



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

MAR - 3 2015

Col. Alan M. Dodd
District Commander
U.S. Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, FL 32232-0019

Dear Col. Dodd:

This is in regard to Permit Application No. SAJ-2004-12518 (SP-JMS) by Mrs. Chaliесе Summers on behalf of The Summer's End Group, LLC for the proposed construction of a new commercial marina and mooring field at Coral Bay, St. John, U.S. Virgin Islands. The proposed project entails the construction of 145 boat slips and the installation of 87 mooring buoys. Construction would require the installation of 1,333 piles (12-17 inch diameter) occupying a total of 2,500 square feet, plus dock structures totaling an area of 1.42 acres. The project also includes changes to an existing rip-rap shoreline protection area as well as the construction of administrative and commercial facilities on seven adjacent upland parcels at Coral Bay. After reviewing the available data, the U.S. Environmental Protection Agency (EPA) believes that this project will result in significant impacts to aquatic resources of national importance. EPA thus strongly recommends the denial of a Department of the Army permit for this project.

EPA has reviewed the public notice for this project, and the Environmental Assessment Report submitted by the applicant. Based on this review, EPA has determined that the proposed project may result in significant impacts to the aquatic environment at Coral Bay. Moreover, the applicant failed to provide sufficient information on the extent of the proposed project's impacts and the adequacy of the proposed mitigation plans. Therefore, if the Department of the Army does not deny this permit, then it should require the submission of an Environmental Impact Statement that would address, at a minimum, the environmental impacts discussed below.

The Virgin Islands Department of Planning and Natural Resources (VIDPNR) has designated Coral Bay as a mooring area due to its enclosed nature that provides storm and hurricane protection to boaters. Heavy use of the area has resulted in environmental impacts associated to mooring, anchoring and waste disposal. In addition, development on the lands surrounding the bay has resulted in an increase in the levels of pollutants and sedimentation reaching the harbor. The development of the planned marina will compound the impacts on the ecosystem.

Coral Bay is an enclosed harbor surrounded by mangroves that serve as a nursery ground and provides habitat for numerous species, such as the green sea turtle, the hawksbill sea turtle, as well as juvenile tarpon (*Megalops atlanticus*) and snook (*Centropomus undecimalis*), among other species. In addition, they provide a good measure of shoreline protection. It also contains extensive seagrass beds and submerged aquatic vegetation that provides food and foraging habitat to endangered sea turtles and nursery for commercially valuable fish stocks. Numerous coral species are found in the area, which also serves as a black tip, lemon and nurse shark nursery. In addition to the seagrass and mangrove habitats directly displaced, numerous coral species are found nearby, including *Acropora palmata*, *Acropora cervicornis*, and *Orbicella annularis*, which are listed as threatened under the Endangered Species Act. Despite the ecological importance of Coral Bay, which has been recognized by the government of the U.S. Virgin Islands (USVI) as an area of particular concern, no formal environmental management plans have been developed for the area. The National Oceanic and Atmospheric Administration (NOAA) and the USVI as a priority site also selected Coral Bay for the U.S. Coral Reef Task Force Local Action Strategy. This area was selected using a set of strategic coral reef management priorities developed by consensus by the coral reef managers in the USVI. Significant investments, by EPA and NOAA, have resulted to measureable improvements in the watershed and water quality of Coral Bay. EPA awarded \$300,000 in a Community Action for a Renewed Environment (CARE) grant to the Coral Bay Community Council that served to initiate hydrological assessments and strategies for improving the watershed. NOAA awarded approximately \$1.5 million to the Coral Bay Community Council through the American Recovery and Reinvestment Act (ARRA) of 2009 for implementation of best management practices for stabilizing erosion and sediment runoff conditions that were impacting Coral Bay habitats.

