



**California Regional Water Quality Control Board
North Coast Region
Geoffrey M. Hales, Chairman**



Matt Rodriguez
Secretary for
Environmental Protection

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Edmund G. Brown Jr.
Governor

December 9, 2011

**In the Matter of
Water Quality Certification
For
US Coast Guard TRACEN
Petaluma Wastewater Treatment Facility Upgrade
Sonoma County
WDID No. 1B11073WNSO**

APPLICANT: United States of America in the Person of the U.S. Coast Guard, Training Center Petaluma
RECEIVING WATER: Unnamed Tributary to Stemple Creek
HYDROLOGIC AREA: Estero San Antonia Hydrologic Sub Area No. 115.40, Bodega Hydrologic Unit No. 115.00
COUNTY: Sonoma County
FILE NAME: U.S. Coast Guard TRACEN Wastewater Treatment Facility Upgrade Project

BY THE EXECUTIVE OFFICER:

1. On May 26, 2011, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from Ms. Carrie Lukacic, of Winzler & Kelly, on behalf of United States of America in the Person of the U.S. Coast Guard, Training Center Petaluma (applicant), requesting Federal Clean Water Act, section 401, Water Quality Certification (certification) and/or Waste Discharge Requirements (Dredge/Fill Projects) for activities associated with the U.S. Coast Guard TRACEN Wastewater Treatment Facility Upgrade Project (Project). The Regional Water Board provided public notice of the application pursuant to title 23, California Code of Regulations, section 3858 on June 16, 2011, and posted information describing the project on the Regional Water Board's website. No comments were received.
2. The project is located at 599 Tomales Road, at the U.S. Coast Guard Training Facility (TRACEN Petaluma), located near the unincorporated community of Two

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Rock, approximately 7 miles northwest of the City of Petaluma; the property is bisected by the Sonoma-Marín county line. TRACEN Petaluma occupies 804 acres, however, the central core of training, administrative, and support facilities are clustered near the center of the site on approximately 110 acres. The eastern and western areas of the property are largely undeveloped and leased to a local farmer for hay production. The site is bounded on the north by Tomales Road and a segment of Valley Ford Road, and on the east by Spring Hill Road.

3. The project will cause disturbances to waters of the United States and waters of the State associated with seasonal wetlands and an unnamed tributary (referred to as drainage channel) to Stemple Creek within the Estero San Antonio Hydrologic Subarea No. 115.40, Bodega Hydrologic Unit No. 115.00.
4. The project is to replace the existing wastewater treatment facility (WWTF) at TRACEN Petaluma to expand treatment, storage, and irrigation capacity at the site. The WWTF is currently regulated under Waste Discharge Requirements (WDR) Order No. 85-162 adopted by the Regional Water Board. The WDR will be revised in the near future to reflect the new WWTF and associated requirements and will be noticed separately from this Water Quality Certification. The current storage and irrigation capacity for treated effluent is insufficient and has led to violations of the operating permit's WDR. Additionally, the Regional Water Board adopted a Cease and Desist Order (No. 98-33) on March 26, 1998, for observed discharges to Stemple Creek resulting from irrigation that occurred when soils were saturated during the winter months.
5. The purpose of the project is to increase the storage and disposal capacity at the site to ensure that the conditions that contribute to the ongoing violations are corrected and the Cease and Desist Order can be rescinded. The proposed project includes the following components: construction of a wastewater treatment facility with all of the supporting infrastructure; new and expanded storage ponds to accommodate 215-acre feet of seasonal storage; removal of an existing 72-inch culvert from the drainage channel; construction of a new bridge across the drainage channel; expansion of the existing agricultural irrigation system, and installation of a new landscape irrigation system. Upgrade and expansion will occur in 2 phases; during project construction, wastewater treatment will be through existing treatment facilities. Following construction of the new treatment plant, the applicant will take partial beneficial occupancy and the wastewater treatment stream will be switched to the new facilities. Existing facilities will then be demolished. Proposed construction is estimated to begin approximately April 1, 2012 and expected completion date is October 30, 2013.

