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VIRGINIA PRESSLER, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH  
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In reply, please refer to:  
EMD/CWB

WQC0804.FNL.15

August 14, 2015

Lieutenant Colonel Christopher W. Crary  
Commander and District Engineer  
Department of the Army  
U.S. Army Engineer District, Honolulu  
Fort Shafter, Hawaii 96858-5440

Dear Lieutenant Colonel Crary:

**Subject: Section 401 Water Quality Certification (WQC) for  
Certain 2012 Department of the Army (DA) Nationwide Permits (NWP)  
File No. WQC0804**

This Section 401 WQC is required for any owner of a discharge that is seeking verification under the DA NWP, promulgated in the February 21, 2012, Federal Register Notices, Volume 77, Number 34, and authorized under Section 404 of the Clean Water Act (CWA) and/or Section 10 of the Rivers and Harbors Act of 1899. Pursuant to Hawaii Administrative Rules (HAR), §11-54-1, discharge means the discharge of a water pollutant as defined in Hawaii Revised Statutes (HRS), §342D-1. As defined in HRS, §342D-1, water pollutant includes dredged spoil, solid refuse, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil, sediment, cellar dirt and industrial, municipal, and agricultural waste.

The Department of Health (DOH), Clean Water Branch (CWB), based this Section 401 WQC on the evaluation of information contained in the February 21, 2012, Federal Register Notices (Volume 77, Number 34); the draft Regional Conditions submitted by the U.S. Army Corps of Engineers (USACE); and the additional information, dated February 24, 2015, from the USACE. The Director of Health (Director) attests that, when all requirements and conditions contained in this Section 401 WQC are fully complied with, there is a reasonable assurance that the activities will be conducted in a manner which will not violate the Basic Water Quality Criteria applicable to all waters and the Specific Water Quality Criteria applicable to the class of State waters where the proposed discharges would take place.

1. Terms of this Section 401 WQC
  - a. This Section 401 WQC becomes effective on **August 31, 2015**. If you agree with the terms and conditions of this Section 401 WQC, please sign

and date below; make a copy for your file record; and submit this entire letter with your original signature to the DOH-CWB within 14 calendar days from your signature date.

- b. This Section 401 WQC expires at the earliest of the following:
  - (1) Midnight, **March 18, 2017** (individual verifications may be granted administrative extensions as specified in Item No. 2.e(3) below); or
  - (2) Until applicable State Water Quality Standards (WQS) is revised or modified. If applicable State WQS is revised or modified and the discharge activities comply with the revisions or modifications, this Section 401 WQC shall remain valid until midnight, **March 18, 2017**.

2. Coverage of this Section 401 WQC

- a. The NWP's listed below are hereby granted coverage under this Section 401 WQC in the State of Hawaii provided that the owner of the discharge complies with the General Conditions (Item No. 3); Special Conditions (Item No. 4); Notification Requirements (Item No. 5); and Compliance Reporting Requirements (Item No. 6). Any person, including any public body, conducting activities authorized by these NWP's that cannot or will not comply with requirements in Item Nos. 3 through 6 must apply for and obtain an individual Section 401 WQC from the DOH-CWB.
  - NWP 3 – Maintenance
  - NWP 5 – Scientific Measurement Devices
  - NWP 6 – Survey Activities
  - NWP 12 – Utility Line Activities
  - NWP 13 – Bank Stabilization
  - NWP 14 – Linear Transportation Projects
  - NWP 33 – Temporary Construction, Access, and Dewatering

b. Limitations on Coverage

This Section 401 WQC does not apply to:

- (1) NWP's listed below that have been denied coverage under this Section 401 WQC. Any person, including any public body, conducting activities authorized by these NWP's must apply for and obtain an individual Section 401 WQC from the DOH-CWB if their activities may result in a discharge as defined in HAR, §11-54-1.
  - NWP 1 – Aids to Navigation
  - NWP 2 – Structures in Artificial Canals
  - NWP 4 – Fish and Wildlife Harvesting, Enhancement and Attraction Devices and Activities

NWP 7 – Outfall Structures and Associated Intake Structures  
NWP 8 – Oil and Gas Structures on the Outer Continental Shelf  
NWP 9 – Structures in fleeting and Anchorage Areas  
NWP 10 – Mooring Buoys  
NWP 11 – Temporary Recreational Structures  
NWP 15 – U.S. Coast Guard Approved Bridges  
NWP 16 – Return Water from Upland Contained Disposal Areas  
NWP 17 – Hydropower Projects  
NWP 18 – Minor Discharges  
NWP 19 – Minor Dredging  
NWP 20 – Response Operations for Oil and Hazardous Substances  
NWP 22 – Removal of Vessels  
NWP 23 – Approved Categorical Exclusions  
NWP 25 – Structural Discharges  
NWP 27– Aquatic Habitat Restoration, Establishment and  
Enhancement Activities  
NWP 28 – Modifications of Existing Marinas  
NWP 30 – Moist Soil Management for Wildlife  
NWP 31 – Maintenance of Existing Flood Control Facilities  
NWP 32 – Completed Enforcement Actions  
NWP 35 – Maintenance Dredging of Existing Basins  
NWP 36 – Boat Ramps  
NWP 37 – Emergency Watershed Protection and Rehabilitation  
NWP 38 – Cleanup of Hazardous and Toxic Waste  
NWP 40 – Agricultural Activities  
NWP 41 – Reshaping Existing Drainage Ditches  
NWP 43 – Stormwater Management Facilities  
NWP 45 – Repair of Uplands Damaged by Discrete Events  
NWP 46 – Discharge in Ditches  
NWP 48 – Existing Aquaculture Activities  
NWP 51 – Land-Based Renewable Energy Generation Facilities

- (2) After-The-Fact applications, in whole or in part, submitted under DA 2012 – 2017 NWPs.
- (3) Discharge(s) regulated under Section 402 of the CWA.
- (4) The same NWP that is verified more than once for a single and complete project as defined in 33 CFR §330.2(i).
- (5) When the Director finds that it is more appropriate to evaluate the project impacts under an individual application for a Section 401 WQC.
- (6) Any project that will result in downstream/down drift post construction impacts to the physical, chemical, and/or biological environment.

- c. The following NWP's have been revoked by USACE within the geographic areas subject to the regulatory jurisdiction of the Honolulu District:

NWP 21 – Surface Coal Mining Activities  
NWP 24 – Indian Tribe or State Administered Section 404 Programs  
NWP 29 – Residential Developments  
NWP 34 – Cranberry Production Activities  
NWP 39 – Commercial and Institutional Developments  
NWP 42 – Recreational Activities  
NWP 44 – Mining Activities  
NWP 49 – Coal Remining Activities  
NWP 50 – Underground Coal Mining Activities  
NWP 52 – Water-Based Renewable Energy Generation Pilot Projects

- d. Geographical Area and Discharge Exclusions

Water bodies and discharges below are excluded from coverage under this Section 401 WQC. Any person, including any public body, proposing discharges to these water bodies may submit an individual Section 401 WQC application to the DOH-CWB for consideration.

- (1) Waste Discharges to natural lakes and anchialine pools as specified in HAR, §11-54-5.2(a).

“Waste” means sewage, industrial and agricultural matter, and all other liquid, gaseous, or solid substances, including radioactive substance, whether treated or not, which may pollute or tend to pollute the waters of the State. [HRS, §342D-1]

Note: Non-contaminated and suitable dredge and fill material authorized under a 2012 NWP is not considered waste.

- (2) Inland Waters: Class 1 (including 1.a. and 1.b.) as identified in HAR, §§ 11-54-3(b), and 11-54-5.1.

- (3) New sewage discharges and new industrial discharges to estuaries as specified in HAR, §§11-54-3(b), and 11-54-5.2(d).  
Note: New industrial discharges do not include the repair and/or replacement within the footprint of an existing structure.

- (4) Marine Waters: Class AA as identified in HAR, §§11-54-3(c), 11-54-6(b), 11-54-6(c), and 11-54-6(d).

- (5) New sewage and industrial discharges to Embayments: Class AA and Class A as identified in HAR, §§11-54-3(c), and 11-54-6(a).

Note: New industrial discharges do not include the repair and/or replacement within the footprint of an existing structure.