EPA is seriously concerned about the potential effects of the proposed development on water quality, sea grass and corals within Coral Bay. The applicant has estimated that the required pilings would result in the loss of 2,500 square feet of sea grass. Additional losses of sea grass due to shading impacts have been estimated as 1.42 acres from the dock structures, 5.7 acres from boats, and plus two additional acres of temporary impacts during construction. Direct impacts on sea grass and submerged aquatic vegetation in the bay may also cause indirect impacts to endangered sea turtles and other marine species that use this aquatic resource of national importance for refuge, foraging and spawning. The threatened/endangered species found in the project area and its vicinity are likely to be affected by the construction and the significant increase in boat traffic that would result from the proposed marina. These aquatic resources of national importance may also be affected by the degradation of water quality that would result from the construction and operation of the facilities, the potential for fuel and wastewater spills, the increases in runoff from the associated upland development, and the increasing overall stresses on the bay. EPA recommends that a comprehensive benthic survey of the complete project area, including the proposed mooring field and the transit routes that would be used by vessels entering or exiting the marina, must be performed in order to more fully quantify all potential impacts on aquatic resources of national importance. While some information on benthic communities was included in the Environmental Assessment Report for the project, the information was limited to the immediate area of the proposed marina. The benthic survey should also include the proposed mooring area and any areas of the bay that would be affected by the proposed upland elements of the project. Information regarding the type of moorings to be

installed, the installation techniques that would be used, and the operation plans for the proposed mooring field should be included. This information is required in order to fully evaluate all the potential impacts to benthic communities.

While the Environmental Assessment Report submitted by the applicant describes the current use of the bay by boaters, and establishes that only a portion of the moorings at Coral Bay have been placed through the established permitting authorities, information regarding the actual volume of vessels that routinely anchor at Coral Bay was not provided. While the applicant implies that such vessels would be accommodated at the proposed facility, and that at least a portion of the proposed mooring field would be managed through a public-private partnership with VIDPNR, no data regarding the actual footprint of the area to be occupied by vessels, nor details on a proposed relocation plan were included. In addition, EPA believes that any vessels that opt not to moor at the proposed facility may end up relocating to nearby areas, resulting in additional impacts that cannot be estimated with the available information.

To compensate for the unavoidable impacts of the project on sea grass, the applicant proposes the removal and disposal of debris and derelict vessels from the marina area, plus the planting of red mangroves along the shoreline in the marina area. The applicant also proposes to transplant sea grass from the footprint of the proposed pilings to barren areas of the sea floor within Coral Bay. While we conceptually agree with this approach, the information submitted does not adequately quantify the amount of sea grass to be restored within the bay. Therefore, at this time, it is difficult to determine whether the proposed mitigation would adequately compensate for the impacts to approximately 9 acres of sea grass. While the applicant has proposed other activities, such as the establishment of a local farmer's market and the placement of informational signs and buoys informing boaters of the importance of the aquatic resources of the area, EPA believes that these additional activities are not acceptable to compensate for the significant loss of aquatic resources of national importance that would result from the project. The applicant should develop and submit a comprehensive mitigation plan that includes the methodology to be used to compensate for impacts to sea grass and corals, an estimate of the area to be restored as compensation, and proposed performance measures to ensure that unavoidable impacts are fully mitigated.

The applicant has stated that turbidity barriers and other control measures would be deployed during construction to reduce the impacts of sediment resuspension. However, no details regarding the in-water and shoreline construction measures to control sedimentation and turbidity are included. In addition, the earth movement activities associated with the proposed upland components of the project (parking, restaurant, Customs and Border Protection office, marina offices, security, crew showers and lockers, and marina management housing) will involve land clearing, grading and excavation as well as major construction activity within the Coral Bay watershed. These activities would result in additional impervious surfaces in the vicinity of the bay that would contribute to greater runoff flows and the potential for the introduction of additional pollutants into the water column. According to the information furnished by the applicant, these potential impacts would be minimized and abated through the implementation of sediment and erosion control plan as well as a storm water management plan that were submitted to VIDPNR under a separate Coastal Zone Management permit application and was not included in the Environmental Assessment Report for the marina project. EPA advises that this proposed project requires permits under the Territorial Pollutant Discharge Elimination System (TPDES) program administered by VIDPNR for the discharge of storm