6. The project will result in temporary impacts to 0.653 acres of wetland and riparian habitat, associated with the unnamed tributary to Stemple Creek. The project will permanently impact 0.979 acres of wetlands.
7. Compensatory mitigation includes on-site and in-kind wetland mitigation at a 1:1 ratio. And 1,168 linear feet of on-site drainage channel will be restored with native riparian vegetation and grasses to reduce sediment delivery, stabilize the bank, increase shade and habitat, and reduce temperature. Mitigation areas will be monitored for function and value, have performance criteria, and require monitoring and annual reporting for at least five years or until criteria have been met, whichever is longer, as outlined in the *Wetlands Mitigation and Monitoring Plan* (Winzler & Kelly, 2011). Wetland mitigation areas will be protected in perpetuity by a legal instrument to be submitted to the North Coast Regional Water Quality Control Board for Executive Officer review and approval prior to construction, or by June 2012, whichever comes first. In addition, the project will utilize Low Impact Development practices to treat and retain storm water runoff on the project site such as; disconnecting impervious areas from the storm drain system by directing runoff to vegetated areas or other pervious surfaces, and vegetated swales. Storm water will not be plumbed or discharged to the sanitary sewer.
8. Non-compensatory mitigation for this project includes re-vegetation of disturbed areas, as appropriate, and the use of Best Management Practices for sediment and turbidity control, and for heavy equipment use near a waterway.
9. In channel work will be conducted between June 15 and October 31. If any stream flow or ponding in the channel are encountered, a dewatering approach will be taken, such as the installation of a sequential coffer dam system to intercept and divert surface water or intercepted shallow groundwater moving through near surface sediments. If needed, the dewatering would be accomplished by installing temporary coffer dams/sumps at the upstream end of the project, and pumping or using gravity flow piping of any nuisance water around the worksite to re-enter the channel below the downstream end of the project. Large sediment filtering bags will be incorporated into the outlet end of the discharge line to minimize turbidity. The dewatering system will be removed following project completion.
10. The Applicant has applied to the California Department of Fish and Game (Department) for a Lake and Streambed Alteration Agreement. The Department has determined that the Project will not substantially adversely affect existing fish or wildlife resources. As a result, a Lake or Streambed Alteration agreement is not needed.

11. The Applicant has applied for an United States Army Corps of Engineers Section 404, Clean Water Act, individual permit (file number 2010-00435-N).

Because the Project involves construction that may adversely affect waters of the State, the Regional Water Board has regulatory jurisdiction under Water Code Section 13269.

Receiving Water: Unnamed tributary to Stemple Creek within the Estero San Antonio Hydrologic Subarea No.115.40, Bodega Hydrologic Unit No. 115.00.

Filled or Excavated Area: Permanent impacts to 0.95 acres of wetland and 80 linear feet of bed and bank.

Latitude/Longitude: 38.25106° N, 122.78621° W

Accordingly, based on its independent review of the record, the Regional Water Board certifies that the U.S. Coast Guard TRACEN Petaluma Wastewater Treatment Facility Upgrade Project (WDID No. 1B11073WNSO), as described in the application, will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided that the Applicant complies with the following terms and conditions:

1. This certification action is subject to modification or revocation upon administrative or judicial review; including review and amendment pursuant to Water Code section 13330 and title 23, California Code of Regulations, section 3867.
2. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to title 23, California Code of Regulations, section 3855, subdivision (b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. This certification is conditioned upon total payment of any fee required under title 23, California Code of Regulations, section 2200, and owed by the Applicant.
4. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this Order. Order No. 2003-0017-DWQ

can be found at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0017.pdf

5. The Estero Americano watershed Total Maximum Daily Loads (TMDL) for sediment/siltation and nutrients was established in 1997 by the North Coast Regional Water Quality Control Board in accordance with section 303(d) of the Clean Water Act, because the State of California determined that the water quality standards for both Stemple Creek and the Estero de San Antonio are exceeded due to excessive sediment/siltation and nutrients. Identified sources contributing to sediment/siltation and excessive nutrients include, but are not limited to: agriculture-storm runoff; removal of riparian vegetation; streambank modification/destabilization; channelization; drainage/filling of wetlands; channel erosion; irrigated crop production; land development; pasture grazing; intensive animal feeding operations; and nonpoint sources.

Actions authorized by this Order require implementation of sediment/siltation and nutrient control measures including:

- Planting of 1,168 linear feet of native riparian vegetation at and near the project site;
- In-stream culvert removal;
- Replanting of disturbed soil with native grasses;
- Pre and post construction stormwater management;
- Utilize Low Impact Development practices to treat and retain stormwater runoff on the project site;
- Wetland creation/enhancement;
- Grease waste is addressed at the food service facilities by implementing practices to minimize the amount of grease discharged to the sanitary sewer and through the use of grease traps to capture any grease that is discharged to the sanitary sewer for subsequent landfill disposal;
- Upgrades to the new wastewater facility, that will reduce nutrient output, will include: biological nutrient removal system; tertiary filter and ultraviolet light disinfection system to generate Title 22 compliant tertiary filtered effluent that will be used for irrigation; improved storage with increased volume and HDPE lined storage ponds. The additional lined storage ponds will protect the surrounding watershed and groundwater by impounding all of the incoming wastewater and storing the treated effluent in a relatively leak free pond system until the summertime irrigation season. By increasing the

storage volume the system will comply with the WDR requirements that prohibit discharges of treated wastewater effluent to surface waters by providing enough standby volume to store wastewater flows on an annual basis for use as irrigation for both agricultural lands and landscape irrigation.

