Decision Document
New Apra Heights Disposal Area, AOC-1
FORMER NAVACTS, GUAM

April 2005

Commander
Naval Facilities Engineering Command, Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134

NAVFAC
Naval Facilities Engineering Command
NAVFAC PACIFIC

Comprehensive Long-Term Environmental Action Navy
Contract Number N62742-94-D-0048, CTO 0051

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Prepared for:

NAVFAC
Naval Facilities Engineering Command
NAVFAC PACIFIC

Commander
Naval Facilities Engineering Command, Pacific
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 96860-3134

Prepared by:

Earth Tech, Inc.
841 Bishop Street, Suite 500
Honolulu, HI 96813-3920

Prepared under:

Comprehensive Long-Term Environmental Action Navy
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CONTENTS

ACRONYMS AND ABBREVIATIONS

AM	action memorandum
AOC	area of concern
BCT	BRAC Cleanup Team
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	chemical of concern
COPEC	chemical of potential ecological concern
CSM	conceptual site model
DD	decision document
EPA	Environmental Protection Agency, United States
GEPA	Guam Environmental Protection Agency
HI	hazard index
HQ	hazard quotient
NAVACTS	Naval Activities
NAVFAC Pacific	Naval Facilities Engineering Command Pacific
PRE	preliminary risk evaluation
PRG	preliminary remediation goal
RAB	restoration advisory board
RAGS	Risk Assessment Guidance for Superfund
RME	reasonable maximum exposure
RSE	removal site evaluation
RVR	remediation verification report
SRA	screening ecological risk assessment
SI	site investigation
U.S.	United States

1. Declaration

1.1 Site Name and Location

This Decision Document (DD) has been prepared for the Former Naval Activities (NAVACTS) New Apra Heights Disposal Area, Area of Concern (AOC) 1 in Santa Rita, Guam.

1.2 Statement of Basis and Purpose

This DD presents the no further response action decision for AOC-1. The final decision was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act, and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan. Concurrence with this no further response action DD by the Guam Environmental Protection Agency (GEPA) is indicated by signature below. Concurrence with the decision by Region IX of the United States (U.S.) Environmental Protection Agency (EPA) is indicated in a letter contained in Appendix A of this DD.

1.3 Description of the Selected Remedy

The selected remedy for AOC-1 is no further response action. A limited time-critical soil removal action at AOC-1 in 2002 excavated approximately 20 cubic yards of metals-contaminated soils from two "hot spot" locations and disposed of it off-island at a facility approved to accept CERCLA wastes. The removal action was conducted to reduce potential risks to ecological receptors to acceptable levels. Confirmation sampling results following the soil removal indicate that the removal action objective was achieved. Therefore, AOC-1 is in a protective state for human health and the environment for unrestricted use, and no further response action is necessary. This decision is supported by documents in the administrative record for New Apra Heights. The Base Realignment and Closure (BRAC) Cleanup Team (BCT), which consists of representatives of the GEPA, the EPA Region IX, and the U.S. Navy, concur with this decision.

1.4 Statutory Determinations

The U.S. Navy has determined that AOC-1, following a CERCLA time-critical hot spot removal action to remove metals-contaminated soils, is in a protective state for human health and the environment for unrestricted use; therefore, no further response action is necessary. This decision is based on the results of post-excavation confirmation sampling, which indicated that residual metals in soils present at AOC-1 either

- Do not exceed background concentrations for metals, or
- Are below EPA Region IX risk-based cleanup levels for unrestricted use.

Therefore, no additional site cleanup work is needed for AOC-1. Moreover, based upon the afore-mentioned conditions, the 5-year review requirement under CERCLA Section 121(c) does not apply.

1.5 SIGNATURE AND SUPPORT AGENCY ACCEPTANCE OF REMEDY

The U.S. Navy and the GEPA have determined that no further response action is necessary for unrestricted use at the New Apra Heights Disposal Area (AOC-1) of the New Apra Heights parcel.

