



**STATE OF HAWAII**  
**DEPARTMENT OF HEALTH**  
P. O. BOX 3378  
HONOLULU, HI 96801-3378

In reply, please refer to:  
EMD/CWB

WQC778.FNL.10

December 16, 2010

The Honorable Jeffrey Chang  
Acting Director  
Department of Transportation  
Aliiimoku Building, Room 509  
869 Punchbowl Street  
Honolulu, Hawai'i 96813

Attention: Mr. Edwin H. Sniffen, P.E.  
Administrator, Highways Division

Dear Mr. Chang:

**Subject: Section 401 Water Quality Certification (WQC) for the  
Kawela Bridge Replacement Project  
Kamehameha V Highway Mile Post 5.1  
Island of Molokai, Hawaii  
File No. WQC 0000778/DA File No. POH-2006-00500**

In accordance with the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et seq.; the "CWA"); Hawaii Revised Statutes (HRS), Chapters 91, 92, and 342D; Part 121 of Title 40, Code of Federal Regulations (CFR); and Hawaii Administrative Rules (HAR), Chapter 11-54; the Department of Health (DOH), has reviewed your October 11, 2010 revised Section 401 WQC Application and appurtenant data relevant to water quality considerations for the subject proposed construction activities. The discharge activities associated with the construction of the subject project will be authorized under the U.S. Department of the Army (DA), Honolulu Engineer District (HED), Nationwide Permit (NWP) #14, under DA File No. POH-2006-00500 to be issued under the authorization of Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344). The processing of this Section 401 WQC Application is based on the requirements contained in CWA, Section 401; HRS, Chapters 91, 92, and 342D; 40 CFR Part 121; and HAR, Chapter 11-54.

The following is the information of the owner and the duly authorized representatives:

**Owner:**

State Department of Transportation (DOT)  
Highways Division (HWYS)  
869 Punchbowl Street, Room 513  
Honolulu, Hawaii 96813

**Contact:** Mr. Edwin Sniffen, Highways Administrator  
Phone: (808) 587-2220  
Fax No.: (808) 587-2340  
Fax No.: (808) 587-0311

**Duly Authorized Representative (Until issuance of the Section 401 WQC):**

Munekiyo & Hiraga, Inc.  
305 High Street, Suite 104  
Wailuku, Hawaii 96793

**Contact:** Mr. Mich Hirano, AICP, Vice President  
Phone: (808) 244-2015  
Fax No.: (808) 244-8729

**Duly Authorized Representative (After issuance of the Section 401 WQC):**

State Department of Transportation  
Maui District, Highways Division  
650 Palapala Drive  
Kahului, Hawaii 96732

**Contact:** Mr. Ferdinand Cajigal, Maui District Engineer  
Phone: (808) 873-3538  
Fax No.: (808) 873-3544

The Director of Health (Director) attests to the following statements based on the information contained in the October 11, 2010 revised Section 401 WQC Application package.

1. The Director has either:
  - a. Examined the application submitted by the applicant and its duly authorized representative and bases its certification upon an evaluation of the information contained in such application which is relevant to water quality considerations; or
  - b. Examined other information furnished by the applicant and its agent sufficient to permit the statement described in Condition No. 2. below.
2. When all requirements and conditions contained in this Section 401 WQC are fully complied with, there is reasonable assurance that the discharges resulting from the proposed construction activities will be conducted in a manner which will not violate the applicable water quality standards (WQS) and will comply with the applicable provisions of CWA, Sections 301, 302, 303, 306, and 307.

3. The following conditions are deemed necessary and shall be imposed with respect to the project construction related discharge activities to be authorized under DA NWP No. 14 (File No. POH-2006-00500) under the applicable provisions of Rivers and Harbors Act of 1899 (RHA), Section 10 and CWA, Section 404.
  - a. The discharge activity that as described in Item No. 7.c of this October 11, 2010 revised Section 401 WQC Application involves: pouring concrete for slab under the bridge to line the stream channel to facilitate maintenance and clean up of the stream channel after storm events; placement of 40 grouted micropiles, approximately 7-5/8 inches in diameter, to support the concrete slab; dumped rip-rap apron to protect the slab from underscouring; grout filled steel bollards upstream of concrete slab to restrict boulders from damaging concrete slab; construction of Cement Rubble Masonry (CRM) wingwalls to retain the banks; placement of grouted rubble paving (GRP) to stabilize the banks; pouring concrete abutments to support the bridge slab; and pouring concrete for two (2) 12-foot wide access ramps from the highway down to the concrete slab for maintenance purposes. An 8-inch waterline, with a concrete jacket will be placed in the streambed under the concrete slab on the upstream side of the bridge. A temporary detour route with two (2) 12-foot lanes will be built on the makai side of the highway to allow traffic to flow around the construction area. Under the detour route will be six (6) 42-inch concrete culverts to allow stream flow to pass the construction area during storm events. Rip-rap will be placed on the makai (south) and mauka (north) side of the detour route over the culverts. The detour route will be graded and filled with construction grade fill to bring it up to the highway grade (approximately +7 feet mean sea level) and paved with a minimum 1-inch asphalt surface and aggregate base.

