State of Hawaii DEPARTMENT OF LAND AND NATURAL RESOURCES Division of Aquatic Resources Honolulu, Hawaii 96813

June 8, 2012

Board of Land and Natural Resources Honolulu, Hawaii

Request for Approval of Special Activity Permit 2012-62 for Mr. Daniel Amato of The University of Hawaii at Manoa, Botany Department and Designated Assistants to Take Three Species of Common Marine Algae From Within the Ewa Limu Management Area, Pokai Bay, Pupukea Marine Life Conservation District, and Haleiwa Harbor, Oahu for a Stable Isotope Analysis to Identify Potential Sewage Pollution

The applicant proposes to conduct activities relating to research on sewage pollutants at four restricted take sites on Oahu - Ewa Limu Management Area, Pokai Bay, Pupukea Marine Life Conservation District, and Haleiwa Harbor. These activities include the collection of three samples from each of three common marine algae at four sites. The restricted sites were selected due to their high risk for sewage pollution as identified by a previous study by Whittier and El-Kadi (2009).

The attached Permit includes both general conditions and special conditions to guide and condition the work in accordance with practices established by the Division of Aquatic Resources to protect marine resources.

The Department reviewed the scope and potential impact of the proposed project on the environment and concludes that it will have minimal or no adverse impacts. Consequently, the Department has determined that the proposed activities are exempt from the requirement to prepare an environmental assessment (under Haw. Rev. Stat. §§343-5 and -6, and HAR §11-200-8). An Exemption determination is attached.

RECOMMENDATION:

Based on the Department's exemption determination (attached) and the application and record in this matter, the Board DECLARES, FINDS, and DECIDES:

- 1) That the actions covered by the Permit will have little or no significant adverse effect on the environment.
- 2) Pursuant to the Department's analysis, the Board concurs with the Director and Chairperson's determination that the activities covered by the Permit are exempt actions under HRS §§ 343-5 and -6 and HAR § 11-200-8.

3) That based on the Application, the record in this matter, and the analysis presented, the Board authorizes and approves the proposed Special Activity Permit for the Applicant, subject to the general and special conditions in the Permit and provided the Applicant complies with all other federal, state, and county laws.

Respectfully submitted,

ROBERT NISHIMOTO

Program Manager

APPROVED FOR SUBMITTAL:

WILLIAM J. AILA, JR.

Chairperson

NEIL ABERCROMBIE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF AQUATIC RESOURCES

1151 PUNCHBOWL STREET, ROOM 330 HONOLULU, HAWAII 96813

May 25, 2012

TO:

Division of Aquatic Resources File

THROUGH: William J. Aila, Jr., Chairperson

FROM:

Robert Nishimoto, Environmental Program Manager

Division of Aquatic Resources

SUBJECT: Declaration of Exemption from the Preparation of an Environmental Assessment under the Authority of Chapter 343, HRS, and Chapter 11-200, HAR, for a Special Activity Permit to Mr. Daniel Amato, University Hawaii at Manoa, Department of Botany.

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

Project Title: Special Activity Permit to Mr. Daniel Amato, University Hawaii at Manoa, Department of Botany, for the take of marine algae from within the Ewa Limu Management Area, Pokai Bay, Pupukea Marine Life Conservation District, and Haleiwa Harbor, Oahu.

Permit Number: SAP 2012-062.

Project Description: The permit, as described below, would authorize the take by hand of three species of marine algae (Hypnea musciformis, Acanthophora spicifera, and Ulva lactuca) in waters within the Ewa Limu Management Area (LMA), Pupukea Marine Life Conservation District (MLCD), Pokai Bay, and Haleiwa Harbor, Oahu, from June 8, 2012 through June 7, 2013. The take of marine algae is prohibited from within the boundaries of 1) the LMA under Section 188-22.8, HRS, 2) the MLCD under Chapter 13-34, HAR, 3) Pokai Bay & 4) Haleiwa Harbor, under Section 188-35, HRS.

The primary purpose of this investigation is to determine if onsite sewage disposal systems (OSDS) density can predict δ 15N values in near-shore macroalgae. Previous studies have identified these study sites as coastal areas of high OSDS (red) and critical for this study. Common intertidal macroalgae will be collected at randomized sites per study area during the dry season (May-September). At each site, three algae samples will be collected and water quality parameters (salinity, temperature, pH, dissolved oxygen) will be measured using an Oakton PCD 650 and location will be recorded using GPS. Percent cover of algae will be visually estimated. Increased δN signatures in macroalgae indicate sewage as a source of nitrogen due to denitrifying bacteria, which preferentially acquire ¹⁴N during wastewater treatment.

