

**Draft**

# **Supplemental Environmental Impact Statement**

## **Guam and Commonwealth of the Northern Mariana Islands Military Relocation (2012 Roadmap Adjustments)**

*Prepared for:*

Joint Guam Program Office  
Washington, DC

*Prepared by:*

Naval Facilities Engineering Command Pacific  
Pearl Harbor, HI

Under

Contract Number N62742-11-D-1801  
Delivery Order No: 0011

**April 2014**

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## DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (SEIS)

**Lead Agency:** Department of the Navy  
**Title of Proposed Action:** Guam and Commonwealth of the Northern Mariana Islands Military Relocation (2012 Roadmap Adjustments)  
**Affected Jurisdictions:** Guam  
**Designation:** Draft SEIS  
**Public Comments Due by:** June 16, 2014 midnight (EDT); June 17, 2014 midnight (ChST)

### Abstract

In September 2010, the U.S. Department of the Navy (DON) signed a Record of Decision (ROD) regarding the 2010 Final Environmental Impact Statement (EIS) for the *Guam and Commonwealth of the Northern Mariana Islands (CNMI) Military Relocation*. In April 2012, the U.S.-Japan Security Consultative Committee jointly announced an adjustment to the previous plans for the Guam military relocation. In accordance with these “2012 Roadmap Adjustments,” the Department of Defense (DoD) adopted a new force posture in the Pacific providing for a materially smaller and reconfigured Marine Corps force on Guam.

Pursuant to the National Environmental Policy Act (NEPA) and the Council on Environmental Quality’s implementing regulations for NEPA, the DON prepared this Draft SEIS for the purpose of supplementing the portions of the 2010 Final EIS regarding the establishment on Guam of a live-fire training range complex (LFTRC), a cantonment area (including family housing), and associated infrastructure to support the relocation of a substantially reduced number of Marines and dependents than was previously analyzed. By supplementing the 2010 Final EIS, this Draft SEIS advances NEPA’s purpose of informing decision-makers and the public about the environmental effects of the DON’s proposed action.

The following federal agencies having either jurisdiction or technical expertise for certain components of the proposed action or a potentially affected resource have accepted the DON’s invitation to participate as cooperating agencies: U.S. Air Force, Federal Aviation Administration, Federal Highway Administration, U.S. Environmental Protection Agency Region 9, U.S. Department of Interior - Office of Insular Affairs, and U.S. Department of Agriculture.

This Draft SEIS analyzes the potential environmental impacts of four action alternatives for the cantonment/family housing component of the proposed action and five action alternatives for the LFTRC component, plus a no-action alternative. Potential impacts have been analyzed for geological and soil resources, water resources, air quality, noise, airspace, land and submerged land use, recreational resources, terrestrial biological resources, marine biological resources, cultural resources, visual resources, ground transportation, marine transportation, utilities, socioeconomics and general services, hazardous materials and wastes, public health and safety, and environmental justice.

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**April 2014**

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(2012 Roadmap Adjustments)  
Supplemental Environmental Impact Statement**

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### Acronyms and Abbreviations