- (6) Marine Bottoms: Class I as identified in HAR, §§-11-54-3(d)(1), 11-54-7(a)(2)(A), 11-54-7(b)(2)(A), 11-54-7(c)(2)(A), and 11-54-7(e)(2)(A).
- e. This Section 401 WQC coverage for each individual verification issued by the USACE under each applicable NWP:
- (1) Shall become valid only when the notification information required in Item No. 5 below has been submitted to the DOH-CWB; all concerns are properly addressed to the satisfaction of the DOH-CWB; and the DOH-CWB informs the USACE that the individual verification is covered under this Section 401 WQC. After 30 calendar days from the date that the notification information transmittal requirements in Item No. 5.c. below was submitted to the DOH-CWB, the corresponding individual verification shall be qualified for coverage under this Section 401 WQC if the DOH-CWB does not inform the USACE that the notification information is deficient or the individual verification is concurred.
  - (2) Shall expire:
    - (a) When this Section 401 WQC for the applicable 2012 NWP's expire as specified in Item No. 1.b above; or
    - (b) The date that a Total Maximum Daily Load (TMDL) Waste Load Allocation (WLA) is established by the DOH and approved by the U.S. Environmental Protection Agency (EPA) for the water body specific to the owner of the discharge for their activity.
  - (3) May be administratively extended for no more than 12 months beyond midnight, **March 18, 2017** only if:
    - (a) The project is under construction or under contract to commence construction;
    - (b) The ACOE has not modified, suspended, or revoked the applicable NWP or individual verification per 33 CFR §330.4(e) and 33 CFR §§330.5(c) and (d); and

- (c) The owner of the discharge notifies the DOH-CWB by February 18, 2017 through the e-Permitting CWB Compliance Submittal Form for Section 401 WQCs (Item No. 6 below) that an administrative extension is required to complete the project construction by March 18, 2018. The completed Transmittal Requirements and Certification Statement for e-Permitting CWB Compliance Submittal Form for Section 401 WQC Submissions must be mailed/delivered to the DOH-CWB by February 18, 2017. If the DOH-CWB changes the e-Permitting status to Accepted, this will indicate that the administrative extension has been granted.

No further correspondence will be provided by the DOH-CWB.

- (4) May be revoked when:
  - (a) The owner of the discharge does not comply with the General Conditions in Item No. 3 below, the applicable Special Conditions in Item No. 4 below, the Notification Requirements in Item No. 5 below, the Compliance and Reporting Requirements in Item No. 6 below; and/or existing State WQS.
  - (b) The owner of the discharge fails to disclose all relevant facts and/or falsifies information by submitting to the DOH-CWB information that does not represent what is actually occurring at the project site.
  - (c) The DOH-CWB discovers that the owner of the discharge provided the USACE and DOH-CWB with different information. An example of different information is submitting a copy of a Preconstruction Notification (PCN) to the DOH-CWB that contains a different scope of work from the PCN submitted to the USACE.
  - (d) State WQS are revised or modified before the activity is completed, and the DOH-CWB determines that the activity is violating the new State WQS pursuant to HAR, §11-54-9.1.05(b)(3) and the owner of the discharge fails to comply with HAR, §11-54-9.1.05(c).
  - (e) The Director has reason to believe that it is in the public interest.

- (f) The owner of the discharge becomes aware of non-compliance with any condition of this Section 401 WQC and/or State WQS and fails to immediately stop the portion of the work that is causing the non-compliance; notify USACE; and/or notify DOH-CWB within one (1) business day.
- (g) The DOH-CWB informs the owner of the discharge and the USACE via e-mail or letter of any non-compliance with any condition of this Section 401 WQC and/or State WQS and the owner of the discharge fails to take immediate corrective actions or stop the portion of the activity that is causing the non-compliance within one (1) business day.

These actions shall not preclude the DOH-CWB from taking other enforcement action authorized by law.

The DOH-CWB will provide written and/or email notification to the owner of the discharge and USACE when the Section 401 WQC coverage for an individual NWP verification is revoked.

- (5) Cannot be modified. After the DOH-CWB verifies coverage under this Section 401 WQC, any changes to information submitted in compliance with the Notification Requirements in Item No. 5 below (with the exception of contact person information and owner name changes for non-transfer of ownerships and changes to authorized representative information) would void any previous coverage. The DOH-CWB may require the owner of the discharge to apply for an individual Section 401 WQC if there are changes to the Notification Requirements.

### 3. General Conditions

The owner of the discharge shall:

- a. Apply best degree of treatment or control measures to the potential water pollutant discharges associated with the proposed construction activity(ies) that assures the discharges will meet requirements compatible with the basic water quality criteria applicable to all waters, uses and specific water quality criteria and recreational criteria established for the class of the receiving State waters. Best Management Practices (BMPs) required in Special Conditions in Item No. 4 below, and submitted in Notification Requirements in Item No. 5 below shall be properly implemented and maintained during the entire construction period. The owner of the discharge shall completely isolate and confine all in-water

work areas throughout the entire water column (surface to bottom) such that all potential water pollutants will not leave or enter the work area. The entire volume of water in the in-water work area needs to be isolated and confined. Note: The in-water work area is 10 feet from the toe of the active Activity Decision Unit boundary defined in Item No. 6.b(4)(b) below. A vessel/barge may be operated outside of the isolated and confined in-water work area only if it is surrounded by a boom.

- b. Only utilize BMPs that are inert and not sources of pollution itself. (Examples of inappropriate in-water BMPs include, but are not limited to: compost biosocks since it is a source of nutrients; silt fence since the material is porous; and a soil berm since the soil particles will erode away).
- c. Isolate and confine all upland activity to contain/retain water pollutants upland and not allow it to enter State waters, including the designated in-water work area.
- d. Collect water pollutants (including, but not be limited to, airborne particulate; dust, concrete slurry, concrete chips, concrete surface preparation washing effluent, construction debris, etc.) from localized work areas and not allow these water pollutants to enter or re-enter State waters, including the in-water work area.
- e. Ensure that all construction debris is contained and prevented from entering or re-entering State waters.
- f. Ensure that all BMPs are deployed prior to the commencement of any construction work; are properly maintained throughout the entire period of in-water work; and are not removed until the in-water work is completed and the water quality in the in-water work area has returned to its pre-construction condition as demonstrated by the monitoring results.
- g. For a stream, ditch, or gulch: Allow unimpeded flow around the isolated and confined in-water work area to allow for aquatic animal migration and/or to prevent downstream flooding situations. The unimpeded flow shall be equivalent to a two (2) year, 24 hour duration storm event and/or the existing flow capacity of the stream, ditch, or gulch.
- h. Comply and require all of their contractors and subcontractors to comply with all requirements of this Section 401 WQC; WQS in Hawaii Administrative Rules, Chapter 11-54; and all information submitted to the DOH-CWB for compliance with the Notification and Reporting Requirements in Item Nos. 5 and 6.

- i. Properly conduct or contract with a qualified laboratory/environmental consultant to conduct the pre-construction, during construction, and post construction monitoring requirements in the Applicable Monitoring and Assessment Plan in Item No. 5 below. Test methods promulgated in 40 CFR Part 136 effective on July 1, 2011, and when applicable, the chemical methodology for sea water analyses (HAR, §11-54-10) shall be used. The detection limits of the test methods used shall be equal to or lower than the applicable WQS as specified in HAR, Chapter 11-54. For situations where the applicable WQS is below the detection limits of the available test methods, the test method which has the detection limit closest to the applicable WQS shall be used. If a test method has not been promulgated for a particular parameter, the applicant may submit an application through the Director for approval of an alternate test procedure by following 40 CFR §136.4.
- j. Comply with any modification to the sampling locations, frequencies, and/or parameters as instructed by the DOH-CWB for corrective/remedial action.
- k. Ensure that all discharges associated with the proposed construction activities are conducted in a manner that will comply with "Basic Water Quality Criteria Applicable to All Waters" as specified in HAR, §11-54-4.
- l. Ensure that all material(s) placed or to be placed in State waters are free of waste material, heavy metals, organic materials, debris and any water pollutants at toxic or potentially hazardous concentrations to aquatic life as specified in HAR, §11-54-4(b).
- m. Assess the existing physical, chemical, and biological environment and design the project to ensure there will be no downstream/down drift post construction impacts to the physical, chemical, and biological environment.
- n. Ensure that the activity will not result in non-compliance or violations to the applicable State WQS. During construction Impact Station water quality parameter levels that are greater than during construction upstream/updrift water quality parameter levels constitute a non-compliance of HAR, §11-54-4(a) requirements that prohibits substances attributable to domestic, industrial, or other controllable sources of pollutants, which includes but is not limited to materials that will settle to form objectionable sludge or bottom deposits; visible floating debris, oil, grease, scum, other floating materials; and objectionable color or turbidity plumes.

