



# 2024 Secretary of Defense Environmental Award Nomination (Environmental Quality, Team)

Marine Corps Base Camp Blaz  
Guam Environmental Quality Team

## INTRODUCTION

The Marine Corps Base Camp Blaz (MCBCB) Guam Environmental Quality Team (Guam EVQT) is composed of Naval Facilities Engineering Systems Command (NAVFAC) employees assigned to support Joint Region Marianas (JRM) and MCBCB for the implementation of the 2010 Environmental Impact Statement (EIS) and 2015 Supplemental EIS and Records of Decision (ROD). The team’s success means the timely relocation of Marines from Okinawa to Guam in keeping with the Defense Policy Review Initiative (DPRI) international agreement between the U.S. and Japan. The Guam EVQT is comprised of the following key members listed in alphabetical order with their positions and commands:



**Photo 1:** MCBCB Guam EVQT (Left to Right): Omar Damian, Rick Salas, Al Borja, Claire Baradi, Cherry Hoya, Tee Mendiola, and German Nuestro (Members Not Shown: Michelle Yoshioka, Richard Gray and Garwin Eng)

Name	Title
Baradi, Claire	Environmental (EV) Protection Specialist, MCBCB
Borja, Albert “Al”	EV Director, MCBCB
Damian, Charles “Omar”	EV Engineer, MCBCB
Eng, Garwin	Project Manager, NAVFAC Pacific (Guam Program Management Office [GPMO])
Gray, Richard	EV Engineer, NAVFAC Pacific GPMO
Hoya, Maria “Cherry”	EV Protection Specialist, MCBCB
Mendiola, Bertina “Tee”	Natural Resources Specialist, MCBCB
Nuestro, German	EV Protection Specialist, MCBCB
Salas Jr., Richard “Rick”	Physical Scientist, MCBCB
Yoshioka, Michelle	EV Director, NAVFAC Pacific GPMO

JRM is a unique command that includes Andersen Air Force Base (AAFB), Naval Base Guam (NBG) and MCBCB. Guam is part of the Mariana Islands and is home to the native Chamorro people, the first stewards known for their ingenuity, warmth, generosity, and patriotism. Guam’s imperiled island ecology, dependence on a sole-source aquifer, exposure to typhoons and wildfires, and high concentration of cultural sites increase the stakes for rigorous environmental planning and responsible development.

MCBCB is the first new Marine Corps base activated since March 1, 1952. The new base will be home to approximately 5,000 Marines from III Marine Expeditionary Force relocating from Okinawa, Japan. MCBCB’s mission is to provide the Fleet Marine Forces with operational functionality to enhance warfighting capabilities, facilitate the strengthening of coalition partnerships and joint region relationships, while projecting forward presence.

The Guam EVQT ensures the protection of human health and manages the environmentally-responsible implementation of the \$8.7 billion DPRI construction program spanning more than 1,000 acres within MCBCB, which has a total land area of approximately 4,276 acres or 6.68 square miles.

## PROGRAM OVERVIEW

The Guam EVQT administers numerous programs for MCBCB in support of Guam DPRI, which include activities regulated by the Clean Air Act (CAA), Clean Water Act (CWA), Resource Conservation and Recovery Act (RCRA), Safe Drinking Water Act (SDWA), and Toxic Substances Control Act and Guam-specific statutory and regulatory framework that are at times more stringent than federal equivalents. The team is unique as it provides dedicated environmental support and advice to NAVFAC Pacific Officer-in-Charge of Construction Marine Corps Marianas, which provides direct construction management of all Guam DPRI U.S. and Mamizu (Japanese-funded) construction projects. The complexity and difficulty of the environmental quality management work is compounded with the concurrent tasks to assist local regulatory agencies with permitting bottlenecks, establish a new installation within a joint basing framework and the need to transition to MCBCB environmental aspects previously managed by NBG at North and South Finegayan and by AAFB at Andersen South and parts of Northwest Field. Additionally, the Guam EVQT has prioritized support of critical advanced planning activities for the Guam Defense System (GDS), are active participants in proactive installation resilience activities via the Readiness and Environmental Protection Integration (REPI) program and Installation Climate Resilience Plan development, worked with the US Army Corps of Engineers to establish a multi-part regulatory Danger Zone, implemented new Operational Range Assessment principles for new USMC ranges per the 2015 ROD, and provided on-site environmental planning support for the J-008-1 Firefighter Training Complex and the P-745 Guam Wildlife Refuge Relocation Environmental Assessments (EAs) on Guam.