AAFB	Andersen Air Force Base	CNIC	Commander, Navy Installations Command
AAMDTF	Army Air and Missile Defense Task Force	CNMI	Commonwealth of the Northern Mariana Islands
ACE	Aviation Combat Element	CNO	Chief of Naval Operations
ACHP	Advisory Council on Historic Preservation	CO	carbon monoxide
ACM	asbestos-containing material	CO <sub>2</sub>	carbon dioxide
ADA	Americans with Disabilities Act	COMNAV	Commander Navy Region
ADNL	A-weighted DNL	CWA	Clean Water Act
ADP	Adaptive Program Management	CWCS	Comprehensive Wildlife Conservation Strategy
AGL	above ground level		
AICUZ	Air Installation Compatible Use Zone	dB	decibels
AIDS	Acquired Immune Deficiency Syndrome	dBA	A-weighted dB
AOC	Area of Concern	dBC	C-weighted dB
APZ	Accident Potential Zone	DMM	discarded military munitions
ARPA	Archeological Resources Protection Act	DNL	day-night average sound level
ATC	Air Traffic Control	DoD	Department of Defense
AT/FP	Anti-Terrorism/Force Protection	DoDEA	Department of Defense Education Activity
ARTCC	Air Route Traffic Control Center	DOI	Department of the Interior
AT	Antiterrorism	DON	Department of the Navy
ATCAA	Air Traffic Control Assigned Airspace	DRMO	Defense Reutilization Marketing Office
B	Beneficial	DRS	Demand-Response Service
BA	Biological Assessment	E	endangered
BEQ	Bachelor Enlisted Quarters	EAC	Economic Adjustment Committee
BFR	Base Facility Requirement	ECF	entry control facility
BI	beneficial impact	EFH	Essential Fish Habitat
BMP	Best Management Practice	EIS	Environmental Impact Statement
BNOISE2	Blast Noise Impact Assessment	EISA	Energy Independence and Security Act
BO	Biological Opinion	EMR	electromagnetic radiation
BOQ	Bachelor Officer Quarters	EO	Executive Order
C	candidate	EOD	Explosive Ordnance Disposal
C&D	construction and demolition	EPP	Environmental Protection Plan
CAA	Clean Air Act	ERA	Ecological Reserve Area
cal	caliber	ESA	Endangered Species Act
CDNL	C-weighted DNL	ESQD	Explosive Safety Quantity-Distance
CEQ	Council on Environmental Quality	ESS	Explosives Safety Submission
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act	FAA	Federal Aviation Administration
CES/CEV	Civil Engineering Squadron Environmental Flight	FHWA	Federal Highway Administration
CFA	Controlled Firing Area	FICUN	Federal Interagency Committee on Urban Noise
CFR	Code of Federal Regulations	FL	flight level
CJMT	CNMI Joint Military Training	FPCON	Force Protection Condition
CLTC	Chamorro Land Trust Commission	FR	Federal Register
cm	centimeter	FTE	full time equivalent
CMCC	Civilian Military Coordination Council	FY	Fiscal Year
		GALC	Guam Ancestral Lands Commission

gal		gallon	iNFADS	internet Navy Facilities Asset Data Store
GAR	Guam Administrative Rules and Regulations		INRMP	Integrated Natural Resources Management Plan
GBSP	Guam Bureau of Statistics and Plans		IT/COMM	information technology/communications
GCA	Guam Code Annotated		JGPO	Joint Guam Program Office
GCC	Guam Community College		JoG	Judiciary of Guam
GDAWR	Guam Division of Aquatic and Wildlife Resources		JRM	Joint Region Marianas
GDISID	Guam Department of Integrated Services for Individuals with Disabilities		KD	known distance
GDMHSA	Guam Department of Mental Health and Substance Abuse		kg	kilogram
GDoC	Guam Department of Corrections		km	kilometer
GDoE	Guam Department of Education		kV	kilovolt
GDPHSS	Guam Department of Public Health and Social Services		KW	kilowatt
G DPR	Guam Department of Parks and Recreations		LBP	lead-based paint
GDPW	Guam Department of Public Works		LEDPA	Least Environmentally Damaging Practicable Alternative
GDYA	Guam Department of Youth Affairs		LEED	Leadership in Energy and Environmental Design
GEPA	Guam Environmental Protection Agency		L <sub>eq</sub>	equivalent sound level
GFD	Guam Fire Department		LFTRC	live-fire training range complex
GHPI	Guam Historic Properties Inventory		LID	Low Impact Development
GIP	Gross Island Product		LOS	level of service
GIS	geographic information system		LSI	less than significant impact
GMHA	Guam Memorial Hospital Authority		m	meters
GOV	government-owned vehicle		m <sup>3</sup>	cubic meters
GovGuam	Government of Guam		MBTA	Migratory Bird Treaty Act
GPA	Guam Power Authority		MCO	Marine Corps Order
GPD	Guam Police Department		MEB HQ	Marine Expeditionary Brigade Headquarters
GPLS	Guam Public Library System		MEC	Munitions and Explosives of Concern
GRN	Guam Road Network		MGd	million gallons per day
GRTA	Guam Regional Transit Authority		MIRC	Mariana Islands Range Complex
GWA	Guam Waterworks Authority		MITT	Mariana Islands Training and Testing
GWUDI	groundwater under the direct influence		MLd	million liters per day
ha	hectares		mm	millimeter
HACCP	Hazard Analysis and Critical Control Point		MMRP	Military Munitions Response Program
HAPC	Habitat Area of Particular Concern		MOVES	Motor Vehicle Emissions Simulator
HG	hand grenade		MPA	Marine Protected Area
HMU	Habitat Management Unit		MPMG	Multi-Purpose Machine Gun
IAP	Installation Appearance Plan		MPPEH	material potentially presenting an explosive hazard
ICS	industrial control systems		MRF	Modified Record of Fire
ID	identification		MSA	Munitions Storage Area
IFR	Instrument Flight Rules		MSAT	mobile source air toxics
ILS	Instrument Landing Systems		MSL	mean sea level
IMPLAN	Impact Analysis for Planning		MSW	Municipal Solid Waste
IRP	Installation Restoration Program		MTVR	Medium Tactical Vehicle Replacement