- o. Immediately cease the portion of the construction work if water quality monitoring or daily inspection or observation result(s) indicates that noncompliance to HAR, §11-54-4(a) or §11-54-4(b), will occur or is occurring. The construction activity shall not resume until adequate measures are implemented and appropriate corrective actions are taken and water quality monitoring demonstrates that the non-compliance has ceased. Note: These actions shall not preclude the DOH-CWB from taking enforcement action authorized by law.
- p. Not hold the DOH responsible for any damages or costs incurred due to the temporary cessation of the construction operations.
- q. Ensure that:
  - (1) Erosion and Sediment Control Measures are in place and functional before earth moving operations begin;
  - (2) Temporary soil stabilization shall be applied on areas that will remain unfinished for more than 30 calendar days; and
  - (3) Permanent soil stabilization shall be applied as soon as practicable after final grading.
- r. Ensure that all temporarily constructed structures, such as the silt containment device(s), floating oil and grease as well as construction debris containment device(s), berm, cofferdam, sheet pile, stream flow diversion structure(s), and/or sediment and soil erosion control structure(s), etc., are properly removed immediately after the completion of the construction work and when the affected water body has returned to its pre-construction condition or better, as demonstrated by the monitoring results, including color photographs.
- s. Ensure that the proposed construction activities related discharges not covered under the NWP's will also comply with State water pollution control permitting requirements under National Pollutant Discharge Elimination System (NPDES) as established in HAR, Chapter 11-55:
  - (1) Obtain NPDES permit for storm water discharges associated with construction activities when the proposed construction activities will disturb one (1) or more acres of land area before initiating any construction activities;
  - (2) Not discharge any effluent associated with the proposed construction activities, such as construction site dewatering

effluent, hydrotesting effluent or rock and concrete truck washing effluent, etc. without first obtaining the required NPDES permit from DOH-CWB; and

- (3) Pesticides application in State waters shall comply with HAR, §§11-54-4(a), 11-54-4(b), 11-54-4(c), 11-54-4(f) and/or Chapter 11-55, Appendix M - NPDES General Permit Authorizing Point Source Discharges from the Application of Pesticides.
- t. Not allow any concrete truck wash water to be disposed by percolation into the ground.
  - u. Maintain and require all of their contractor(s) and the subcontractor(s), that are performing work covered under this Section 401 WQC, to maintain at the construction site or in the nearby field office, a copy of this letter, all Notification and Compliance Reporting Requirements in Item Nos. 5 and 6 below, and all records demonstrating that every requirement of this Section 401 WQC has been complied with.
  - v. Ensure that all areas temporarily impacted, either directly or indirectly, by the project construction activities are fully restored to its pre-construction conditions. For example: Incidental construction debris is cleaned up prior to removal of BMPs.
  - w. Discontinue work during storm events or during flood condition.
  - x. Hold clearing and grubbing to a minimum.
  - y. Modify environmental protection measures, including BMPs and monitoring requirements, when instructed by the DOH-CWB for corrective action/remedial actions.
  - z. Allow the DOH-CWB to conduct routine inspections of the construction site in accordance with HRS, §342D-8.
  - aa. Complete and submit a Solid Waste Disclosure Form for Construction Sites to the DOH, Solid and Hazardous Waste Branch, Solid Waste Section. The form can be downloaded at:  
<http://health.hawaii.gov/shwb/files/2013/06/swdiscformnov2008.pdf>.
  - bb. Not stockpile, store, or place construction material or construction activity-related materials in State waters or in ways that will disturb or adversely impact the aquatic environment.

- cc. Dispose of construction debris, waste products, vegetation and/or dredged material removed from the construction site at upland State and County approved sites.
- dd. Contain on land and not allow to enter or re-enter State waters any runoff, return flow, or airborne particulate pollutants, if any, from the excavated/dredged material dewatering process or from the stockpiling site.
- ee. Comply with all new State WQS adopted by the DOH after the effective date of this letter.
- ff. Ensure that their discharge activity shall not interfere with or become injurious to any designated uses (HAR, §11-54-1 and HAR, §11-54-3), or existing uses (HAR, §11-54-1 and HAR, §11-54-1.1). The owner of the discharge shall maintain and protect all designated and existing uses.

4. Special Conditions

The following are additional conditions for the applicable NWP:

a. NWP 3 – Maintenance

- (1) Apply best degree of treatment or control measures appropriate to the proposed repair, rehabilitation, or replacement activity(ies) that will fully isolate and confine the localized work area(s) to prevent potential repair, rehabilitation, or replacement activities associated water pollutant(s) from directly entering or exit from the isolated and confined area(s). Water tight forms shall be used when repair or rehabilitation work involving cast-in-place concrete application activity.
- (2) Effluent resulting from hydroblasting, saw cutting, concrete surface preparation, rock washing, or any other similar regulated activity(ies) shall be properly contained, collected and prevented from entering, either directly or indirectly, State waters, except for those discharges that have received authorization issued by the DOH-CWB under the NPDES Permit as applicable.
- (3) Appropriate and effective measure(s) shall be implemented to properly contain/collect the potential water pollutant discharges resulting from the application of concrete corrosion inhibitor; or from the scrubbing, chipping, cutting, rebar reinforcing, grouting, filling activities needed for the permitted construction activity(ies).

- (4) Restore all affected area(s) to its preconstruction condition or better as demonstrated by monitoring and photographs or video, when available.
- (5) No dredging shall be allowed except for the purposes to repair or reconstruct the existing structure(s) within the original foot print.
- (6) Hardening the stream channel or stream bed outside its original structure foot print is not covered under this Section 401 WQC.
- (7) The owner of the discharge must have evidence that the structure(s) or fill(s) to be repaired or rehabilitated was previously authorized by the USACE and the structure(s) or fill(s) is currently serviceable, unless the activity occurred before the dates identified in 33 CFR §330.3.

b. NWP 5 – Scientific Measurement Devices

Remove all Scientific Measurement Devices (Devices) and any other structures or fills associated with installation and use of the Devices (e.g., foundations, anchors, buoys, lines, etc.) and restore the site to its pre-construction conditions when no longer in use.

c. NWP 6 – Survey Activities

- (1) The owner of the discharge shall obtain an applicable NPDES Permit issued by the DOH-CWB if the discharge of drilling mud and cuttings into State waters is anticipated.
- (2) For boring related drilling activity, steel casing shall be used with a larger diameter outer steel casing used outside the inner steel casing to contain excess water from entering directly into the State water. A mud pan shall be used on the raft/vessel and placed around the outer casing to capture any overflow and prevent any return flow of discharge into receiving State waters.

d. NWP 12 – Utility Line Activities

- (1) Side casting of excavated/dredged material in aquatic environment, including the wetlands, is prohibited.
- (2) Directional or horizontal drilling method is recommended over the conventional trenching method, if feasible.