## SUMMARY OF ACCOMPLISHMENTS

During Fiscal Year (FY) 2022-2023, the Guam EVQT delivered on the following objectives:

Objectives	Achievement Highlights
<b><i>Develop MCBCB Responsibly</i></b>	<ul style="list-style-type: none"> <li>Delivered commitments to the people of Guam through focus on compliance and implementation of 2015 ROD-driven best practices and infrastructure upgrades.</li> <li>Published MCBCB Environmental Policy Statement to establish a strong foundation for Environmental Management System (EMS) implementation.</li> <li>Developed critical plans/permits for the new base, kept pace with support for DPRI projects to enable force flow, pivoted capacity to GDS, helped managed EAs for new USMC requirements, and supported critical range activation process.</li> </ul>
<b><i>Promote Local Partnerships</i></b>	<ul style="list-style-type: none"> <li>Participated in the Civilian-Military Coordination Council permits working group.</li> <li>Implemented a Memorandum of Agreement (MOA) between Guam Environmental Protection Agency (GEPA) and NAVFAC Marianas for enhanced collaboration.</li> <li>Streamlined construction design review and permitting process in support of Guam DPRI and leveraged GEPA compliance expertise to enhance construction staff skills.</li> </ul>
<b><i>Enhance Environmental Quality Awareness and Outreach</i></b>	<ul style="list-style-type: none"> <li>Created outreach tools to ensure all MCBCB operations have basic information to ensure minimization of operational impacts and delays from environmental infractions.</li> <li>Utilized key leadership engagements and outreach via the Marine Corps Base Camp Blaz website and social media to highlight environmental stewardship efforts.</li> <li>Used the National Environmental Policy Act (NEPA) process along with resource consultations to solicit environmental justice perspectives from the community for better-informed decision making.</li> </ul>
<b><i>Plan and Collaborate Towards Installation Resilience</i></b>	<ul style="list-style-type: none"> <li>Ensured continuity of operations despite limited utilities and communication by conducting damage assessments and hazardous material abatement.</li> <li>Managed high tempo environmental planning demands for recovery projects after Typhoon Mawar.</li> <li>Administered REPI program green infrastructure initiatives and contributed to climate resilience planning to leverage Government of Guam (GovGuam) partnerships to pave the way for a more resilient base and to reduce regulatory constraints on the mission.</li> </ul>

## DEVELOP MARINE CORPS BASE CAMP BLAZ RESPONSIBLY

The team published in October 2022 a new Environmental Policy Statement for MCBCB signed by Commanding Officer (CO), Colonel Ernest Govea, directing compliance with environmental requirements, prevention of pollution and continual improvement towards establishment of a robust EMS towards full operating capability in FY29. Consistent with the CO's policy statement for continual improvement, the Guam EVQT obtained reimbursable funding and developed solicitations for the award of contract task orders that develop critical plans and other deliver services regulated by the CAA, SDWA, CWA and RCRA. Examples of prioritized projects include air emission inventories, drinking water sampling, spill prevention control and countermeasure plan, and hazardous waste management plan. In addition, the Guam EVQT submitted regular reports in accordance with the Guam DPRI Mitigation Monitoring and Tracking Plan.