The discharge activity that the applicant is seeking coverage for as described in Item No. 7.d of the October 11, 2010 revised Section 401 WQC Application during the new Kawela Bridge project will be both temporary and permanent. The temporary discharges are associated with the construction of the detour route. The permanent discharge activities involve actions associated with the concrete stream bed lining, maintenance access ramp, and bridge support and bank stabilization. See Tables 1 and 2, below.

**Table 1**

<b>DISCHARGE ASSOCIATED WITH DETOUR ROUTE CONSTRUCTION</b>			
<b>Type</b>	<b>Amount</b>		
	<b>CY</b>	<b>Lineal Feet</b>	<b>Square Feet</b>
a. Imported Borrow and Erosion Control <sup>1</sup>	342 CY		
b. Aggregate Base Course	280 CY	---	---
c. Temporary Rip-Rap	110 CY	---	
d. 6-42" Reinforced Concrete Pipe Class IV	---	361 lf.	---
<sup>1</sup> Fill and backfill will consist of non-expansive granular material, such as crushed coral or basalt			

**Table 2**

<b>DISCHARGE ASSOCIATED WITH BRIDGE SUPPORT STRUCTURES AND STREAM BED IMPROVEMENTS</b>			
<b>Type</b>	<b>Amount</b>		
	<b>CY</b>	<b>Lineal Feet</b>	<b>Square Feet</b>
a. Filter Material for Abutment	4 CY		
b. Aggregate Base for Channel Slab	85 CY		
c. Concrete in Bridge Abutment and Wingwalls Footings	65 CY		
d. Concrete in Channel Slab	245 CY		
e. Concrete in Access Ramps	50 CY		
f. 40-Grouted Micropiles (7 5/8-inch diameter) w/Permanent Casings and grouted fill		2,840 lf.	
g. 19-Structural Steel Bollards (6-inch Diameter) removable		138 lf.	
h. Grouted Rubble Paving (12-inch diameter minimum)			3,176 sq. ft.
i. Dumped Rip-Rap (15-inch diameter minimum)			3,502 sq. ft.
j. Waterline Concrete Jacket	25.4 CY		
k. Waterline Cushion	21.5 CY		
l. Waterline Backfill	70.0 CY		

- b. Materials to be temporarily or permanently placed into Kawela Stream and Pacific Ocean as identified under Item No. 10.e of the October 11, 2010 revised Section 401 WQC Application are listed in Tables 3 and 4, below:

**Table 3**

<b>CONSTRUCTION ACTIVITY ASSOCIATED WITH TEMPORARY DETOUR ROUTE</b>					
<b>Source</b>	<b>Composition</b>	<b>Quantity</b>			<b>Duration</b>
		<b>CY</b>	<b>Lineal Feet</b>	<b>Square Feet</b>	<b>Months (mos.)</b>
a. Imported Borrow and Erosion Control	Fill and backfill will consist of non-expansive granular material such as, streambed substrate crushed coral or basalt	342 CY			12-18 mos.
b. Aggregate Base Course		280 CY	---	---	12-18 mos.
c. Temporary Rip-Rap		---	---	819 sq. ft.	12-18 mos.
d. 42" Reinforced Concrete 6-Pipe Class IV	Portland Cement	---	361 lf.	---	12-18 mos.