- (3) Utility line substations, foundations for overhead utility line towers, poles, and anchors are excluded from the WQC coverage for this Nationwide Permit.
  - (4) Obtain the required NPDES discharge permit, if the proposed construction activity(ies) will disturb a total of one (1) or more acres of land area, or effluent discharges from the hydrotesting and/or construction site dewatering activity(ies) is anticipated.
- e. NWP 13 – Bank Stabilization
- (1) The bank stabilization project shall be designed and constructed to ensure that the constructed project will not cause erosion to the adjacent sand beach, shoreline, stream bank, stream bed, or other properties.
  - (2) The bank stabilization project shall not affect or interfere, in any way, with any existing recreational activity(ies) or any other existing uses.
  - (3) Benchmarks shall be established prior to the commencement of any bank stabilization construction work. Benchmarks shall be utilized to compare the site condition before and after the construction. Color photographs shall be taken before and after the completion of the bank stabilization project construction. Copies of the color photographs taken shall contain the date and time the photos were taken, an orientation map, and descriptive narratives. Color photographs taken before the project construction shall be submitted with e-Permitting NWP Blanket WQC Notification Form. Color photographs taken after the project construction shall be submitted to the DOH-CWB through the e-Permitting Section 401 WQC Compliance Form (Item No. 6 below) within 14 calendar days after the completion of the construction project.
  - (4) Concrete lining of stream bank or stream bed or hardening of shoreline is not covered under this WQC.
  - (5) Obtain the required NPDES discharge permit if the proposed construction activity(ies) will disturb a total of one (1) or more acres of land area or effluent discharges from the hydrotesting and/or construction site dewatering activity(ies) is anticipated.

- f. NWP 14 – Linear Transportation Projects
  - (1) Replacement structure required for any linear transportation project shall not exceed the existing structure foot print within State waters.
  - (2) Project that will result in additional aquatic environment or function loss is not covered under this WQC. DA NWP Applicant shall apply for an individual Section 401 WQC.
  - (3) Obtain the required NPDES discharge permit if the proposed construction activity(ies) will disturb a total of one (1) or more acres of land area or effluent discharges from the hydrotesting and/or construction site dewatering activity(ies) is anticipated.

5. Notification Requirements

- a. The form used to submit the notification requirements is the e-Permitting NWP Blanket WQC Notification Form. This form is available on the e-Permitting Portal located at: <https://eha-cloud.doh.hawaii.gov/epermit/>.
  - (1) Enter the e-Permitting Portal website.
  - (2) Login to the e-Permitting Portal. A one-time registration is required to obtain a login and password.
  - (3) Press the Form Finder button.
  - (4) Type “NWP Blanket WQC Notification Form.”
  - (5) Read the instructions.
  - (6) Press the submit Online Form button and complete the form.
- b. The owner of the discharge seeking verification under the applicable NWP shall submit through the e-Permitting NWP Blanket WQC Notification Form:
  - (1) A copy of the PCN submitted to the USACE.
  - (2) A compliance certification indicating that they will comply with all conditions of this Section 401 WQC.
  - (3) The legal name(s), street address, contact person's name and position title, and telephone and email addresses of the Owner of the discharge, Owner Contact Person, Certifying Person, General

- Contractor, Emergency Contacts, Project Contact, and authorized representative (if applicable).
- (4) The project name, a project location description, the Tax Map Key, and the approximate centroid location coordinate of the in-water work activity (latitude/longitude coordinates in decimal degrees).
  - (5) All associated applicable permits or licenses that will be required:
    - a. The CWA, Section 402 NPDES Permit number and/or Notice of General Permit Coverage (NGPC) file number which is associated with this project activity, as applicable.
    - b. State Department of Land and Natural Resources (DLNR) permit number and status for:
      - (i) Stream Channel Alteration Permit (SCAP);
      - (ii) Conservation District Use Permit (CDUP);
      - (iii) Statewide programmatic general permit for the restoration, repair, maintenance, and operation of loko i'a., as applicable. Please provide a copy of "authorization to proceed" issued by DLNR, Office of Conservation and Coastal Land (OCCL).
    - c. RCRA Permit number for any hazardous wastes stored or used at the project, as applicable.
    - d. For SARA, indicate the chemicals and their quantities at the project site, as applicable.
    - e. Others (i.e., Underground Injection Control (UIC) file number, Special Management Area (SMA) permit, Shoreline Setback Variance (SSV), etc.), as applicable.
  - (6) The name(s) of the State waters where the discharge will occur, the classification of the State waters, a determination if the State water(s) is on the CWA, §303(d) impaired water body list, the associated existing uses, temporary and potential long term adverse impacts to the associated existing uses, and a certification that the associated existing uses will be maintained and protected.
  - (7) Disclosure of each water pollutant of concern (POC) from the Activity; certification that the BMPs will completely isolate and confine the entire volume of water within the in-water work area and prevent each water pollutant from leaving the in-water work

area; the duration of the water pollutant discharge; and the quality and quantity of the POC discharge.

- (8) BMPs and construction drawings for activities/discharges covered under this Section 401 WQC.
- (9) Specification of the during construction monitoring frequency based on the duration of the in-water work and when BMPs will be changed/moved as the in-water work is performed. The minimum during construction monitoring frequency is as follows:
  - (a)  $\leq$  two (2) months in-water work; monitoring and reporting frequency = daily.
  - (b)  $>$  two (2) months and  $<$  one (1) year in-water work; monitoring and reporting frequency = three (3) times per week.
  - (c)  $\geq$  one (1) year and  $<$  two (2) years in-water work; monitoring and reporting frequency = two (2) times per month.
  - (d)  $\geq$  two (2) years and  $<$  three (3) years in-water work; monitoring and reporting frequency = monthly.
  - (e)  $\geq$  three (3) years in-water work; monitoring and reporting frequency = quarterly.
- (10) The Applicable Monitoring and Assessment Plan (AMAP) that complies with AMAP Guidelines (August 10, 2015/Version 1); HAR, Chapter 11-54; CWA, §401(d); and HRS, §342D-55.
- (11) Certification that the owner of the discharge will stop all in-water work if a visible plume is observed emanating from the work area; the plume will be sampled in accordance with the AMAP; and work will not resume until the cause of the plume is determined and corrective action is performed as required.
- (12) Certification that the owner of the discharge will stop all in-water work if during construction Impact Station water quality parameter levels are greater than the highest mean pre-construction Impact Station water quality parameter levels, and during construction Impact Station water quality parameter levels are greater than during construction upstream/up current control station water quality parameter levels. The owner of the discharge must also

certify that work will not resume until the cause of these exceedances are corrected as demonstrated by water quality sampling.

- c. During the process of completing the e-Permitting NWP Blanket WQC Notification Form, the owner of the discharge will be required to download the Transmittal Requirements and Certification Statement for e-Permitting NWP Blanket WQC Form Submissions. After submitting the NWP Blanket WQC Notification Form through the e-Permitting Portal, the owner of the discharge shall mail/deliver to the DOH-CWB the completed Transmittal Requirements and Certification Statement for e-Permitting NWP Blanket WQC Notification Form Submissions with the following information:
- (1) The e-Permitting Submission #. A unique e-Permitting Submission # (e.g. 15H-ZGVV-421H) is assigned to each NWP Blanket WQC Notification Form submittal. It is located in the History Link of the e-Permitting Portal. If the owner of the discharge submits a revised NWP Blanket WQC Form, the e-Permitting Submission # will contain the version (e.g. 15H-ZGVV-421H, v1).
  - (2) Indication if an initial NWP Blanket WQC Notification Form (new submittal) or a Revised NWP Blanket WQC Notification Form (revised submittal to address DOH-CWB comments) is being submitted.
  - (3) Section 401 WQC file number if revising the NWP Blanket WQC Notification Form to respond to DOH-CWB comments (e.g., WQC0962). The DOH-CWB comments will contain the file number. Initial NWP Blanket WQC Notification Form submittals will not have a file number.
  - (4) Printed First and Last Name of Certifying Person. For initial submittals, the Printed First and Last Name must be the Certifying Person identified in NWP Blanket WQC Notification Form. For revised submittals, the Printed First and Last Name may be either the Certifying Person identified in the NWP Blanket WQC Notification Form or the duly authorized representative identified in the initial NWP Blanket WQC Notification Form.
  - (5) The certification statement:

**“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 significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”**

- (6) Date of certification of the Transmittal Requirements and Certification Statement for e-Permitting NWP Blanket WQC Form Submissions.
- (7) Original Certification signature. Someone else may sign “for” the individual listed in the Printed First and Last Name. Any signatures shall be provided as described in 40 CFR §122.22.
- (8) A CD or DVD containing the downloaded e-Permitting submission in PDF or ZIP. To download the submission, click on the History Link in the e-Permitting Portal (after NWP Blanket WQC Notification Form is submitted). Locate the submission and press the view button under the Action column. Press the Download Submission button. A PDF file will be generated if you have no attachments. A ZIP file will be created if you have attachments. Save the PDF or ZIP file on the CD or DVD. Do not add additional files to the CD or DVD. Your CD or DVD shall match your e-Permitting submission #.