The Guam EVQT exemplified commitment to environmental compliance by managing back-to-back regulatory inspections/sanitary surveys of the MCBCB drinking water infrastructure by U.S. Environmental Protection Agency (USEPA) and GEPA, which included the new water infrastructure under construction at the main cantonment. The Guam EVQT worked closely with utility operators throughout the regulatory inspections, having prior established close working relationships through coordination support and assistance when utility personnel were short-staffed. Because of successful pre-inspection planning, teamwork, and effective collaboration, there were no significant regulatory deficiencies.



*Photo 2: German Nuestro performing preparatory inspections at an existing water well at MCBCB.*



*Photo 3: Military and civilian solid waste managers visit the composting operations at MCBCB, which has yielded 3 million cubic yards of material suitable for final landscaping and site stabilization.*

obtained regulatory approval for the cleanup work plan, oversaw the open detonation process of rendering safe the 3-acre area, ensured soils were screened prior to consolidation, and hosted multiple regulatory site visits throughout the duration.

Regarding commitments to 2015 ROD mitigations that are mutually beneficial to both the military and the civilian community, Guam EVQT helped with planning, tracking and coordination of the Northern District Wastewater Treatment Plant upgrade to secondary treatment and the Northern Guam Lens Aquifer deep-well monitoring network, which are protective of marine water quality and drinking water quality, respectively.

As part of advanced planning support for the GDS' high-priority NEPA and site characterization process, the Guam EVQT rapidly performed environmental surveys and analysis to support topographic surveys, geotechnical, and Munitions of Explosive Concern (MEC) reconnaissance to meet aggressive schedules. Three of the proposed Enhanced Integrated Air and Missile Defense sites are located within MCBCB. It is estimated that the in-house effort saved the government approximately \$50,000 compared to contracted work effort.

The Guam EVQT also achieved an innovative partnership with MCBCB range management staff through obtaining US Army Corps of Engineers (USACE) safety buffers for public safety and obtaining agreement in principle from GEPA that explosive range operation at Skaggs Urban Training Complex has low risk to drinking water supplies. The USACE-designated safety buffers at the Mason Live Fire Training Range Complex were made possible by Guam EVQT support of environmental review and response to public comments to achieve publication of USACE's final rule on the Federal Register. The designated two-part safety buffer is innovative as the larger buffer area that could heavily constrain fishing activities is only activated when less frequent training at the machine gun range is active, leaving the smaller buffer area associated with small arms less than .50 caliber to be used more frequently, resulting in a smaller overall effect on fishing areas when ranges are active. The EVQT also developed a site-specific analysis in coordination with range management staff demonstrating to GEPA through simple mass balance calculations to model the exceedingly minute amounts of explosive munition constituents that would be generated at the range. Meetings and correspondence pertaining to the analysis resulted in an agreement in principle that the hand grenade range and breacher facility design does not require substantial changes, which is anticipated to save the taxpayer at least \$5 million from unnecessary construction change orders and annualized operational costs. The munitions constituent analysis will be integrated into the range baseline assessment awarded in 2023, which will then begin the process for full Operational Range Assessments in support of the new Marine Corps ranges in accordance with the 2015 Record of Decision.

Finally, the EVQT successfully completed two significant NEPA milestones in support of MCBCB. First is the timely completion of the Final EA for the critical J-008-1 Firefighter Training Complex, despite significant feedback requiring resolution from key regulatory agencies and incorporating briefs to the Guam Mayor's Council and use of MCBCB social media accounts for public outreach. The environmental justice analysis was a key focus and the reduction of community impacts from cultural and visual resources adverse impacts were also addressed in the analysis. Second is the EVQT's efforts that supported basic facility requirement development that led to completion of a Description of Proposed Action and Alternatives and Site Selection Criteria for Military Construction (MILCON) P-745 Guam Wildlife Refuge Relocation EA on Guam. The EVQT employed in-depth stakeholder coordination and site analysis at no additional cost to the government that fully took into account the status of the Guam Wildlife Refuge as critical habitat and the sensitivity of the Ritidian Archaeological Complex, which is possibly the oldest archaeological site on Guam. The cost avoidance of in-house efforts is approximately \$30,000 compared to contractor work efforts.