WILLIAM J. AILA, JR. CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

GUY KAULUKUKUI

WILLIAM M. TAM DEPUTY DIRECTOR - WATER

AOUATIC RESOURCES BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND COASTAL LANDS CONSERVATION AND RESOURCES ENFORCEMENT

ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION

LAND STATE PARKS

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

- 1. <u>All activities associated with this permit have been evaluated as a single action</u>. Since this permit involves an activity that is precedent to a later planned activity, i.e., the removal of marine algae throughout the permit period, the categorical exemption determination here will treat all planned activities as a single action under § 11-200-7, HAR.
- 2. The Exemption Class for Scientific Research with no Serious or Major Environmental Disturbance Appears to Apply. §11-200-8(a)(5), HAR, exempts the class of actions that involve "basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource."

In addition, the activities under consideration are exempt under Exemption Class #5, Exempt Items #4, and #5, respectively, which include "wildlife and game surveys, censuses, inventories, studies..." and "...marine surveys and research activities...." Department of Land and Natural Resources, Exemption List for the Division of Fish and Game, approved January 19, 1976.

The proposed research activities here appear to fall squarely under the exemption class identified under §11-200-8(a)(5), HAR, and as described under the 1976 exemption list class items. As discussed below, no significant disturbance to any environmental resource is anticipated. Thus, so long as the below considerations are met, an exemption class should include the action now contemplated.

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

Significant cumulative impacts are not anticipated as a result of this activity, and numerous safeguards further ensure that the potentially sensitive environment of the project area will not be significantly affected. All activities will be conducted in a manner that does not diminish marine resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects.

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

| SAP | 201 | 2-62 |
|------|-----|------|
| May | 25, | 2012 |
| Page | 3 | |

4. Overall Impacts will Probably have a Minimal or No Significant Effect on the Environment. Any foreseeable impacts from the proposed activity will probably be minimal, and further mitigated by general and specific conditions attached to the permit. Specifically, all research activities covered by this permit will be carried out with strict safeguards for the natural, historic, and cultural resources, other applicable law and agency policies and standard operating procedures.

Conclusion. Upon consideration of the permit to be approved by the Chairperson, being delegated signatory authority on behalf of the Board of Land and Natural Resources at its meeting of June 8, 2012, the potential effects of the above listed project as provided by Chapter 343, HRS, and Chapter 11-200, HAR, have been determined to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.

| William J. Aila, Jr. Chairperson, | Date |
|-------------------------------------|------|
| Board of Land and Natural Resources | |

Department of Land & Natural Resources DIVISION OF AQUATIC RESOURCES 1151 Punchbowl Street, Room 330 Honolulu, Hawaii 96813

Date Issued: June 8, 2012

Valid not longer than June 7, 2013

SPECIAL ACTIVITY PERMIT

The Department of Land and Natural Resources hereby grants permission for certain activities involving aquatic organisms belonging to the people of Hawaii, under Section 187A-6, Hawaii Revised Statutes, and other applicable laws.

The Permittee is

Affiliation: UH-Manoa

Name:

Mr. Daniel Amato

Address: Botany Department

Title:

Principal Investigator

3190 Maile Way, Rm 101

Honolulu, HI 96822

This permit is issued, subject to the general and special conditions, for a study on nutrient sewage levels in nearshore marine algae on Oahu.

| Common | Scientific Name | Number Specimen | Location |
|--------------|--|-------------------|---|
| Name | | | See Special |
| | | | Conditions II.B. |
| Marine Algae | Hypnea musciformis, Acanthophora spicifera, Ulva lactuca | 3 of each species | Ewa Management Area, Pokai Bay, Pupukea MLCD, Waialua Bay (Haleiwa Harbor), Oahu |

I. GENERAL CONDITIONS:

- A. This permit does not make the Department of Land and Natural Resources or the State of Hawaii liable in any way for any claim of personal injury or property damage to the permittee or assistants which may occur during any activity conducted under this permit; moreover, the permittee and all assistants agree to hold the State harmless against any and all claims of personal injury, death or property damage resulting from activities of the permittee or any assistant.
- B. This permit conveys a privilege to engage in only those activities under the jurisdiction of the Department of Land and Natural Resources. The permittee is responsible for complying with all applicable County, State, and Federal requirements. The permit does not convey any privilege of access over or through private property.