The completed Transmittal Requirements and Certification Statement for e-Permitting NWP Blanket WQC Form Submissions and all attachments shall be mailed or delivered to the DOH-CWB, 919 Ala Moana Boulevard, Room 301, Honolulu, Hawaii 96814.

- d. Check the status of the NWP Blanket WQC Notification Form submittal using the History Link in the e-Permitting Portal. The statuses are as follows:
  - (1) Submitted – Owner of discharge has submitted the NWP Blanket WQC Notification Form through the e-Permitting Portal.
  - (2) Hard Copy Received – DOH-CWB has received the hard copy of the Transmittal Requirements and Certification Statement for e-Permitting NWP Blanket WQC Form Submissions.

- (3) In Review – DOH-CWB is currently reviewing the NWP Blanket WQC Notification Form submittal. The DOH-CWB shall have 30 calendar days from the time DOH-CWB receives the hard copy of the Transmittal Requirements and Certification Statement for e-Permitting NWP Blanket WQC Form Submissions to review.
- (4) Applicant Action Required – DOH-CWB has comments on the NWP Blanket WQC Notification Form submittal. DOH-CWB will e-mail comments/concerns on the NWP Blanket WQC Notification Form submittal to the owner of the discharge and cc copy USACE. The owner of the discharge shall properly address DOH-CWB comments/concerns within 30 calendar days from the email. If the owner of the discharge fails to properly address DOH-CWB comments/concerns by the 30 calendar day deadline, the DOH-CWB will consider the owner of the discharge to no longer be interested in being covered under this Section 401 WQC. Therefore, the status of the NWP Blanket WQC Notification Form shall be changed to Rescinded and the processing will be terminated. The owner of the discharge will then have to apply for and obtain coverage under an individual Section 401 WQC.
- (5) Accepted – The DOH-CWB concurs that the individual verification is covered under this Section 401 WQC. The DOH-CWB shall notify the USACE via e-mail ([cepoh-ro@usace.army.mil](mailto:cepoh-ro@usace.army.mil)) that the individual verification is covered under this Section 401 WQC. Copies of the email will be sent to the Certifying Person, Owner Contact, General Contractor (if applicable), Project Contact, Emergency Contacts, and Authorized Representative (if applicable).
- (6) Rescinded – The individual verification cannot be covered under this Section 401 WQC and must apply for and obtain coverage under an individual Section 401 WQC. The DOH-CWB shall notify the USACE via e-mail ([cepoh-ro@usace.army.mil](mailto:cepoh-ro@usace.army.mil)) that the individual verification has been denied coverage under this Section 401 WQC. Copies of the e-mail will be sent to the Certifying Person, Owner Contact, General Contractor (if applicable), Project Contact, Emergency Contacts, and Authorized Representative (if applicable).

## 6. Compliance Reporting Submittals

- a. The form used to submit reporting and compliance requirements is the e-Permitting CWB Compliance Submittal Form for Section 401 WQCs. This form is available on the e-Permitting Portal located at: <https://eha-cloud.doh.hawaii.gov/epermit/>.

- (1) Enter the e-Permitting Portal website.
  - (2) Login to the e-Permitting Portal.
  - (3) Press the Form Finder button.
  - (4) Type "CWB Compliance Submittal Form for Section 401 WQCs" for the form to submit reporting and compliance requirements.
  - (5) Read the instructions.
  - (6) Press the submit Online Form button and complete the form.
- b. The owner of the discharge shall submit through the e-Permitting Section CWB Compliance Submittal Form for Section 401 WQCs:
- (1) Notification of the commencement date within seven (7) calendar days before the start of any construction activities.
  - (2) Notification of the completion date within 14 calendar days after the completion of the proposed construction activities (including the disturbed areas restoration activities and post construction monitoring requirements).
  - (3) Notification of all noncompliance within one (1) business day and the corrective actions that were taken.
  - (4) The DOH-CWB may require additional post construction monitoring, including but not limited to, benthic monitoring, beach profile monitoring, and erosion monitoring. For projects in streams: There is a mandatory two (2) year quarterly post construction downstream erosion impact monitoring.
  - (5) All applicable Item No. 4 post-construction monitoring requirements.
  - (6) If required by the appropriate resource agencies, a Compensatory Mitigation Plan that was approved/accepted if the activity may adversely affect the biological environment, including special aquatic sites specified in 40 CFR 230.40 to 230.45. If the discharge/activity will affect special aquatic sites, the Mitigation/Compensation Mitigation Plan must compensate for the loss of area acreage and function of the special aquatic site; be located in the same watershed as the affected special aquatic site; and be approved/accepted by the USACE in accordance with

the "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule" published in Federal Register (FR) on April 10, 2008 and became effective on June 9, 2008.

- c. During the process of completing the e-Permitting Section 401 WQC Compliance Form, the owner of the discharge will be required to download the Transmittal Requirements and Certification Statement for e-Permitting CWB Compliance Submittal Form for Section 401 WQCs Submissions. After submitting the CWB Compliance Submittal Form for Section 401 WQCs through the e-Permitting Portal, the owner of the discharge shall mail/deliver to the DOH-CWB the completed Transmittal Requirements and Certification Statement for e-Permitting CWB Compliance Submittal Form for Section 401 WQCs Submissions with the following information:

- (1) The e-Permitting Submission #. A unique e-Permitting Submission # (e.g. 15H-ZGVV-421H) is assigned to each CWB Compliance Submittal Form for Section 401 WQCs submittal. It is located in the History Link of the e-Permitting Portal. If the owner of the discharge submits a revised CWB Compliance Submittal Form for Section 401 WQCs, the e-Permitting Submission # will contain the version (e.g. 15H-ZGVV-421H, v1).
- (2) Indication if an initial CWB Compliance Submittal Form for Section 401 WQCs (new submittal) or a revised CWB Compliance Submittal Form for Section 401 WQCs (revised submittal to address DOH-CWB comments) is being submitted.
- (3) File number (e.g. WQC0962).
- (4) Printed First and Last Name of Certifying Person or Authorized Representative as identified in the NWP Blanket WQC Notification Form submitted for the verification.
- (5) The certification statement:

**"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 significant penalties for submitting**

**false information, including the possibility of fine and imprisonment for knowing violations.”**

- (6) Date of certification of the Transmittal Requirements and Certification Statement for e-Permitting CWB Compliance Submittal Form for Section 401 WQCs.
- (7) Original Certification signature. Someone else may sign “for” the individual listed in the Printed First and Last Name. Any signatures shall be provided as described in 40 CFR 122.22(a).
- (8) A CD or DVD containing the downloaded e-Permitting submission in PDF or ZIP. To download the submission, click on the History Link in the e-Permitting Portal (after the CWB Compliance Submittal Form for Section 401 WQCs is submitted). Locate the submission and press the view button under the Action column. Press the Download Submission button. A PDF file will be generated if you have no attachments. A ZIP file will be created if you have attachments. Save the PDF or ZIP file on the CD or DVD. Do not add additional files to the CD or DVD. Your CD or DVD shall match your e-Permitting submission #.

The completed Transmittal Requirements and Certification Statement for e-Permitting CWB Compliance Submittal Form for Section 401 WQCs Submissions and all attachments shall be mailed or delivered to the DOH-CWB, 919 Ala Moana Boulevard, Room 301, Honolulu, Hawaii 96814.

- d. Check the status of the CWB Compliance Submittal Form for Section 401 WQCs submittal using the History Link in the e-Permitting Portal. The statuses are as follows:
  - (1) Submitted – Owner of discharge or authorized representative has submitted the CWB Compliance Submittal Form for Section 401 WQCs through the e-Permitting Portal.
  - (2) Hard Copy Received – DOH-CWB has received the hard copy of the Transmittal Requirements and Certification Statement for e-Permitting CWB Compliance Submittal Form for Section 401 WQCs Submissions.
  - (3) In Review – DOH-CWB is currently reviewing the CWB Compliance Submittal Form for Section 401 WQCs submittal.