## PROMOTE LOCAL PARTNERSHIPS

The activation of Marine Corps Base Camp Blaz comes with a substantial increase in MILCON projects and construction personnel levels on Guam. In light of the potential impacts of this buildup, JRM and the Government of Guam established the Civilian Military Coordination Council (CMCC) in keeping with the 2015 ROD for Guam DPRI. The CMCC established working groups to analyze and develop solutions for government services impacted by Guam DPRI and other mission growth. The Guam EVQT helped staff the Permits Working Group under the CMCC and worked collaboratively to track projections of permitting staff shortfalls and developed courses of action to address the challenge. The result was the signing of a MOA between NAVFAC Marianas Commanding Officer (CO) Capt. Troy Brown and GEPA Administrator that mutually recognizes the adverse impact on permitting services and commitment to collaborate on activities that increase GEPA's ability to respond effectively to the new workload. GEPA staffing is in chronic decline and is less equipped to compete in the job market due to lower relative pay. The net effect is the growing backlog of military project design reviews, which in turn affects mission delivery. To reduce delays, Guam EVQT member Ms. Claire Baradi worked on-site at GEPA's office under the auspices of the NAVFAC-GEPA MOA to collaborate with GEPA Chief Engineer, Capt.



*Photo 4: Governor Lou Leon Guerrero addresses co-chair RDML Gregory Huffmann, Commander JRM, at the Guam Civilian-Military Coordination Council. MCBCB is a member of the CMCC with active staff participation.*

Brian Bearden, on streamlining solutions. As a result of the joint efforts, it became clear that there are two major contributing reasons for the delay in the review process. First, GEPA remains chronically understaffed and needs technical assistance to help meet the demands of the increased workload. Second and just as important, 71% of MILCON packages submitted for GEPA review were incomplete, exacerbating the understaffed conditions by necessitating re-work due to resubmissions.

To address these leading indicators for delays, the Guam EVQT sought the assistance of U.S. Indo-Pacific Command to fund two Professional Engineers that will check MILCON packages against established checklists to catch common issues and to add a layer of quality assurance to ensure submissions are complete. The Guam EVQT quickly wrote the scope of a labor services contract tailor-made to the unique qualifications to support GEPA and was able to award the contract within compressed timelines even as MCBCB was recovering from the devastation of Typhoon Mawar.

To address the lack of existing GEPA guidance and gain efficiencies by reducing errors, the following tools were developed by the Guam EVQT in coordination with GEPA to assist and streamline the existing processes and was widely disseminated to boost knowledge and awareness:



- GEPA Clearing, Grubbing, Grading and Stockpiling (CGGS) Permit Application Checklist – a checklist for the construction contractor summarizing GEPA regulations, standards, and required documents for the CGGS Permit Application.
- GEPA Internal Checklist for MILCON Design Review – a checklist that gives designers and permittees specific stormwater and erosion and sedimentation control criteria based on the 22GAR Chapter 10 Guam Soil Erosion and Sediment Control Regulations and the 2006 CNMI (Commonwealth of the Northern Mariana Islands) and Guam Stormwater Management Manual. This checklist focuses on and is intended for utilization by GEPA staff, project designers, and the public to identify high-priority design criteria for construction projects.
- MILCON Electronic Upload Naming Convention Guidance – describes best practices for MILCON package upload process and provides a naming convention for permit applications. This

*Photo 5: Membership flyer for the SAME Guam Post; the meeting highlighted GEPA and NAVFAC guest speakers, Capt. Bearden and Claire Baradi of the Guam EVQT for status update on permitting.*

helps the GEPA permit staff rapidly categorize submissions as Design-Bid-Build and Design-Build; Conditional and Full Permit Applications; CGGS Permits or Design Reviews; and New and Renewal CGGS Permit Applications.

