:
 - a. The DOH determines that any portion of the Activities are violating existing State WQS or any condition in this Section 401 WQC and the Applicant fails to cease the violation within seven (7) calendar days of notice by DOH letter.
 - b. New State WQS are subsequently established before the Activities are completed, the DOH determines that any portion of the Activities are violating the new State WQS, and the Applicant fails to cease the violation within 180 calendar days of notice by DOH letter.

These actions shall not preclude the DOH from taking appropriate enforcement action authorized by law.

- 4. The following conditions must be complied with by the Applicant's organization and its contractor(s) when conducting the Activity:
 - a. Invite the DOH-CWB to attend the partnering, pre-construction, or any other similar type of meeting that is established for the proposed project and its Activities, if any.
 - b. Unless otherwise specified, all Section 401 WQC compliance requirements must be submitted via the DOH e-Permitting Portal Section 401 WQC Compliance Form. The DOH e-Permitting Portal is located at: https://eha-cloud.doh.hawaii.gov/epermit/.
 - c. Provide the notifications below via the DOH e-Permitting Portal Section 401 WQC Compliance Form:
 - i. The Applicant shall notify DOH at least seven (7) calendar days before the start of the Activities.
 - ii. The Applicant shall notify DOH within 14 calendar days after the completion of the Activities, including the disturbed in-water area restoration activities.

- d. Comply with all requirements, specifications, schedules, procedures, drawings, and other information contained in the Application.
- e. Maintain a copy of the Application and this Section 401 WQC at the project site or in the nearby field office.
- f. Maintain records at the project site or in the nearby field office demonstrating that all Section 401 WQC requirements have been fully complied with.
- g. Ensure that all Activities are conducted in a manner that will comply with the "Basic Water Quality Criteria Applicable to All Waters" as specified in HAR, §11-54-4.
- h. Ensure that all material(s) placed or to be placed in State waters are free of waste metal products, organic materials, debris, and any pollutants at toxic or potentially hazardous concentrations to aquatic life as specified in HAR, §11-54-4(c).
- i. Ensure that the Activities will not interfere or become injurious to any designated uses and/or existing uses of the receiving State water.
- j. Properly implement and maintain all water pollution control measures and Best Management Practices (BMPs) specified in the Application. All water pollution control measures must be in place and functional before any Activities begin and shall not be removed until the Activities are completed and the disturbed area water quality has returned to its pre-construction condition or better. All temporary water pollution control measures and temporary structures shall be removed following the completion of the Activities and upon verification that the affected quality of the water column has been returned/restored to the pre-project condition.
- k. Conduct the Applicable Monitoring and Assessment Plan (AMAP) in your Application.
 - i. The DOH may, at its own discretion, require the Applicant to modify the AMAP, including modifying the monitoring frequencies, adding parameters to be monitored, and adding sampling locations.
 - ii. Any request for reduction in monitoring frequencies shall be submitted via the DOH e-Permitting Portal Section 401 WQC Compliance Form. The request shall include an assessment of monitoring results which clearly demonstrate that the Activities are in compliance with applicable State WQS.

- iii. Color photographs shall be taken daily before, during, and after the completion of the Activities. Copies of the color photographs shall contain the date and time the photos were taken and a written narrative description of what is being depicted in the photograph. A photograph orientation map shall also be submitted. Photographs taken before the commencement of the Activities shall be submitted to the DOH-CWB via the DOH e-Permitting Portal Section 401 WQC Compliance Form prior to the commencement of the Activities. Photographs taken during the Activities shall be submitted with the field sampling report (see below). Photographs taken after the completion of the Activities shall be submitted to the DOH-CWB within two (2) weeks after the completion of the Activities.
- iv. Photographs taken during the field sample collection shall be submitted to the DOH-CWB by e-mail at:

 <u>cleanwaterbranch@doh.hawaii.gov</u> in Excel and/or PDF formats before the closing of the next business day the sample was taken.

The e-mail shall contain the project name, Section 401 WQC file number, and date of field measurement in the subject line, and the following certification statement below, and the name of the individual making the certification.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

I. Immediately report to the DOH-CWB by e-mail at:

<u>cleanwaterbranch@doh.hawaii.gov</u> and at telephone number (808) 586-4309
any spill(s) or other contamination(s) that occurs at the project site at any
time following the commencement of the Activities.