water runoff from the proposed construction activities. In addition, please note that certain construction activities in the ghuts within the project area (such as sediment traps, placement of rip rap, dam embankments, and others) may require compliance with the Territory Isolated Wetlands Permit requirements and Territory earth change requirements. Inland ghuts, such as those that may be present within the project area, are maintained by the Virgin Islands' Department of Public Works (VIDPW), who requires that the flow pathways not be impeded. The applicant should be aware of these requirements and explain how they will comply. Furthermore, the establishment of sediment controls and the diversion of storm water flows to control water velocity and the transport of sediments will be important factors in reducing the potential impacts from sedimentation in the bay. The developer should prepare a Storm Water Pollution Prevention Plan (SWPPP) addressing all storm water and sedimentation issues pursuant to the requirements of the TPDES General Permit. Emphasis should be placed on the development and establishment of controls prior to the start of any earth movement activities. A schedule for the development and implementation of these controls is critical to ensure that adequate storm water erosion and sedimentation management is achieved.

Land based sources of pollution are a major threat to corals and sea grass. In the case of Coral Bay, the surrounding steep slopes, and erodible soils contribute to high sediment loads. In 2009, the Coral Bay Community Council received funding from the American Recovery and Reinvestment Act (ARRA) for the development and implementation of watershed stabilization techniques specific to Coral Bay. As a result of these efforts, the ghuts in the area now receive less sediment-laden flows, reducing the threats from land based sources of pollution to corals and sea grass beds. The proposed project may undo the water quality improvements that have been gained from these efforts. For these reasons, EPA believes that the water quality data at the site must be benchmarked, and a regular monitoring plan must be developed and implemented in order to determine the project's impacts on water quality. Should this monitoring demonstrate the potential for adverse impacts from the project, controls and management strategies must be dynamically adjusted to prevent water quality deterioration within Coral Bay.

The Environmental Assessment Report for the proposed project states that wastewater from the facility would be transported via the marina's pump out system to a 3,000-gallon upland holding tank, and would ultimately be hauled offsite by a licensed carrier for treatment and disposal at Cruz Bay. However, the applicant has stated that the pump out services at the marina would be available to the general public in an effort to help improve water quality at Coral Bay. Furthermore, the applicant has stated that the volume of wastewater to be collected from the general public is unknown at this time. Given the popularity of Coral Bay among boaters, the volume of wastewater that would be collected will likely overwhelm the proposed holding tank, requiring more frequent hauling of the wastes. In addition, the Environmental Assessment Report does not specify whether the proposed holding tank will be used exclusively for the wastewater collected through the vessel pump out system. Since additional wastewater loads associated from the upland facilities associated with the marina are expected, the applicant should provide information regarding the estimated wastewater volume from such facilities, whether other additional holding tanks would be required, and the estimated frequency of wastewater hauling and the capacity of the proposed treatment facility at Cruz Bay. EPA is concerned that the *treatment facility* targeted to receive wastewater from the project could exceed its capacity as a result of the increased loads, resulting in additional impacts to water quality elsewhere in the U. S. Virgin Islands.

Another area of concern for EPA is waste management. Given the large scale of the proposed project, significant amounts of solid waste will be generated. In the case of solid waste, the applicant has stated that the wastes generated during construction and operation of the proposed facility would be deposited in 20-foot roll-off containers, and would be hauled by a local, licensed waste hauler to Bovoni Landfill in St. Thomas for disposal. The solid waste volume to be generated by the proposed marina was estimated at approximately 1,500 pounds per week. While this does not appear to be a significant volume, it is not clear whether this estimate takes into consideration solid waste generated from the upland elements/amenities associated with the marina project. If additional loads from the upland portions of the project were considered separately, they must be accounted for, since significant loads could impact the solid waste disposal facilities of the Virgin Islands, which are already compromised. Therefore, EPA requests that the applicant provide detailed data on the generation of solid wastes at the proposed facility, including estimates of the type and quantity of waste to be generated by both the aquatic and terrestrial elements of the proposed facility. The applicant must also explain how the waste would be ultimately disposed of in order to determine whether the existing solid waste management facilities at Bovoni Landfill can manage the estimated loads. If the applicant considers alternative solid waste management strategies, such as composting and recycling, EPA would like to review descriptions of the processes, the procedures to be followed, and the estimated reduction of solid wastes that would result from such strategies. This information should be incorporated into the solid waste management plan for the proposed development.