**Table 4**

<b>CONSTRUCTION ACTIVITY ASSOCIATED WITH BRIDGE SUPPORT STRUCTURES AND STREAM BED IMPROVEMENTS</b>					
<b>Type</b>	<b>Composition</b>	<b>Amount</b>			<b>Duration</b>
		<b>CY</b>	<b>Lineal Feet</b>	<b>Square Feet</b>	<b>Months (mos.)</b>
a. Filter Material for Abutment	Geotextile material, sand and gravel	4 CY			Permanent
b. Aggregate Base for Channel Slab	Structural stone and gravel	85 CY			Permanent
c. Concrete in Bridge Abutment and Wingwalls Footings	Portland cement and aggregate	65 CY			Permanent
d. Concrete in Channel Slab	Portland cement and aggregate	245 CY			Permanent
e. Concrete in Access Ramps	Portland cement and aggregate	50 CY			Permanent
f. Grouted Micropiles (7 5/8-inch	Structural Steel		2,840 lf.		Permanent

CONSTRUCTION ACTIVITY ASSOCIATED WITH BRIDGE SUPPORT STRUCTURES AND STREAM BED IMPROVEMENTS					
Type	Composition	Amount			Duration
		CY	Lineal Feet	Square Feet	Months (mos.)
diameter) 40- w/Permanent Casings and grouted fill					
g. Structural Steel for 19, 6-inch diameter Bollards	Structural Steel		138 lf.		Permanent
h. Grouted Rip-Rap (12-inch diameter)	Basalt Boulders			3,176 sq. ft.	Permanent
i. Dumped Rip-Rap (15-inch diameter)	Basalt Boulders			3,502 sq. ft.	Permanent

c. This Section 401 WQC:

- (1) Shall become effective on the date of this letter.
- (2) Shall expire at **midnight March 18, 2012**, or until the applicable WQS are revised or modified, or when the DA NWP #14 (No. POH-2006-00500) is modified, revoked, suspended, or expired, or the proposed construction is completed, whichever is earliest. If the applicable State WQS is revised or modified before **March 18, 2012**, and the discharge activity complies with the revisions or modifications, this Section 401 WQC shall continue to be valid until **March 18, 2012**.

The Director may, upon receipt of written request submitted under the authorization of 33 CFR 330.6(b) from the DOT-HWYS administratively extend the expiration date of the approved Section 401 WQC if the written request can demonstrate to the Director that the project is in fact under construction or under contract to begin construction after the NWP expires and there are no significant changes to the project scope and the changes will not, either individually or cumulatively, cause adverse impact to the receiving water quality. The request shall be accompanied with appropriate color photographs demonstrating that the project is in fact under physical construction and the purpose of extending the expiration date is to allow the contractor to complete the project construction.

- (3) May be revoked when any of the following is identified:
- (a) The DOT-HWYS shall comply with all applicable new WQS as adopted by the DOH. In any case where:
    - (i) WQS applicable to the waters into which the activity may discharge are subsequently established before the activity is completed; or
    - (ii) The Director determines that the activity is violating new WQS.

The Clean Water Branch (CWB) will notify the DOT-HWYS of the violation. The DOT-HWYS shall cease the violation within 180 calendar days of the date of the notice. If the DOT-HWYS fails within 180 calendar days of the date of the notice to cease the violation, the Director may revoke this certification; and

- (b) The Director determines that the discharge(s) from the activity is violating any existing WQS or condition of this Section 401 WQC, the CWB shall notify the DOT-HWYS of the violation. The DOT-HWYS shall cease the violation within seven (7) calendar days of the date of the notice. If the DOT-HWYS fails within seven (7) calendar days of the date of the notice to cease the violation, the Director may revoke this certification.

These actions shall not preclude the Director from taking other enforcement action authorized by law.

Written notification by the CWB under this section is complete upon mailing or sending a facsimile transmission mailing of the document or actual receipt of the document by DOT-HWYS.

d. The DOT-HWYS shall:

- (1) Invite the DOH's representative(s) to attend the partnering, pre-construction, or any other similar type of meeting that is established for the proposed construction project, if any.
- (2) Comply with all terms, conditions, Best Management Practices (BMPs) measures, specifications and all other requirements as specified in the October 11, 2010 revised Section 401 WQC Application.

Comply and properly implement, operate and maintain the BMPs measures contained in the October 11, 2010 revised Section 401 WQC Application.

The BMPs Plan contained in the October 11, 2010 revised Section 401 WQC Application represents the minimum BMPs measures required to be implemented during the construction of the subject project. The general contractor may furnish **additional** BMPs measures, as deemed necessary, through the DOT-HWYS to the CWB for review and written acceptance prior to start of construction.

- (3) Conduct or contract with a qualified laboratory to conduct the **Applicable Monitoring and Assessment Program for Clean Water Act (CWA) Section 401 Water Quality Certification, Kawela Stream Bridge Replacement, Kawela, Moloka'i, Hawai'i**" (AMAP, AECOS No. 1124B, dated October 7, 2010).

Test methods promulgated in 40 CFR Part 136 effective on July 1, 2001, and, when applicable, the chemical methodology for sea water analyses (see HAR, Section 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 Hawaii Administrative Rules (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.