Accordingly, this Order is consistent with, and implements BMPs that would attenuate sediment/siltation and nutrient adverse impacts. At present, there are no watershed-specific implementation plans for these TMDLs. If TMDL implementation plans are adopted for these watersheds prior to the expiration date of this Order, the Regional Water Board may revise the provisions of this Order to address actions identified in such action plans.

6. If groundwater is encountered during construction it will be discharged to an upland location where it cannot flow into Waters of the State. BMPs that may be used include: storage tanks, sediment desilting basins, and water filters. Additionally, BMPs such as the use of washed gravel, sand bags, straw, and/or silt fences will be used as necessary to control velocity of the land discharge and erosion. Groundwater shall not be discharged to waters of the State.
7. Riparian vegetation restoration will be implemented as outlined in the Wetlands Mitigation and Monitoring Plan (Winzler & Kelly, 2011). Riparian restoration includes 1,168 linear feet of highly degraded stream channel. Stream channel restoration will achieve the following desired results: thermal heat reduction; stormwater runoff filtration; bank stabilization; sediment control; stream habitat enhancement; flood control; hydromodification, reducing peak flows; and removal of invasive species.
8. Because of the possibility of the agricultural irrigation transmission main line trench across the S-5 wetland to compromise the integrity of the wetland, a plan to prevent hydraulic compromise will be submitted to the North Coast Regional Water Quality Control Board for Executive Officer review and approval prior to construction, or by June 2012, whichever comes first.
9. Wetland mitigation areas will be protected in perpetuity by a legal instrument to be submitted to the North Coast Regional Water Quality Control Board for Executive Officer review and approval prior to construction, or by June 2012, whichever comes first.
10. Applicant shall create and maintain fencing and signage to keep third parties from entering the wetland mitigation/enhancement areas

11. The setbacks implemented in the project will be maintained at a minimum 25 foot setback from top of bank of the drainage channel that bisects the site and also the tributary to Stemple Creek. There is one location for a short distance that the toe of one dike comes within 25 feet of the top of bank near the bridge area. In all other areas the toes of the dikes are well over 40 feet away from the top of bank. In the areas where wetlands are being preserved/mitigated, and where construction of the mitigation wetlands will be, there are setbacks less than 25 foot setbacks to the existing and new access road, however a fence shall be installed to provide separation and protection from access. There shall be no fertilizers, nutrients, and/or manure applied to the agricultural fields in a manner that would allow or cause nutrient laden stormwater runoff to enter any waters of the State; fertilizers, nutrients and/or manure, shall be applied at appropriate agronomic rates.
12. To ensure successful wetland creation/enhancement mitigation and riparian revegetation/stabilization efforts, plantings shall be monitored and maintained (including irrigation if necessary) for five years. Geomorphic and hydrologic success criteria and monitoring requirements for the wetlands, the riparian corridor, and additional mitigation planting is outlined in the Wetlands Mitigation and Monitoring Plan (Winzler & Kelly, 2011). The Applicant is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice to achieve these goals. Replacement plants shall be monitored with the same survival success for an additional five years from the year of installation. A status report shall be submitted to the Regional Water Board by December 31st of each year. Photos, descriptive narrative, and tabulations of plant counts shall be submitted within the report.
13. Pursuant to Regional Water Board Resolution R1-2004-0087, Total Maximum Daily Load Implementation Policy Statement for Sediment-Impaired Receiving Waters within the North Coast Region (Sediment TMDL Implementation Policy), the Executive Officer is directed to “rely on the use of all available authorities, including existing regulatory standards, and permitting and enforcement tools to more effectively and efficaciously pursue compliance with sediment-related standards by all dischargers of sediment waste.”
14. The federal antidegradation policy requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law.

Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. This Order is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater.