Given the large scale of this project, its potential impacts on water quality, aquatic resources of national importance and endangered species, EPA advises that the Environmental Assessment Report does not properly address potential project impacts. While EPA understands that the developers have tried to minimize impacts by avoiding dredging and proposing conceptual compensatory mitigation for the project's unavoidable impacts, it appears that much of the available studies and impact minimization measures have only focused on the sensitive aquatic ecosystem of the area immediately adjacent to the proposed marina. The direct and indirect impacts which may result from the proposed upland elements of the project are just as important and must be considered as a whole rather than as a separate permit action. In addition, while the applicant included a discussion of the alternatives analysis for the project within the Environmental Assessment report, such discussion only considers the full build out of the project and does not adequately assess and discuss the environmental impacts of each alternative. Based on the deficient alternatives analysis, EPA assumes that additional alternatives to achieve the proposed project purpose with lesser environmental impacts, as well as additional opportunities to further reduce the environmental impacts of the project, may be available and must be considered by the applicant.

There are a number of aspects of this project that are expected to impact the level of Greenhouse Gases (GHGs) being emitted into the local environment, such as increased emissions during construction, and long term increases associated with increased automobile and boat traffic to the area. Consistent with the recent Council on Environmental Quality revised Guidance for Greenhouse Gas Emissions and Climate Change Impacts, EPA recommends estimating the greenhouse gas emissions associated with the proposal. EPA also recommends considering measures to reduce greenhouse gas emissions associated with the project, including reasonable alternatives or other mitigation opportunities. Similarly, we recommend the Corps

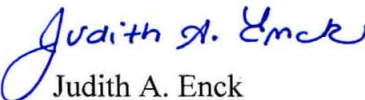
consider, as appropriate, changes to the proposal to make it more resilient to anticipated climate change.

Finally, EPA recommends that this project must be evaluated as a whole, and that the direct and indirect impacts on the surroundings must be considered prior to reaching a permit decision. The regulations by the Council on Environmental Quality for the implementation of the National Environmental Policy Act (NEPA) urge agencies to consider both the context and the intensity of impacts. Specifically, 40 CFR 1508.27(b) states that officials must consider that more than one agency may make decisions about partial aspects of a major action, and that the intensity of a project must be valued in terms of impacts that may be both beneficial and adverse; the degree to which the proposed action affects public health or safety; the unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas; the degree to which the effects on the quality of the human environment are likely to be highly controversial; and the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks. Given the high degree of interest that this project has generated, the unique characteristics of the area, its proximity to the Virgin Islands National Park, the uncertain risks associated with the proposed development, and the extent of the potential impact to aquatic resources, the applicant's Environmental Assessment Report is simply inadequate. In addition, I strongly encourage the Corps of Engineers to hold public hearings on this project in St. John, U.S. Virgin Islands.

After reviewing the available data, EPA remains concerned that the proposed St. John Marina will result in significant impacts to aquatic resources of national importance. This is based on the potential infrastructure needs of the project, its potential for significant water quality degradation, its effects on sea grasses and corals, its indirect impacts on endangered/threatened species and the consideration of the values and functions of the special aquatic sites within the project area. In addition, the applicant has failed to comply with the Clean Water Act Section 404(b)(1) Guidelines due to the lack of a suitable alternatives analysis and a detailed mitigation plan to compensate for the project's unavoidable adverse impacts to the greatest extent possible. EPA therefore recommends the denial of a Department of the Army permit for this project. This letter is intended to satisfy the requirements of both Part IV 3(a) and 3(b) of the Section 404(q) MOA between our two agencies.

If you have any questions regarding this matter, please contact me at (212) 637-5000, or have your staff contact Mr. Jose C. Font, Director of EPA's Caribbean Environmental Protection Division, (787) 977-5870.

Sincerely,


Judith A. Enck
Regional Administrator

cc: U.S. Army Corps of Engineers, San Juan, PR
U.S. Fish and Wildlife Service, Boqueron, PR
National Marine Fisheries Service, Boqueron, PR
V.I. Department of Planning and Natural Resources
National Oceanic and Atmospheric Administration