The Director may, at the Director's own discretion or upon written request from DOT-HWYS and on a case-by-case basis, require DOT-HWYS to modify the monitoring frequency(ies), parameter to be monitored, or change the sampling locations, as appropriate. If a written request is submitted for the reduction of monitoring frequency(ies), it shall be accompanied by an assessment of monitoring results which shall clearly demonstrate that the project construction activity related discharge has fully complied with the applicable WQS.

Color photographs shall be taken before, during, and after the completion of the proposed construction activities. Copies of the color photographs taken should note the date and time the photos were taken. Photographs taken before the project construction shall be submitted to the CWB prior to the commencement of the project construction. Photographs taken after the construction shall be submitted to the CWB within two (2) calendar weeks after the completion of the construction project.



Field measurement results as well as the color photographs taken during the construction period shall be submitted to the CWB, before the closing of the next business day the sample and photos were taken, via e-mail in excel and pdf format to [cleanwaterbranch@doh.hawaii.gov](mailto:cleanwaterbranch@doh.hawaii.gov).

All communication, including but not be limited to the e-mail with the CWB shall include **File No. WQC 0000778** and the certification statement below.

- (4) 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, Section 11-54-4.
- (5) Ensure that all material(s) placed or to be placed in State waters are free of waste metal products, organic materials, debris and any pollutants at toxic or potentially hazardous concentrations to aquatic life as specified in HAR, Section 11-54-4(b).
- (6) Ensure that the permitted activity will not result in noncompliance or violations to the applicable State WQS. Although temporary increases in turbidity level is expected, any visible floating debris, oil, grease, scum, other floating materials, or objectionable color, or turbidity plume, detected in State waters outside the native material filled bags berm confined/isolated areas constitutes a violation of HAR, Subsection 11-54-4(a) requirements.

The DOT-HWYS shall immediately cease the portion of the construction work if water quality monitoring or daily inspection or observation result(s) indicates that non-compliance to HAR, Section 11-54-4(a) or Section 11-54-4(b), will occur or is occurring. The construction activity shall not resume until adequate mitigative measures are implemented and appropriate corrective actions are taken and concurred with by the DOH.

The DOT-HWYS shall not hold the DOH responsible for any damages or costs incurred due to the temporary cessation of the construction operations.

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

- (7) Ensure that construction debris is contained and prevented from entering or reentering State waters, including the Kawela Stream and Pacific Ocean. All construction debris will be properly removed from the aquatic environment and be disposed of at an upland Federal, State or County approved site. A Solid Waste Disclosure Form for Construction Sites shall be completed and returned to the DOH's Solid and Hazardous Waste Branch, Office of Solid Waste

Management. No construction material or construction-related materials shall be stockpiled, stored, or placed in the aquatic environment or stored or placed in ways that will disturb the aquatic environment. The Solid Waste Disclosure Form for Construction Sites is available online at:  
<http://www.hawaii.gov/health/environmental/waste/sw/pdf/swdiscformnov2008.pdf>.

- (8) Immediately report to the CWB by e-mail at [cleanwaterbranch@doh.hawaii.gov](mailto:cleanwaterbranch@doh.hawaii.gov) or via telephone (808) 586-4309 and DOH's Maui District Health Office (DHO) via fax (808) 984-8237 or telephone (808) 984-8234 of any spill(s) or other contamination(s) that occurs at the project site.
- (9) Ensure that all temporarily constructed structures, including the temporary detour route, native material filled bags berm, silt fence, geotextile fabric, or other similar structures constructed, are properly removed following the completion of the project construction and upon the verification that the affected Stream bed and stream flow have been returned/restored to its pre-construction condition.
- (10) Provide project status notifications. The DOT-HWYS shall:
  - (a) Notify the CWB and provide updated construction schedule by e-mail at [cleanwaterbranch@doh.hawaii.gov](mailto:cleanwaterbranch@doh.hawaii.gov) and to the Maui DHO via fax (808) 984-8237 within seven (7) calendar days before the start of construction activities.
  - (b) Notify the CWB and Maui DHO in writing within 14 calendar days after the completion of the proposed construction activities (including the restoration of the disturbed site).

All communication, including but not limited to the e-mail and fax, with the CWB shall include **File No. WQC 0000778** and the certification statement below.

- (11) Ensure that:
  - (a) Erosion and Sediment Control Measures are in place and functional before earth moving operations begin.
  - (b) Temporary soil stabilization be applied on areas that will remain unfinished for more than 30 calendar days.