15. Non-compensatory mitigation measures include the use of Best Management Practices (BMPs) to be employed during construction to minimize sediment production and prevent the movement of loose soil off-site and cement containment, to ensure that materials do not enter the waterway. All erosion control measures will be installed and in place by October 15, or during non-construction periods as necessary, and maintained thereafter by the contractor/Applicant. All disturbed soil will be revegetated with native species or seeded with native grasses. If vegetation cannot be reestablished before expected rainfall, mulching, erosion control fabric, or other sediment control measures will be implemented to prevent delivery of sediment to the drainages. All equipment will be maintained in good working order and spill kits will be on hand during construction. Equipment shall not be staged, or fueled, near waters of the State. Additionally, all required BMPs shall be on-site and ready for timely deployment before the start of construction activities.
16. Applicant shall prioritize use of wildlife-friendly 100% biodegradable erosion control products/BMPs wherever feasible. For purposes of this Order, photodegradable synthetic products are not considered biodegradable. Applicant shall not use or allow the use of erosion control products, that contain synthetic (e.g., plastic or nylon) netting or materials for permanent erosion control (i.e., erosion control materials to be left in place for two years or after the completion date of the project). If the Applicant finds that erosion control netting or products have entrapped or harmed wildlife, the Applicant shall remove the netting or product and replace it with wildlife-friendly biodegradable products. The Applicant shall not use or allow the use of soil stabilization products that contain synthetic materials within waters of the United States or waters of the State at any time. Applicant shall remove any remaining synthetic netting or materials remaining at the end of two years, or sooner.
17. The mitigation measures that are detailed in the Final NEPA and Environmental Assessment and CEQA Initial Study/Mitigated Negative Declaration (SCH No. 2008044001) are hereby incorporated by reference and are conditions of approval of this certification. Notwithstanding any more specific conditions in this certification, the Applicant shall implement and comply with the mitigation

measures for Biological Resources, and Hydrology and Water Quality identified in the Initial Study/Mitigated Negative Declaration.

18. The Regional Water Board shall be notified in writing (email is acceptable) at least five working days (working days are Monday-Friday) prior to the commencement of ground disturbing activities, with details regarding the construction schedule, in order to allow staff to be present onsite during construction, and to answer any public inquiries that may arise regarding the project.
19. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this Order, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the State. When operations are completed, any excess material or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream.
20. BMPs for erosion, sediment and turbidity control shall be implemented and in place at commencement of, during and after any ground clearing activities or any other project activities that could result in erosion or sediment discharges to surface water. All activities and BMPs shall be implemented according to the submitted application and the conditions in this Order.
21. A copy of this Order and the application documents submitted by the Applicant for this certification shall be provided to all contractors and subcontractors conducting the work, and shall be in their possession at the work site.
22. If, at any time, an unauthorized discharge to surface water (including wetlands, rivers or streams) occurs, or any water quality problem arises, the associated project activities shall cease immediately until adequate BMPs are implemented. The Regional Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises.
23. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete the project.
24. Prior to implementing any change to the project that may have a significant or material effect on the findings, conclusions, or conditions of this Order, the Applicant shall obtain the written approval of the Regional Water Board Executive Officer.

25. All project work shall be conducted as described in this Order and in the application submitted by the Applicant. If the Regional Water Board is not notified of a significant alteration to the project, it will be considered a violation of this Order, and the Applicant may be subject to Regional Water Board enforcement actions.
26. The Regional Water Board may add to or modify the conditions of this Order, as appropriate, to implement any new or revised water quality standards and implementation plans adopted and approved pursuant to the Porter-Cologne Water Quality Control Act or Section 303 of the Clean Water Act.
27. The Applicant shall provide Regional Water Board staff access to the project site to document compliance with this certification.
28. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under applicable State or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification. In response to a suspected violation of any condition of this certification, the Regional Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the Regional Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this certification, the Regional Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.
29. In the event of any change in control of ownership of land presently owned or controlled by the Applicant, the Applicant shall notify the successor-in-interest of the existence of this Order by letter and shall forward a copy of the letter to the Regional Water Board at the above address.

To discharge dredged or fill material under this Order, the successor-in-interest must send to the Regional Water Board Executive Officer a written request for transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, and the address and telephone number of the person(s) responsible for contact with the Regional Water Board. The request must also describe any changes to the project proposed by the

successor-in-interest or confirm that the successor-in-interest intends to implement the project as described in this Order.

30. Except as may be modified by any preceding conditions, all certification actions are contingent on: a) the discharge being limited to and all proposed mitigation being completed in strict compliance with the Applicant's project description, and b) compliance with all applicable requirements of the Water Quality Control Plan for the North Coast Region (Basin Plan).
31. The authorization of this certification for any dredge and fill activities expires on December 9, 2016. Conditions and monitoring requirements outlined in this certification are not subject to the expiration date outlined above, and remain in full effect and are enforceable.

If you have any questions or comments please call Stephen Bargsten at (707) 576-2653.

Catherine Kuhlman
Executive Officer

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Weblink: State Water Resources Control Board Order No. 2003-0017 -DWQ, General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification can be found at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0017.pdf

Original to: Captain R. Erin Brogan, Commanding Officer Training Center Petaluma, United States Coast Guard, 599 Tomales Road, Petaluma, CA 94952

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