- m. Ensure that construction debris is contained and prevented from entering or reentering State waters. All construction debris shall be properly removed from the aquatic environment and disposed of at an upland State and County approved site. Before the start of the Activities, a Solid Waste Disclosure Form for Construction Sites shall be completed and returned to the DOH's Solid and Hazardous Waste Branch, Office of Solid Waste Management. No construction material or construction-related materials shall be stockpiled in the aquatic environment or stored or placed in ways that will disturb the aquatic environment. The Solid Waste Disclosure Form for Construction Sites is available online at: http://health.hawaii.gov/shwb/files/2013/06/swdiscformnov2008.pdf.
- n. Properly collect and remove all side cast material and dispose at an upland State and County approved site.
- o. If water quality monitoring or daily inspection or observation result(s) indicates non-compliance with this Section 401 WQC will occur or is occurring, Applicant shall immediately cease that portion of the Activities causing the non-compliance. The project activity shall not resume until adequate mitigative measures are implemented and appropriate corrective actions are taken. These actions shall not preclude the DOH from taking enforcement action authorized by law. The DOH shall not be responsible for any damages or costs incurred due to the temporary cessation of any of the Activities.
- p. Review and update the effectiveness and adequacy of pollution control measures and BMPs in the Application. Applicant shall modify the pollution control measures, BMPs, and AMAP when instructed by the DOH.
- q. Any changes or modifications to the pollution control measures, BMPs, and AMAP in the Application shall be submitted to the DOH-CWB for approval. Applicant shall address all comments and concerns to the DOH-CWB satisfaction before the changes or modifications become effective.
- r. There shall be no discharge of any type of wash water and/or effluent into State waters without first obtaining from the DOH a National Pollutant Discharge Eliminations System (NPDES) permit authorizing such type of water pollutant discharge to State waters.

- s. Runoff, return flow, or airborne particulate pollutants, if any, from the excavated/dredged material dewatering process or from stockpiling shall be contained on land and not be allowed to enter State waters. In the event of potential discharge of these pollutants, the Applicant shall first obtain from the DOH a NPDES permit authorizing such discharge.
- t. Discontinue the Activities during flood conditions.
- u. Ensure that all areas impacted, either directly or indirectly, by the Activities are fully restored.
- v. Avoid locating moorings (including anchors and floats) in sensitive aquatic habitats such as coral reefs, fish spawning areas, and submerged aquatic vegetation (unless location is acceptable to the Department of Land and Natural Resources, Division of Aquatic Resources or the National Oceanic Atmospheric Administration).
- w. Ensure moorings (including anchors and floats) are made of clean, inert material. Treated lumber shall not be used as it may contain compounds that can be released into the water and become toxic to the aquatic environment.
- x. Pre-cast and cure concrete anchors, if required, away from State waters prior to use to prevent seepage of potentially toxic substances into the waterbody.
- y. Locate moorings in depths that allow structures and vessels to remain afloat at the lowest possible water levels and that prevent propellers from disturbing bottom sediments.
- z. Select mooring anchors of an adequate size to secure vessels or structures and prevent the anchor from shifting or dragging along the bottom of the state water.
- aa. Size the length of mooring lines, chains, or cables to avoid excess line, chain, or cable accumulation on the bed of the State water.
- bb. Ensure native beach material such as logs, sand, gravel, and boulders that are important components of fish habitat are not used as mooring structures and are left in place on the foreshore.
- cc. Properly dispose of derelict or unused floats, lines, chains, or cables in accordance with appropriate laws and rules.

dd. Ensure moorings are kept in good repair by regularly inspecting and maintaining the structure. Mooring maintenance must be performed into perpetuity (or until it is properly disposed of) or it will itself become a pollution source.