- CGGS Permit Letter Templates – a standardized permit letter template to uniformly convey permit language and help curb confusion in interpreting the permit requirements, especially those stemming from understanding if the permit is conditional or a full approval. This action helps to avoid potential NOV's though this misunderstanding.
- Pre-Mobilization Guidance for Construction Managers – Provided to construction staff to identify preconstruction submittals and permits and associated timelines to maximize the ability of a construction project to mobilize on schedule with the timely completion of environmental plans and permits.

The collaboration between NAVFAC and GEPA has yielded clear benefits – while MILCON project awards requiring regulatory oversight continue to increase, packages requiring significant rework has decreased from 71% to 44% of applications leading to greater GEPA review bandwidth and efficiency. Ms. Claire Baradi's excellent contribution to the mission was rewarded by the presentation of an Appreciation Coin by Capt. Tim Liberatore, then NAVFAC Marianas CO and Society of American Military Engineers (SAME) Guam Post

President, during a June 2022 SAME membership meeting. The Guam EVQT in-house efforts to kick-start the partnership effort with GEPA saved approximately \$100,000 versus contractor work effort.

## ENHANCE ENVIRONMENTAL QUALITY AWARENESS AND OUTREACH

Every year, the Guam EVQT Environmental Summit touches upon challenging regulatory topics and lessons learned for construction and building managers. For the past two years, Guam EVQT's Summit increasingly focused on the collaborative efforts with GEPA and to reinforce paths to greater efficiency and compliance.



*Photo 6: Capt. Robert Stiles, Commanding Officer, Officer in Charge of Construction Marine Corps Marianas, Capt. Brian Bearden, GEPA Chief Engineer, and Al Borja, MCBCB EV Director, emphasize the partnership between GovGuam and the Navy as they view MCBCB facilities under construction from a distance.*

The 2022 Summit reinforced 2015 ROD mitigation requirements specific to DPRI projects, including: keeping projects within boundaries analyzed under NEPA; focusing on high-risk horizontal projects due to substantial environmental complexity; archaeological monitoring measures associated with the 2011 Programmatic Agreement; threatened and endangered species management (salvage and translocation) from the 2015/2017 Biological Opinions; and updated NAVFAC hazardous spill reporting protocol. Also discussed were an environmental desk guide that outlined EVQT roles in construction project quality assurance to ensure preconstruction submittals incorporated any NEPA-required mitigation requirements and provided expected schedules for submission for timely mobilization. A large portion of the Summit was dedicated to GEPA permitting, as this was a topic with the most room for improvement. Examples and types of permits were discussed in depth, and recommendations were provided for a smoother permit review process with less errors.

Throughout FY22 to FY23, several environmental bulletins were shared with designers and construction managers. These bulletins were discussed at the Summit and new bulletins were presented for discussion:

- Underground Injection Control (UIC) Wells – UIC wells trigger difficult and expensive permitting and monitoring requirements. This bulletin stressed that Class V UIC wells are to be avoided under Guam DPRI. The design review checklist helped set expectations to eliminate inadvertent UIC wells in designs for cost savings.
- Stormwater Management (Sediment Basins and Disturbed Area) – The purpose of this bulletin was to provide guidance and raise awareness for those who oversee and actively work on MCBCB construction projects as a result of an increased observation of undersized basins at construction sites. The bulletin focused on the 2006 CNMI/Guam Stormwater Management Manual's 5,500 cubic foot per acre served sizing requirements for sedimentation basins and the 2022 Construction General Permit 5-acre limitations for unstabilized sites.
- Oil-Water Separators (OWSs) – GEPA regulations under 10 Guam Code Annotated Chapter 76 Article 1, Underground Storage of Regulated Substances require an installation permit application by contractors for construction of OWS.
- Landowner Signature for GEPA Permits – This bulletin touched on the importance of checking and differentiating the permit application signature for the landowner as opposed to the asset owner for wells, solid waste facilities (during project construction), underground storage tanks, and test boring.