- (b) Permanent soil stabilization be applied as soon as practicable after final grading.

The DOT-HWYS shall maintain and shall also ensure that the contractor(s) will maintain, at the construction site or in the nearby field office, a record (such as the construction log, etc.) to demonstrate that Condition 3.d(11) of the Section 401 WQC requirements have been fully complied with.

- (12) Ensure that all areas impacted, either directly or indirectly, by the project construction activities are fully restored.
  - (13) Discontinue the work during flood condition(s).
  - (14) Hold clearing and grubbing work to a minimum.
  - (15) Comply with all new State WQS or applicable requirements adopted by the DOH after the effective date of this WQC and/or after receipt of the WQC issued by the Director.
- e. The DOT-HWYS shall review and update the effectiveness and adequacy of the BMPs Plan the **Applicable Monitoring and Assessment Program for Clean Water Act (CWA) Section 401 Water Quality Certification, Kawela Stream Bridge Replacement, Kawela, Moloka'i, Hawai'i**" (AMAP, AECOS No. 1124B, dated October 7, 2010) and/or environmental protection measures upon request or when instructed by the Director.

Any change(s) to the implemented site-specific BMPs Plan, the **Applicable Monitoring and Assessment Program for Clean Water Act (CWA) Section 401 Water Quality Certification, Kawela Stream Bridge Replacement, Kawela, Moloka'i, Hawai'i**" (AMAP, AECOS No. 1124B, dated October 7, 2010) and any other project construction related requirements or information and/or correction(s) or modification(s) to information already on file with the DOH shall be submitted to the CWB for review and comment, as such change(s), correction(s) or modification(s) arises. The DOT-HWYS shall properly address all comment(s) and/or concern(s) to the Director's satisfaction before such change(s), correction(s) or modification(s) become effective.

- f. By applying for and accepting this Section 401 WQC, the DOT-HWYS agrees that the DOH may conduct routine inspection of the construction site, taking color photographs, and to sample any discharges or effluent in accordance with HRS, Section 342D-8.

- g. There shall be no discharge of any type of washing waters, including concrete wash water or rock washing water, into State waters. Effluent discharges shall comply with requirements and conditions specified in National Pollutant Discharge Elimination System (NPDES) Permit No. HI 0021841 issued by the DOH.
- h. Runoff or return flow, if any, from the excavated/dredged material dewatering process or from the upland stockpiling site(s) shall be contained on land and not be allowed to enter or reenter State waters.

Should the discharge of the return flow or runoff from the excavated material dewatering or stockpiling site be unavoidable, it shall be properly handled in such a manner that the effluent discharges will not violate the applicable WQS. A detailed dewatering design and discharge plan, including applicable effluent monitoring program, shall be submitted to the Director for review, comment and written acceptance before any discharges into State waters, including Kawela Stream and Pacific Ocean, shall be allowed.

- i. The DOT-HWYS is hereby informed that effective on the date of this letter, Mr. Mich Hirano of Munekiyo & Hiraga, Inc., is no longer recognized as the duly authorized representative. All future information must be submitted by Mr. Ferdinand Cajigal, Maui District Engineer or The Honorable Jeffrey Chang, Acting Director of Transportation.
4. Please include **File No. WQC 0000778** and the following certification statement in all future correspondence with the DOH for the subject project:

**"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."**

5. DOT-HAR has published a Notice of Proposed Water Pollution Control Permit and Section 401 WQC in the *Honolulu Star-Advertiser* on **November 5, 2010**.

After consideration of the expressed views of all interested persons and agencies and pertinent State statutes and rules, the DOH hereby issues this Section 401 WQC to DOT-HWYS for the subject project.

The Honorable Jeffrey Chang  
December 16, 2010  
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Should you have any questions, please contact Mr. Michael Tsuji, Supervisor of the Enforcement Section or Mr. Edward Chen of the Engineering Section, CWB, at 586-4309.

Sincerely,

  
**FOR**  
Keith R. Ridley  
Acting Director of Health

- c: Regulatory Branch, HED, COE [via fax 438-4060 only]
- CZM Program, Office of Planning, DBEDT [via fax 587-2899 only]
- CWRM, DLNR [via fax 587-0219 only]
- SHWB, DOH
- Mr. Mich Hirano, Munekiyo & Hiraga, Inc. [via fax (808) 244-8729 only]
- Mr. Ferdinand Cajigal, Maui District Engineer [via fax (808) 873-3544 only]
- Permit No. HI 0021841 [e-file only]