If you have any questions, please contact Mr. Darryl Lum of the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

JOANNA SETO, P.E., ACTING CHIEF Environmental Management Division

DCL:na

c: Regulatory Office, POH, COE

[via e-mail cepoh-ro@usace.army.mil only]

Mr. John Nakagawa, CZM Program, Office of Planning, DBEDT

[via e-mail john.d.nakagawa@hawaii.gov only]

Mr. Finn McCall, DLNR-DOBOR

[via e-mail finn.d.mccall@hawaii.gov]

(w/Receipt No. 62080 for \$1000 Filing Fee)

Mr. Stephen Schmelz, DLNR-DOBOR

[via e-mail stephen.c.schmelz@hawaii.gov only]

CWB, Hawaii District Health Office [via e-mail only]



OFFICE OF PLANNING STATE OF HAWAII

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813

Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

DAVID Y. IGE GOVERNOR

MARY ALICE EVANS

DIRECTOR OFFICE OF PLANNING

Telephone: Fax:

(808) 587-2846 (808) 587-2824

Web: http://planning.hawaii.gov/

DTS201910180815NA

December 4, 2019

To:

Edward Underwood, Administrator

Division of Boating and Ocean Recreation Department of Land and Natural Resources

Attn:

Finn McCall

Division of Boating and Ocean Recreation

From:

Mary Alice Evans, Director Wory Alice Evans

Subject: Hawaii Coastal Zone Management Program Federal Consistency Review for the

Installation of Day Use Mooring Buoys at Kaukalaelae Point, Makako Bay, and Hilo Bay, Hawaii Island; Department of the Army Permit File No. POH-2019-00099

The Hawaii Coastal Zone Management (CZM) Program has completed the federal consistency review for the installation of day use mooring buoys at Kaukalaelae Point, Makako Bay, and Hilo Bay, Hawaii Island, which is subject to federal permit authorization under Department of the Army Permit File No. POH-2019-00099 (proposed activity).

We conditionally concur with the certification that the proposed activity is consistent with the enforceable policies of the Hawaii CZM Program based on the following conditions.

- 1. The proposed activity shall be completed as represented in the CZM federal consistency application, including the consistency certification and supporting materials, that was completed on October 22, 2019. Any changes to the proposed activity shall be submitted to the Hawaii CZM Program for review and approval. Changes to the proposed activity may require a full CZM federal consistency review, including publication of a public notice and provision for public review and comment. This condition is necessary to ensure that the proposed activity is implemented as reviewed for consistency with the enforceable policies of the Hawaii CZM Program. Hawaii Revised Statutes (HRS) Chapter 205A Coastal Zone Management, is the federally approved enforceable policy of the Hawaii CZM Program that applies to this condition.
- 2. To mitigate potential adverse effects from the proposed activity, the "Day Mooring Installations Best Management Practices" (2018) shall be fully implemented. This condition is necessary to ensure consistency with HRS Chapter 205A Coastal Zone Management, which is the federally approved enforceable policy that applies to this condition.

Mr. Edward Underwood December 4, 2019 Page 2

3. The proposed activity shall be in compliance with State of Hawaii water quality standards and requirements specified in Hawaii Administrative Rules (HAR) Chapter 11-54 Water Quality Standards, including the Section 401 Water Quality Certification (WQC1012) issued by the Department of Health, Clean Water Branch on January 10, 2019. This condition is necessary to ensure consistency with Hawaii CZM Program federally approved enforceable policies HRS Chapter 342D Water Pollution, and HAR Chapter 11-54.

If the requirements for conditional concurrences specified in 15 CFR § 930.4(a), (1) through (3), are not met, then all parties shall treat this conditional concurrence letter as an objection pursuant to 15 CFR Part 930, subpart D. Furthermore, you are hereby notified that, pursuant to 15 CFR § 930.63(e) and 15 CFR Part 930, subpart H, you have the opportunity to appeal an objection resulting from not meeting the requirements of 15 CFR § 930.4(a), (1) through (3), to the Secretary of Commerce within 30 days after receiving this conditional concurrence letter, or 30 days after receiving notice from the U.S. Army Corps of Engineers that your Department of the Army Permit will not be approved as amended by the conditions required by this concurrence.