- (4) Applicant Action Required – DOH-CWB has comments on the CWB Compliance Submittal Form for Section 401 WQCs submittal. DOH-CWB will email comments/concerns to the owner of the discharge and cc copy USACE. The owner of the discharge shall properly address DOH-CWB comments/concerns or DOH-CWB will revoke individual verification coverage under this Section 401 WQC.
  - (5) Accepted – The DOH-CWB has no comments on the submittal at this time.
7. USACE shall email to the DOH-CWB ([cleanwaterbranch@doh.hawaii.gov](mailto:cleanwaterbranch@doh.hawaii.gov)) a pdf copy of all issued final verifications.

The USACE published a public notice of the proposed Section 401 WQC in ***The Garden Island, Honolulu Star-Advertiser, The Maui News, West Hawaii Today and Hawaii Tribune-Herald*** on **April 21, 2015**.

After consideration of the expressed views of all interested persons and agencies and pertinent State statutes and rules, the Department hereby issues this Section 401 WQC to all owners seeking coverage under the applicable NWP. This action does not constitute a significant change from the tentative determination set forth in the public notice.

If you have any questions, please contact Mr. Mathew Kurano of the Enforcement Section or Mr. Edward Chen of the Engineering Section, CWB, at (808) 586-4309.

Sincerely,



*for* VIRGINIA PRESSLER, M.D.  
Director of Health

- Enclosures:    1. Response to Public Notice Comments, dated August 14, 2015  
                  2. Applicable Monitoring Assessment Plan Guidelines  
                      (August 14, 2015 Version 1)
- c: Regulatory Office, POH, COE [via e-mail [cepoh-ro@usace.army.mil](mailto:cepoh-ro@usace.army.mil) only]  
Ms. Michelle R. Lynch, POH, COE [via e-mail [Michelle.R.Lynch@usace.army.mil](mailto:Michelle.R.Lynch@usace.army.mil) only]  
Pacific Islands Contact Office, U.S. EPA Region IX  
  [via e-mail [wiltse.wendy@epa.gov](mailto:wiltse.wendy@epa.gov) only]  
Mr. John Nakagawa, CZM Program, Office of Planning, DBEDT  
  [via e-mail [JNakagaw@dbedt.hawaii.gov](mailto:JNakagaw@dbedt.hawaii.gov) only]  
Mr. Todd Nishioka, DOT-HWYS, [via e-mail [Todd.Nishioka@hawaii.gov](mailto:Todd.Nishioka@hawaii.gov) only]  
U.S. Fish and Wildlife Service  
U.S. National Marine Fisheries Service [via e-mail [pirohonolulu@noaa.gov](mailto:pirohonolulu@noaa.gov) only]  
Engineering Division, DLNR [via e-mail [dickey.h.lee@hawaii.gov](mailto:dickey.h.lee@hawaii.gov) only]  
Harbors Division, DOT [via e-mail [carter.luke@hawaii.gov](mailto:carter.luke@hawaii.gov) only]  
CWRM, DLNR [via e-mail [dlnr.cwrn@hawaii.gov](mailto:dlnr.cwrn@hawaii.gov) only]  
OCCL, DLNR [via e-mail [dlnr.occl@hawaii.gov](mailto:dlnr.occl@hawaii.gov) only]  
DHO, Hawaii  
DHO, Maui  
DHO, Kauai  
EHS, Molokai/Lanai  
Ms. Snookie Mello, AECOS [ via e-mail [smello@aecos.com](mailto:smello@aecos.com) only]

Lieutenant Colonel Christopher W. Crary  
August 14, 2015  
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WQC0804.FNL.15

I AGREE WITH THE TERMS AND CONDITIONS OF THIS LETTER:



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HONOLULU DISTRICT ENGINEER  
U.S. ARMY CORPS OF ENGINEERS

20 Aug 2015  
DATE

**AMAP GUIDELINES (DQO format)**  
**August 14, 2015 Version 1**

- A. A Clean Water Act (CWA), Section 401 Water Quality Certification (WQC) does not exempt a discharger from compliance with applicable CWA or State Water Quality Standards (WQS) requirements. A WQC only provides the framework within which work may be performed, and must include the best degree of treatment or controls. The controls are generally referred to as the best management practices (BMPs). Samples are taken to verify that the BMPs are adequate to prevent any pollution of the surrounding receiving State waters.

Example: The WQC application identifies the discharge of Water Pollutant A. After the WQC is issued, it is discovered that Water Pollutant B is also being discharged. Water Pollutant B is not covered by the WQC. The WQC is now invalid, and the discharger faces enforcement action.

An Applicable Monitoring and Assessment Plan (AMAP) is a document that addresses the sampling component of a given project. The AMAP explains in detail what you are doing and why you are doing it. The AMAP shall follow the standard approach utilized in the Scientific Method. The AMAP shall include some basic information that would allow someone unfamiliar with the project to understand what was done.

A well written and properly executed AMAP will produce representative data that is legally defensible. It is the sole responsibility of the discharger to obtain and provide representative data and demonstrate their compliance with their WQC conditions and/or environmental laws. The Department of Health (DOH), Clean Water Branch (CWB) is not responsible for checking or double checking your AMAP. Poorly written AMAPs, poor sample design or unrepresentative sampling cannot produce data of sufficient quality to demonstrate compliance with applicable WQS and environmental laws. If you have poor sample design, data that is not representative, and/or cannot demonstrate your compliance with your WQC conditions, State WQS or environmental laws, your WQC may be revoked and you may be subject to the appropriate corrective/compliance/enforcement actions authorized by the Hawaii Revised Statutes (HRS). Therefore, it is in your best interests to produce an AMAP of the highest quality.

- B. The objective of taking samples is to obtain the most accurate information in order to make the correct decision. On a macro scale, the Data Quality Objectives (DQO) are utilized to ensure that representative data is collected using a systematic approach. On a micro scale, proper Quality Control (QC) is applied to ensure that accurate data is collected. Following these guidelines

will help to ensure that representative data is collected resulting in the best decision(s) being made.

- C. Utilize the DQO to develop your AMAP. (Download and Read the DQO Guidelines: <http://www.epa.gov/quality/qs-docs/g4-final.pdf>. Also see [www.QE3C.com](http://www.QE3C.com).)

The DQO is a seven (7) step planning process that addresses the problem(s) (or issues) that will be encountered during the project.

**TITLE PAGE** – provide preparer’s name, company, qualification and contact information of the author of the AMAP and date and version of the AMAP.

**INTRODUCTION** – a brief description of the project. Provide the following:

- a. Project name, scope, location, existing environmental conditions, receiving State water information, and purposes of preparing this AMAP.
  - b. Specific statutory and legal requirements, rules, regulations that are applicable to this project and guidelines, matrix, rationale/justifications used as the basis of preparing this AMAP.
1. **STATE THE PROBLEM** - The first, and most critical step, is to define the problem(s). This is a description of each of the potential problems in one (1) or two (2) sentences that will be the focus of the AMAP. Everything else in the AMAP will seek to resolve this/these problem(s).
- a. The problem statement describes the problem as it is currently understood and predicted/anticipated, and the conditions that are causing, or may have the potential of causing the problem.
  - b. The general format of a problem statement: **In order to** [support/understand/establish/determine/confirm/reduce/prevent] (some issue) **data regarding** [pollutant/contaminant] [in/on/above/below] (the medium) **are needed**.
  - c. Example: In order to confirm that BMPs are preventing sediment in the work area from impacting marine waters, data regarding turbidity in the ocean are needed.
  - d. There can be more than one problem statement that must be addressed.
2. **IDENTIFY THE GOAL OF THE STUDY** - Principal Study Questions (PSQs): Identify the issue(s) or condition(s) that will allow you to reveal the solution to the problem. State the alternative actions for each PSQ. For each PSQ, formulate a Decision Statement.