Capt. Bearden's presentation at the 2022 Summit included in-depth training on stormwater design and permit principles that was the first of its kind between NAVFAC and GEPA. The training helped to provide clarification on general requirements; erosion and sediment control performance standards; infiltration; post-construction stormwater treatment standards and criteria; unified sizing criteria; updated and simplified criteria calculations; appropriate BMPs and pretreatment, and most importantly, hints, tips, and observations from previous MILCON applications. The Guam EVQT records the trainings and uploads them with slides on the MCBCB environmental program website.

In addition to working with local regulatory partners, key leadership and public engagements were also a critical line of effort to promote awareness of the EVQT's efforts to preserve and enhance environmental quality. The team hosted visits by members of the Guam Legislature, USEPA, Guam Preservation Trust, Human Rights

Watch, University of Guam Water and Environmental Research Institute, Department of Chamorro Affairs, Association of State and Territorial Solid Waste Management Officials and many others.

## PLAN AND COLLABORATE TOWARDS INSTALLATION RESILIENCE

In addition to non-discretionary efforts to support emergent mission requirements, the EVQT are also members of the JRM REPI team and have actively pursued proactive off-base solutions to increasing regulatory constraints and to address installation resilience through improvements to green infrastructure on GovGuam parcels. To date, the EVQT have successfully advocated for more than \$11 million in environmental funding to improve the protection of land and water resources. The EVQT have also begun coordination of MCBCB Installation Climate Resilience Plan, which will focus on identifying climate risks to installation operations and develop strategies and means to increase resilience to the most damaging aspects of climate change that affect Guam. JRM REPI lessons-learned in considering holistic off-base landscape-level solutions to declining natural resource health and associated threats to groundwater and marine water quality will be integrated into planning activities. The EVQT also assisted the Assistant Regional Engineer staff by submitting to the Office of Local Defense Community Cooperation a nomination for GovGuam's inclusion in the Installation Resilience program.

In May 2023, Guam was directly hit by Super Typhoon Mawar resulting in widespread damage of facilities and interruption of public services on Guam. The EVQT team ensured continuity of operations despite island-wide limitation in utilities, fuel, and communication by reporting to work as quickly as feasible to assist with damage assessments and managed increasing environmental planning demand to develop projects for repairs. Issues resolved during this high operational tempo event include rapid evaluation and cleanup of asbestos-containing roofing material and floor tiles, utilization of emergency provisions in developing Categorical Exclusions, in-house temporary repairs and cleanup of critical environmental facilities and maintenance trails, and survey of base areas for debris removal. The Guam EVQT were recognized by the MCBCB Public Works Department with an on-the-spot certificate for outstanding support during typhoon preparation and recovery efforts.



*Photo 7: This mosaic depicts the challenges of post-Typhoon Mawar recovery, with heavy damage to infrastructure, debris from both nearby forests and construction areas, and damaged water and power infrastructure. Center: Rick Salas performs damage assessments and visual reconnaissance for hazardous debris requiring specialized abatement.*



*Photo 8: Cherry Hoya inspects the perimeter of a project at MCBCB on a sunny day.*

## A BRIGHT FUTURE OF ENVIRONMENTAL EXCELLENCE

Proper management of environmental quality across Guam's unique set of compliance and planning challenges requires in-depth understanding of the local regulatory landscape, multi-disciplinary approach to problem solving, and alignment of mission focus with community partnership.

The Guam EVQT is part of the largest ongoing construction program on Guam and is poised for greater support as MCBCB looks to future training in Tinian. By tapping into the diverse talent within NAVFAC, the MCBCB Guam EVQT will steadfastly uphold environmental quality at MCBCB while supporting emerging GDS priorities. The hard-earned lessons and solutions will help pave the way for accomplishment of the National Defense Strategy while keeping faith with environmental commitments to the people of Guam.