This CZM consistency conditional concurrence does not represent an endorsement of the project nor does it convey approval with any other regulations administered by any state or county agency. Thank you for your cooperation in complying with the Hawaii CZM Program. If you have any questions, please call John Nakagawa of our CZM Program at 587-2878.

cc: Vera Koskelo, U.S. Army Corps of Engineers (by email)
Darryl Lum, DOH, Clean Water Branch (by email)



US Army Corps of Engineers, Honolulu District

DEPARTMENT OF THE ARMY PERMIT LETTER OF PERMISSION

File Number: POH-2019-00099

Project Title: Day Use Mooring Buoys, Kona, Hilo, HI

Subject: Department of the Army Letter of Permission

PERMITTEE: Edward Underwood (DLNR-DOBOR)

PERMIT NO.: POH-2019-00099

ISSUING OFFICE: U.S. Army Corps of Engineers Honolulu District

Regulatory Office (CEPOH-RO)

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

PROJECT DESCRIPTION: To install 26 day use single point mooring buoys around the Island of Hawaii, including eleven moorings at Kaukalaelae Point in Keahou Bay, ten moorings at Garden Eel Cove in Makako Bay (Garden Eel Cove), and five moorings in Hilo Bay. Two of the proposed ten moorings at Garden Eel Cove are proposed to be anchored in sand substrate with manta ray/earth anchors. The remaining eight proposed moorings at Garden Eel Cove and all proposed moorings at the Kaukalaelae Point and Hilo Bay would be installed on boulders, rubble, or coral reef hard substrate with two-point pin anchors consisting of drilling stainless steel bolts drilled and securing with epoxy. The epoxy anchoring for all pin anchors would not exceed a total of one cubic yard. For each of the two proposed manta anchoring systems, the manta anchoring system would be connected to the buoy with an eye splice hose and shackle, a poly rope, and a mid-line weight. For each of the proposed pin anchoring systems, the two pins would typically be placed approximately three to four feet apart and each connected with a ½-inch shackle, a 3/8-inch thimble and a 23/8-inch wire clamp to 3/8-inch wire rope. The two wire ropes are connected to a 2.5-inch by ³/₈-inch mooring ring, which is connected to the buoy with a ⁷/₈-inch nylon three-strand line. The mooring buoys would be installed over a period of approximately one month. Water depths in the day-use mooring areas range from 15 to 44 feet deep for Kaukalaelae Point, 15 to 75 feet deep for Garden Eel Cove, and 7 to 38 feet deep for Hilo Bay. In both Kaukalaelae Point and Garden Eel Cove, one of the proposed moorings at each site is intended for recreational use, while the remainder of the proposed moorings are intended for commercial use. All five proposed moorings in Hilo Bay are intended for mixed commercial and recreational use based on first availability.

In addition to this letter of permission, the project drawings (Enclosure 2), BMP plan (April 2018) (Enclosure 3) depicting the authorized work, and Department of Aquatic Resources Site Selection Guidelines (Enclosure 4) are also provided as attachments of this permit.

PROJECT LOCATION:

Kaukalaelae Point (Keauhou Bay): 19.559234 N, -155.967445 W; Makako Bay (Garden Eel Cove): 19.736077 N, -156.058710 W;

Kona, Island of Hawaii, Hawaii

and

Hilo Harbor: 19.741533 N, -155.060257 W

Hilo, Island of Hawaii, Hawaii

PERMIT CONDITIONS:

General Conditions:

- The time limit for completing the work authorized ends on December 13, 2024. If you
 find that you need more time to complete the authorized activity, submit your request
 for a time extension to this office for consideration at least one month before the above
 date is reached.
- 2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
- 6. If a conditioned Coastal Zone Management Consistency Determination has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions (Enclosure 4).

7. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

- 1. The permittee understands and agrees that if future operations by the United States require the removal, relocation, or other alteration of the structure or work herein authorized, or if in the opinion of the Secretary of the Army or their authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required upon due notice from the U.S Army Corps of Engineers to remove, relocate, or alter the structural work or obstructions caused thereby without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 2. You must install and maintain, at your expense, any safety lights and signals prescribed by the United States Coast Guard (USCG), through regulations or otherwise, on your authorized facilities. The USCG may be reached at the following address and telephone number: Fourteenth Coast Guard District, Commander (dpw), 300 Ala Moana Boulevard, Room 9-216, Honolulu, Hawaii 96850, ATTN: Kensley Raigeluw. You can contact the USCG via email at kensley.raigeluw@uscg.mil.
- 3. Prior to the commencement of any work authorized by this permit, you shall advise the project manager, Vera Koskelo, in writing at:

U.S. Army Corps of Engineers - Honolulu District Building 230, CEPOH-RO Fort Shafter, HI 96858-5440

or via email at CEPOH-RO@usace.army.mil and Vera.B.Koskelo@usace.army.mil of the date the authorized activity will commence and the name and telephone number of all contractors or other persons performing the work. A copy of this permit and drawings must be provided to the contractor and made available to any regulatory representative during an inspection of the project site.

- 4. Permittee shall submit a signed certification regarding the completed work and any required mitigation. A "Compliance Certification" is provided (Enclosure 5).
- 5. Endangered Species. You must comply with the following conditions to avoid and/or minimize adverse impacts to threatened and endangered species, including designated critical habitat:
 - a) Incidents where any individuals of Green Sea Turtle (*Chelonia mydas*), Hawksbill Turtle (*Eretmochelys imbricata*), Loggerhead Sea Turtle (*Caretta caretta*), Hawaiian Monk Seal, (*Monachus schauinslandi*) listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the U.S. or structures or work in navigable waters of the U.S. authorized by this NWP shall be reported to NOAA Fisheries, Office of Protected Resources at (301) 713-1401 and the Regulatory Branch of the Honolulu District, U.S. Army Corps of Engineers at (808) 835-4303. The finder should leave the animal

alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measurements to ensure that evidence intrinsic to the specimen is preserved.

- 6. Water Quality Certification. You must implement and abide by the conditions of your individual Section 401 Water Quality Certification, unless waived, for this project by the State of Hawaii Department of Health, Clean Water Branch. Expiration of your WQC invalidates this authorization.
- 7. Coastal Zone Management Consistency Determination.
 You must implement and abide by the conditions of your individual Coastal Zone
 Management Consistency Concurrence issued for this project by the State of Hawaii
 Department of Business, Economic Development and Tourism, Office of Planning.
 Expiration of your CZM Consistency Concurrence invalidates this authorization.

Further Information:

| 1. | Congressional Authorities: |
|----|---|
| | You have been authorized to undertake the activity described above pursuant to: |
| | Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). |
| | Section 404 of the Clean Water Act (33 U.S.C. 1344). |
| | ☐ Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 |
| | (33 U.S.C. 1413). |

- 2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
- 3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
 - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.
 - e. Damage claims associated with any future modification, suspension, or revocation of this permit.

- Reliance on Applicant's Data: The determination of this office that issuance of this
 permit is not contrary to the public interest was made in reliance on the information
 you provided.
- 5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permit.
 - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

| KOSKELO.VERA. Digitally signed by SCASELO.VERA.B.1370139110 B.1370139110 Date: 2019.12.13 10-28:59 Vera B. Koskelo | |
|---|------------------|
| Project Manager, Regulatory Office | 13 December 2019 |
| Vera B. Koskelo | (DATE) |
| Project Manager, Regulatory Office | , , |



US Army Corps of Engineers, Honolulu District

DEPARTMENT OF THE ARMY PERMIT PERMIT TRANSFER

| File Number: POH-2019-00099 Project Title: Day Use Mooring Buoys, Konsubject: Department of the Army Perm | |
|---|---|
| PROPERTY TRANSFER: When the structure in existence at the time the property is transfer will continue to be binding on the new owner(s this permit and the associated liabilities associated conditions, have the transferee sign and date to | red, the terms and conditions of this permit) of the property. To validate the transfer of ated with compliance with its terms and |
| PERMIT TRANSFEREE: | |
| | |
| Permittee/Transferee Signature | DATE |
| Permittee Name (Please Print) | - |
| Street Address | _ |
| City, State, and Zip Code | - |
| NEW PROPERTY OWNER: | |

DATE

City, State, and Zip Code

New Permittee/Property Owner Signature

New Permittee/Property Owner Name (Please Print)

Street Address