- a. The general format of a decision statement: **Determine whether** [PSQ] **and requires** [Alternate Action A] **or** [Alternate Action B].
- b. Example: Determine whether BMPs are ineffective and requires modification or no further action is necessary.
- c. State how data will be used.
  1. Pre-construction (pre-con) data will be used to establish the baseline (existing) levels for each parameter in State waters. A minimum of 10 sets of data shall be collected at the Control and Impact station Decision Units (DUs). If 10 sets cannot be collected (e.g., dry stream bed) and there is insufficient data to establish action levels, then the DUs shall be photo-documented, and corrective actions shall be taken whenever water is present. MULTI INCREMENT samples or the acceptable equivalent shall be collected over a reasonable period of time before commencing the proposed construction activity to collect seasonal (dry or wet for the class of the impacted State waters, as appropriate) representative samples at the project site. As appropriate, samples may also be collected over a minimum of a two (2) week period immediately before commencing any proposed construction activity. Impact station DUs shall be sampled in triplicate with the highest pre-con means serving as the action levels (turbidity and Total Suspended Solids (TSS)). The highest and lowest pH means shall serve as the pH action levels. Dissolved Oxygen (DO), Temperature and Salinity means may also serve as action levels where these parameters are impacted by the project. The percent Relative Standard Deviation (%RSD) shall be calculated for all triplicate samples. The %RSD should be maintained as low as possible, and in no case should exceed 20%. (An exceedance of 20% indicates that the sampling procedure is not capturing the variability adequately.) Standard distance of the Control DUs from the Impact DU is within 50 feet. (See Figure 3 for an example.)
  2. Submit pre-con data to the CWB prior to the start of any construction activities, preferable to be submitted with the Section 401 WQC Application or the e-Permitting NWP Blanket WQC Notification Form.
  3. Pre-con data (turbidity and TSS highest triplicate means) will be compared to during-construction data to demonstrate whether there are no impacts to water quality during the project construction.
  4. Pre-con data will be compared to post construction data to demonstrate that there are no long term adverse impacts to water quality from construction activities.

5. For streams, during construction, the upstream control station data will be compared to the impact and downstream control stations to demonstrate that there are no impacts to water quality.
  6. For open coastal and oceanic waters, during construction, the up-current control station data will be compared to the impact and down-current control stations to demonstrate that there are no impacts to water quality.
  7. If a plume emanates from the work area, the plume should also be sampled as a separate DU.
3. **IDENTIFY INFORMATION INPUTS** - Specify the parameters that will be measured/analyzed. State detection limits, action levels, instruments/measuring devices, references, calibration procedures, precision, accuracy, etc.
- a. General Information
    1. State who will take the samples.
    2. Photos shall be taken by the samplers of the sampling sites, BMPs and general work area that will be impacted, either directly or indirectly, by the proposed construction activities. Photos shall be date/time stamped with a narrative description of what is being documented. The standard date format is MM/DD/YY and the standard time format is the 24 hour clock. Include a photo orientation map that shows the location and orientation of photos taken.
    3. Station locations (i.e., DUs) shall be identified with GPS coordinates (latitude/longitude with datum (WGS84)).
    4. Include a scaled plan view map that shows the project location, a delineation of all BMPs and DUs, the location of all inputs that may impact the DUs, and GPS coordinates (WGS84) of all DU boundaries.
    5. All sampling activities shall be documented in a field notebook/logbook (Standard Methods 20<sup>th</sup> Ed. 1060B).
    6. Contractor/duly authorized representative's responsibilities:
      - a. Knowledgeable of their responsibilities as specified in the AMAP.
      - b. Inspect and properly maintain BMPs, document in a logbook and include photos (follow procedure in step 2 above).
  - b. Sampling
    1. Clearly indicate the sampling locations for Pre-, During- and Post-construction monitoring. (Inside of BMP containments, outside of BMP containments, impact DU, upstream/up-current, and

- downstream/down-current control DUs, etc.)
2. Specify the number of DUs (by phase if it changes).
  3. Note the importance of the pre-construction sample results for establishing baseline conditions, in establishing action levels, and for comparison to post-construction values to determine long term project impacts. Take at least 10 sets of MULTI INCREMENT pre-con samples (or the acceptable equivalent) in triplicate and calculate the percent relative standard deviation (%RSD). %RSD should be maintained as low as possible, and not exceed 20%.
  4. State the sampling frequency(ies) (by phase if it changes).
  5. State the Parameters that will be measured, Units, Methods, Instruments, Minimum Detectable, Minimum Sensitivity, Hold Times, and Field Preservation (present this information in a table). See Appendix 1 for the Matrix for minimum standard parameters and frequencies.
  6. State that parameters are measured from MULTI INCREMENT samples or the acceptable equivalent.
  7. Describe the sampling procedure (or include a Sampling Standard Operating Procedure (SOP)).
  8. Samplers shall include a narrative of site conditions that may impact sample results.
  9. Include an example of the Chain of Custody form, Data Sheet form, and Report form.
  10. Specify calibration standards and ranges for instruments including any expiration dates for supplies.
  11. State that samples must be taken during work operations (i.e., at the time when the potential for pollution is greatest).
  12. Address specific QA/QC issues associated with the sampling. Lab QC should be described. Improper field sampling is usually the largest source of error. Field measurement QC must be as rigorous as lab QC.
  13. Calibrate all field instruments/probes, as applicable.
  14. Perform Secondary (QC) checks prior to, and after, each day's sampling. These procedures should be documented in specific SOPs, along with the acceptable ranges for each check. Submit QC data with field measurements.
  15. Streams: For projects in streams, the standard requirement is to conduct post-con erosion assessment of the downstream banks and beds quarterly, for two (2) years, to verify no long term adverse impacts as a result of the project.
  16. Beach nourishment: For beach nourishment projects, the standard requirement is to conduct post-con beach profile measurements of the nourished beach quarterly, for two (2) years, to verify that nourished beach performs effectively as proposed and there will be no long term adverse impacts as a result of the project.

c. Personnel

1. Specify Name, Title, Organization, Responsibilities and Qualifications of ALL personnel involved with this document (in a table). Samples should be collected by a Qualified Sampler. ("Qualified Sampler", as used in this document, means a person who actively practices environmental science, or has formal training in sampling theory, practices and techniques. Qualified Samplers must be experienced in, and thoroughly knowledgeable of, all aspects of the sampling including all equipment, instruments, SOPs, calibrations, secondary checks, limits, and reporting requirements. Samplers must be able to recognize unobvious or potential problems and have the ability to address those issues, and notify the appropriate person of the problem(s) for timely proper corrective/remedial action. The concern here is that problems are best addressed if they are immediately recognized when the samples are taken. The chances of correcting problems are reduced with delay and the further the data gets passed on.)

2. Reports and Assessments

- a. Field data (raw) shall be submitted to DOH-CWB within 24 hours (or by the end of the next business day) of when the field samples were taken, via e-mail in excel and pdf format to [cleanwaterbranch@doh.hawaii.gov](mailto:cleanwaterbranch@doh.hawaii.gov). Include photos and site conditions/comments in the field data report. Sample results for TSS shall be submitted by the end of the next business day after TSS results become available.
- b. The project owner (Certifying person of the Section 401 WQC Application) or their duly authorized representative (the representative must meet 40 CFR § 122.22 requirements) is responsible for sending the reports to CWB.
- c. Email reports to [CleanWaterBranch@DOH.hawaii.gov](mailto:CleanWaterBranch@DOH.hawaii.gov). Specify when and how all reports and assessments will be submitted to the DOH-CWB to comply with your WQC requirements. Refer to your WQC for details.

4. **DEFINE THE BOUNDARIES OF THE STUDY** - Specify the boundaries: Define the population of interest, spatial boundaries, temporal boundaries, and scale of decision making. (The scale of decision making means the DU.)

- a. Example: The DU consists of all of the water along the length of the installed BMP measures (i.e., turbidity barrier) out to one meter, from the surface to the bottom. The temporal boundaries are from the beginning of the project (e.g., March 1, 2011) to the end of the project (e.g., April 30, 2011).