MUS	Management Unit Species	ppb	parts per billion
MW	megawatt	ppm	parts per million
NA	not applicable	PRTC	Pacific Regional Training Center
NAAQS	National Ambient Air Quality Standards	PTSD	Post-Traumatic Stress Disorder
NAVFAC	Naval Facilities Engineering Command	QOL	Quality of Life
NAVFIG	Naval Flight Information Group	RAICUZ	Range Air Installation Compatible Use Zone
NAVMAG	Naval Magazine	RAM	Random Antiterrorism Measures
NDAA	National Defense Authorization Act	RC	Recently Completed
NEIC	National Enforcement Investigations Center	RED HORSE	Rapid Engineer Deployable Heavy Operational Repair Squadron Engineers
NEPA	National Environmental Policy Act	REVA	Range Environmental Vulnerability Assessment
NEXRAD	Next-Generation Radar	RF	Reasonably Foreseeable
NGLA	Northern Guam Lens Aquifer	ROD	Record of Decision
NHP	National Historic Park	ROI	region of influence
NHPA	National Historic Preservation Act	RWY	Runway
NI	no impact	SARNAM	Small Arms Range Noise Assessment Model
NMFS	National Marine Fisheries Service	SAW	Squad Automatic Weapon
NOx	oxides of nitrogen	SDDCTEA	Surface Deployment and Distribution Command – Transportation Engineering Agency
NOAA	National Oceanic and Atmospheric Administration	SDZ	surface danger zone
NOI	Notice of Intent	SEIS	Supplemental Environmental Impact Statement
NPDES	National Pollutant Discharge Elimination System	SHPO	State Historic Preservation Office
NR	Not Reported	SI	significant impact
NRHP	National Register of Historic Places	SIAS	Socioeconomic Impact Assessment Study
NWF	Northwest Field	SI-M	significant impact but mitigable
NWI	National Wetlands Inventory	SNCO	Staff Non-Commissioned Officer
NWR	National Wildlife Refuge	SO <sub>2</sub>	sulfur dioxide
OEIS	Overseas Environmental Impact Statement	SOGCN	Species of Greatest Conservation Need
OPNAVINST	Chief of Naval Operations Instruction	SPAWAR	Space and Naval Warfare Systems Command
ORC	Operational Range Clearance	SPCC	Spill Prevention, Control, and Countermeasure
OSHA	Occupational Safety and Health Administration	SSPP	Strategic Sustainability Performance Plan
P	Present	STD	Sexually Transmitted Disease
PA	Programmatic Agreement	STP	sewage treatment plant
PAG	Port Authority Guam	SUA	Special Use Airspace
PCB	polychlorinated biphenyl	SWMP	Stormwater Management Plan
PCE	primary constituent elements	SWPPP	Stormwater Pollution Prevention Plan
pCi/L	picocuries per liter	T	threatened
PDIA	Potential Direct Impact Area	TCP	Traditional Cultural Property
PIIA	Potential Indirect Impact Area	TMDL	Total Maximum Daily Load
PM	particulate matter	tpy	tons per year
PM <sub>2.5</sub>	particulate matter less than or equal to 2.5 microns in diameter	U&SI	utilities and site improvements
PM <sub>10</sub>	particulate matter less than or equal to 10 microns in diameter	UDP	Unit Deployment Program
POL	petroleum, oil, and lubricants		
POV	privately-owned vehicle		

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UFC	Unified Facilities Criteria	V	Version
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter	v/c	volume to capacity
UIC	Underground Injection Control	VFR	Visual Flight Rules
UoG	University of Guam	VOC	volatile organic compound
U.S.	United States	WA	Warning Area
USACE	U.S. Army Corps of Engineers	WERI	Water and Environmental Research Institute
USC	U.S. Code	WG	Wing
USDA	U.S. Department of Agriculture	WWII	World War II
USEPA	U.S. Environmental Protection Agency	WWPS	Wastewater Pump Station
USFWS	U.S. Fish and Wildlife Service	WWTP	Wastewater Treatment Plant
USFS	U.S. Forest Service	X	Adverse
USGS	U.S. Geological Survey	$\text{yd}^3$	cubic yards
UXO	unexploded ordnance		

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