- C. The permittee and each assistant are individually responsible and accountable for their actions while conducting activities authorized under this permit; additionally, the permittee is responsible and accountable for the actions of the permittee's assistants.
- D. This permit is not transferable or assignable. Any person whose name does not appear on this permit and is conducting any activity described herein is subject to prosecution for violation of State laws.
- E. The permittee may request changes to the permit. Any such request to make changes to the permit must be made in writing and received by the Department at least thirty days prior to the change. The addition of new assistants will require each individual to sign the Attachment on page 6 stating that they have read, understood, and agree to abide by all general and special permit conditions. No change may be implemented without written approval from the Department.
- F. The permittee may request to:
 - 1. Add assistants to the permit;
 - 2. Add another permittee or replace an existing permittee in the manner stated above; and
 - 3. Change the activities authorized under this permit.
- G. The permittee or their assistant(s) must have with them a copy of this permit while conducting activities authorized by this permit.
- H. This permit authorizes collection of organisms protected by Federal law only with prior appropriate Federal authority, which must be described on Page 1 of this permit (if applicable).
- I. This permit does not authorize the sale of any collected organism.
- J. This permit expires on the date indicated on Page 1. Within <u>one month</u> of the expiration date, the permittee must return this permit to the address listed on the upper left corner of page 1 with complete information on all activities authorized under this permit, on the attached Activity Report form.
- K. The permittee and assistants agree to provide access to data obtained under authority of this permit upon request of the Division of Aquatic Resources, and to provide to the Division a copy of each report, published for distribution, prepared with data obtained under this permit. The permittee agrees to provide the Division of Aquatic Resources access to organisms obtained and held under this permit for on-site inspection.
- L. The permittee agrees to notify the island office of the Division of Conservation and Resources Enforcement at least 24 hours prior to any authorized activity being conducted in the field. Please provide the permittee name, the permit number, the date, time, and location of the planned activity, and contact information.

M. A violation of any terms or condition of this permit or any violation of State law not covered by this permit may result in revocation of the permit and other penalties as provided by law. In addition, the Department may consider any such violation as grounds for denying any future application for this or any other permit issued by the Department.

II. SPECIAL CONDITIONS

- A. This permit authorizes the removal of the listed marine algae species on table 1, page 1 to study pollution effects on marine algae.
- B. The locations where the marine algae samples may be taken are the Ewa Limu Management Area, Pokai Bay, Pupukea Marine Life Conservation District, and Haleiwa Harbor. These areas are where high levels of nutrients have been identified in previous studies.
- C. The algae will be removed by hand in the intertidal zone.
- D. The removed algae will be dried, powdered, and analyzed at the UH at Manoa Biogeochemical Stable Isotope Laboratory.
- E. The primary permittee and designated assistants are required to obtain permission before entering upon lands or waters not under the jurisdiction of the Department.
- F. This permit does not by implication authorize the primary permittee or any designated assistant to engage in any other activity that is in violation of any other State, Federal or County law, regulation or ordinance.

WILLIAM J. AILA, JR., Chairperson
Department of Land and Natural Resources

cc: (x) DOCARE

SIGNATURES AND AGREEMENT

By my signature below, I acknowledge receipt and understanding of the general and special conditions of this Special Activity Permit. Further, I agree to abide by all of these conditions when conducting activities authorized by this permit.

| PRIN | CIPAL PERMITTEES | S: | |
|-------------|------------------|------------------|-----------------|
| | | Mr. Daniel Amato | |
| DESIGNATI | ED ASSISTANTS: | | |
| Signature: | | Signature: | |
| Print Name: | Migiwa Kawachi | Print Name: | Dr. Celia Smith |
| Signature: | | Signature: | |
| Print Name: | | Print Name: | |
| Signature: | | Signature: | |
| Print Name: | | Print Name: | |
| Signature: | | Signature: | |
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| Signature: | | Signature: | |
| Print Name: | | Print Name: | |
| Signature: | | Signature: | L ¹ |
| Print Name: | | Print Name: | |

ACTIVITY REPORT

Results of all activities performed under authority of this permit must be reported on this form (or copies) within one month after the permit expires (see first page). Use as many sheets as you need. Submit the report to the Division of Aquatic Resources at 1151 Punchbowl Street, Room 330, Honolulu, HI 96813.

| Date | Location | Common or Scientific Name | Quantity Collected* | Disposition of Specimens |
|--------------------|--------------------|------------------------------|------------------------|--------------------------|
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| Domeitt | eas Ciomatum | | | |
| | ee Signature | | | |
| Mr. Dar Printed | niel Amato name | Signature | Date | |

^{*}If salvaged (collected because the specimen was dead or injured already), please detail circumstances: condition (dead, or describe extent of injury), how or from whom the specimen was obtained.

ATTACHMENT FOR DESIGNATED ASSISTANTS ONLY

| Primary Permittee: Mr. Daniel Amato | |
|--|--|
| I, being the primary permittee, designated assistants. | hereby acknowledge the addition of the following |
| Mr. Daniel Amato | Date |
| ADDITIONAL DESIGNATED ASSIS | STANTS |
| We, the undersigned, have read, undersabove Special Activity Permit. | stand, and agree to all conditions stipulated in the |
| Signature | Print Name: |