- b. Include a scaled map or construction drawing of the project site with the BMPs and indicate where the DUs are located. Note that because of the nature of water sampling, samplers may have to choose between addressing the spatial or temporal components.
5. **DEVELOP THE ANALYTIC APPROACH** - State the Decision Rule(s) as “if...then...else...” statements that incorporate the parameter of interest (or pollutants of concern (POC)), the unit of decision making, the action level and the alternative actions.
- a. The general format of a Decision Rule: **If the** [parameter of interest] **within** [DU] **is >** [the action level] **then** [alternate action A] **else** [alternate action B].
  - b. Example: If the mean turbidity value of the Impact DU is greater than the value at the upstream control DU, or the highest mean pre-con value, then stop work and inspect/repair BMPs, else no further action required.
  - c. Since you may have multiple parameters of interest and multiple DUs, you will probably have multiple Decision Rules.
6. **SPECIFY PERFORMANCE OR ACCEPTANCE CRITERIA** - Specify Error Tolerances. (Depending on the project, this section can be quite involved. The more critical the consequences of an incorrect decision, the greater the importance of this section.)
- a. MULTI INCREMENT samples are cheaper alternative means of obtaining representative and more accurate sample values than traditional (grab or composite) samples. MULTI INCREMENT samples cannot determine statistical values such as the range or standard deviation; however MULTI INCREMENT samples do provide values at, or very close to the mean which are the most important values for determining impacts. Decision errors are far less likely with this method.
  - b. To verify that MULTI INCREMENT samples are providing accurate values, they should be taken in triplicate and the percent Relative Standard Deviation (%RSD) should be calculated. %RSD should be maintained as low as possible, and in no case should exceed 20%.
  - c. If MULTI INCREMENT samples are not taken, appropriate statistical performance or acceptance criteria shall be provided. For example:
    - 1. Take 90+ samples per day (e.g., every 15 minutes 24/7). Explain how the data will be evaluated and what levels will trigger corrective actions. These levels should be recorded on the data sheets so that the samplers will know when an exceedance has occurred and that they need to take corrective actions.

2. Determine the variability of the environmental variables.
  - a. An estimate of the population Standard Deviation is needed.
3. Identify the decision errors.
  - a. Discuss the consequences of making each decision error.
  - b. Example: There are 2 possible errors that could be made. A parameter is measured as above a limit when it is actually below, or it is measured below the limit when it is actually above.
4. Choose the Null Hypothesis.
  - a. The Null Hypothesis should state the opposite of what the project hopes to accomplish.
  - b. Example: The sampling is attempting to show that erosion control measures are reducing the amount of sediment runoff; therefore the null hypothesis should state that the erosion control measures did not reduce the amount of sediment runoff. You must then collect sufficient data to allow you to reject the null hypothesis. If you fail to do this, you must accept the null hypothesis (i.e., your BMP's did not reduce runoff).
5. Specify the boundaries of the gray region (width of the gray region =  $\Delta$ ).
  - a. The gray region is the range of values within which the consequences of making a decision error are relatively minor. One end of the range is the action level, and the other end is the point at which the consequences of making a decision error become significant.
  - b. Example: Lower Bound of the Gray Region (LBGR) = Action Level - (Analytical error + Sampling error)
6. Assign probability limits on either side of the gray region.
  - a. In this step you specify the error rates that the decision makers are willing to accept, and provide a rationale for the rates.
  - b. Example: Alpha ( $\alpha$ ) error - (5%) that the project succeeded when it actually failed. Beta ( $\beta$ ) error - (20%) that the project failed when it actually succeeded.
- d. The action levels should be established and recorded on the data recording sheet so that the samplers will know when an exceedance has occurred and the project owner and/or general contractor needs to take appropriate corrective actions. (Example: Typical action levels could be "the highest mean pre-con turbidity value".)

7. **DEVELOP THE PLAN FOR OBTAINING DATA** - Optimize the Sample Design. Identify the most resource effective data collection and analysis

design that satisfies the DQOs specified in the last six (6) steps.

- a. Collect MULTI INCREMENT samples.
  1. Usually, MULTI INCREMENT samples are more accurate and a cheaper alternative to traditional sampling methods.
- b. Non-MULTI INCREMENT samples.
  1. Review DQO outputs from steps 1 to 6 to ensure they are internally consistent.
    - a. The outputs provide information on the context of, requirements for and constraints on data collection design.
  2. Develop alternate sample designs.
    - a. For each decision rule, develop one or more sample designs for consideration and evaluation in Step 7. Keep in mind the Step 5 outputs defining the population you are trying to represent with the data.
  3. For each design option, select needed mathematical expressions.
    - a. Define suggested method(s) for testing the statistical hypothesis and define sample size formula(e) that corresponds to the method(s).
    - b. Example:
      1. Generate frequency distribution histogram(s) for each population.
      2. Select one or more statistical methods that will address the PSQ's.
      3. List the assumptions for choosing these statistical methods.
      4. List the appropriate formula for calculating the number of samples, n.
  4. Select the optimal sample size that satisfies the DQO's for each data collection design option.
    - a. Using the appropriate formula, calculate the number of samples needed, by varying  $\alpha$  and  $\beta$  for each  $\Delta$ . Select the sample sizes that have acceptable levels of  $\alpha$ ,  $\beta$  and  $\Delta$ .

#### D. Attachments

1. List all technical documents used in preparation of this document.
2. List all technical documents associated with equipment and instruments in the AMAP.
3. List all procedural documents that will be used in the AMAP.
4. Include copies of applicable SOPs, as referenced in the AMAP. See <http://www.epa.gov/quality/qs-docs/g6-final> pdf.

5. Include example copies of the Chain of Custody form, Datasheet form and Report form.

Additional AMAPs may be required to assess impacts upon biota or for erosion (e.g. beaches and streams).

## Appendix 1 – Matrix

### General Monitoring Guideline for Section 401 Water Quality Certification Projects

Period of Construction Project	<1 to 4 Months					≥5 Months to ≤4 Year					Construction Project Monitoring Frequency*		
	≤1	>1	2	3	4	≥5	1	2	3	≤4	Pre-	During	Post
Photo Documentation	✓										✓	✓	✓
pH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Turbidity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Total Suspended Solids (TSS)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dissolved Oxygen (DO)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Salinity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Secchi Disc or Light Extinction	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Biological Monitoring	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Nitrate + Nitrite Nitrogen (NO <sub>3</sub> ,NO <sub>2</sub> )	○	○	○	○	○	●	●	●	●	●	●	●	●
Total Kjeldahl Nitrogen (TKN)	○	○	○	○	○	●	●	●	●	●	●	●	●
Ammonia Nitrogen (NH <sub>4</sub> )	○	○	○	○	○	●	●	●	●	●	●	●	●
Total Nitrogen (TN)	○	○	○	○	○	●	●	●	●	●	●	●	●
Ortho-Phosphate (PO <sub>4</sub> )	○	○	○	○	○	●	●	●	●	●	●	●	●
Total Phosphorus (TP)	○	○	○	○	○	●	●	●	●	●	●	●	●
Chlorophyll <i>a</i>	○	○	○	○	○	●	●	●	●	●	●	●	●
Silicate	○	○	○	○	○	●	●	●	●	●	●	●	●
Pesticides, PAHs, metals, etc.	●	●	●	●	●	●	●	●	●	●	●	●	●
Other													
Monitoring Frequency	D	D	D	3W	3W	3W	2M	M	Q	Q	*	**	***

Symbol Legend	
✓	Basic water quality monitoring parameters
✓	Included with dredging projects, if no habitat loss or modification
✓	Optional per data evaluation suggesting no significant impact
⊗	Optional per dredging projects
✗	Photo documentation on dredging project with some habitat loss or modification
✗	Bio-monitoring on dredging projects with habitat loss or modification
●	To be determined on individual case
○	Optional per individual cases for dredging projects

#### Notes:

\* Pre-construction sampling for TSS and Turbidity of TEN samples over TWO weeks for projects that impact bottom sediment.

\*\* During construction monitoring is limited to length of "in-water" work period.

\*\*\* Post-construction monitoring is limited to once per construction period.

**Shaded blocks represent basic or minimum requirement for most projects.**

D = Daily  
 W = Weekly  
 M = Monthly  
 Q = Quarterly  
 (i.e., 3W = three times per week)

Note that the monitoring frequency is based on the length of in-water work where the BMPs are not modified (e.g., due to multiple phases). If the BMPs are modified for different phases, the length of in-water work will be based on the length of each phase. Thus, each phase may have a different monitoring frequency.