Melvin Z. Waki

Melvin Z. Waki, P.E.
Head, Environmental Services Department
Naval Facilities Engineering Command, Pacific

4/22/05
Date

Fred Castro

Fred Castro, Administrator
Guam Environmental Protection Agency

4/27/05
Date

2. Decision Summary

2.1 Site Name, Location, and Description

The New Apra Heights Disposal Area (AOC-1) is located east of Agat Bay and south of Apra Harbor. The site consists of 28 acres in the southwestern portion of the New Apra Heights parcel along the southeastern perimeter of the New Apra Heights subdivision, just north of Southern High School (see Figure 1). The site is unused and contains no structures. The area is overgrown with tangantangan scrub and cane grass and includes limited wetland areas.

The Navy is the lead agency for environmental cleanup at Navy sites, such as AOC-1. GEPA and EPA IX have provided oversight during environmental investigations and cleanup activities on Navy BRAC properties.

2.2 Site History and Enforcement Activities

Historically, the U.S. Navy and the U.S. Army used the site. From the 1940s through part of the 1970s, the west-central portion of the New Apra Heights parcel was part of Camp Busanda, a former worker housing area for Public Works Center, Guam. Former Camp Busanda is located north of AOC-1. The Army also used the southeast portion of the site as a motor pool and storage yard.

The discovery of stained soil and buried scrap metal during construction of Southern High School led to a site investigation (SI) to assess the nature and extent of contamination (Ogden 1995). The SI determined that contaminants associated with the stained soil and the scrap metal pile posed an unacceptable risk to human health and the environment. The SI indicated that contaminants may have migrated to the adjacent property (AOC-1) and, therefore, recommended additional investigation.

A remedial investigation at AOC-1 was conducted in a phased approach to determine the nature and extent of contamination (Earth Tech 2001b). The investigation consisted of biological reconnaissance, topographic surveying, geophysical surveying, passive soil gas surveying, surface and subsurface soil sampling, geotechnical sampling, and a debris inventory. Four hot spot locations of metals-contaminated soils were identified in the first round of soil sampling. A second round of soil sampling was conducted at the four hot spot locations to determine the vertical and horizontal extents of metals exceeding the screening criteria. Based on the data from both rounds of sampling, it was determined that the site posed no unacceptable risks to human health, but two of the four hot spot locations contained metals at concentrations that posed a potential risk to ecological receptors.

A removal site evaluation (RSE) was conducted in 2001 (Earth Tech 2001b) for AOC-1 to evaluate the appropriate response action to reduce ecological risks to protective levels. The RSE concluded that a limited surface soil removal action at two hot spot locations would reduce risks to the environment to protective levels. In 2002, a time-critical removal action (IT Corporation 2003) removed approximately 20 cubic yards of metals-contaminated soil from AOC-1 and transported it off island for disposal at a landfill approved to accept CERCLA waste. One of the excavated areas was then backfilled with onsite borrow materials. The other excavation did not require backfill because of its proximity to wetlands and concerns that placement of fill material from another location could introduce new species to the wetlands. Verification sampling was conducted at both excavations and it was determined that the site-specific cleanup objectives had been met. This information was presented to the BCT in a remediation verification report (RVR) (IT Corporation 2003).

To facilitate reuse of the property after early transfer, a determination letter was reviewed by the BCT and approved by GEPA, EPA, and the Navy (GEPA 2001). This letter permits the Government of Guam to use the property for industrial purposes while the environmental closure process continues and the DD is being reviewed and finalized.

2.3 COMMUNITY PARTICIPATION

Community participation in decisions about environmental activities at the New Apra Heights parcel has been encouraged throughout the environmental restoration and site closure processes. In an effort to involve the public in the decision-making process for BRAC activities at the New Apra Heights Parcel, a Restoration Advisory Board (RAB) was established in 1998. The RAB is composed of BCT and community representatives who attend regularly scheduled meetings (typically on a quarterly basis). Additionally, the Navy established a point of contact for the public in the Naval Facilities Engineering Command, Pacific (NAVFAC Pacific).

A notice of availability for the Proposed Plan was published in the *Pacific Daily News* on 18 July and 21 July 2004. A public comment period was held from 22 July through 23 August 2004. In addition, a public meeting was conducted on 22 July 2004 to present the Proposed Plan. At this meeting, the Navy answered questions about the site and the no further response action alternative. No written comments were received during the comment period. The Navy's response to comments received is included in the Responsiveness Summary, which is Appendix B of this DD.

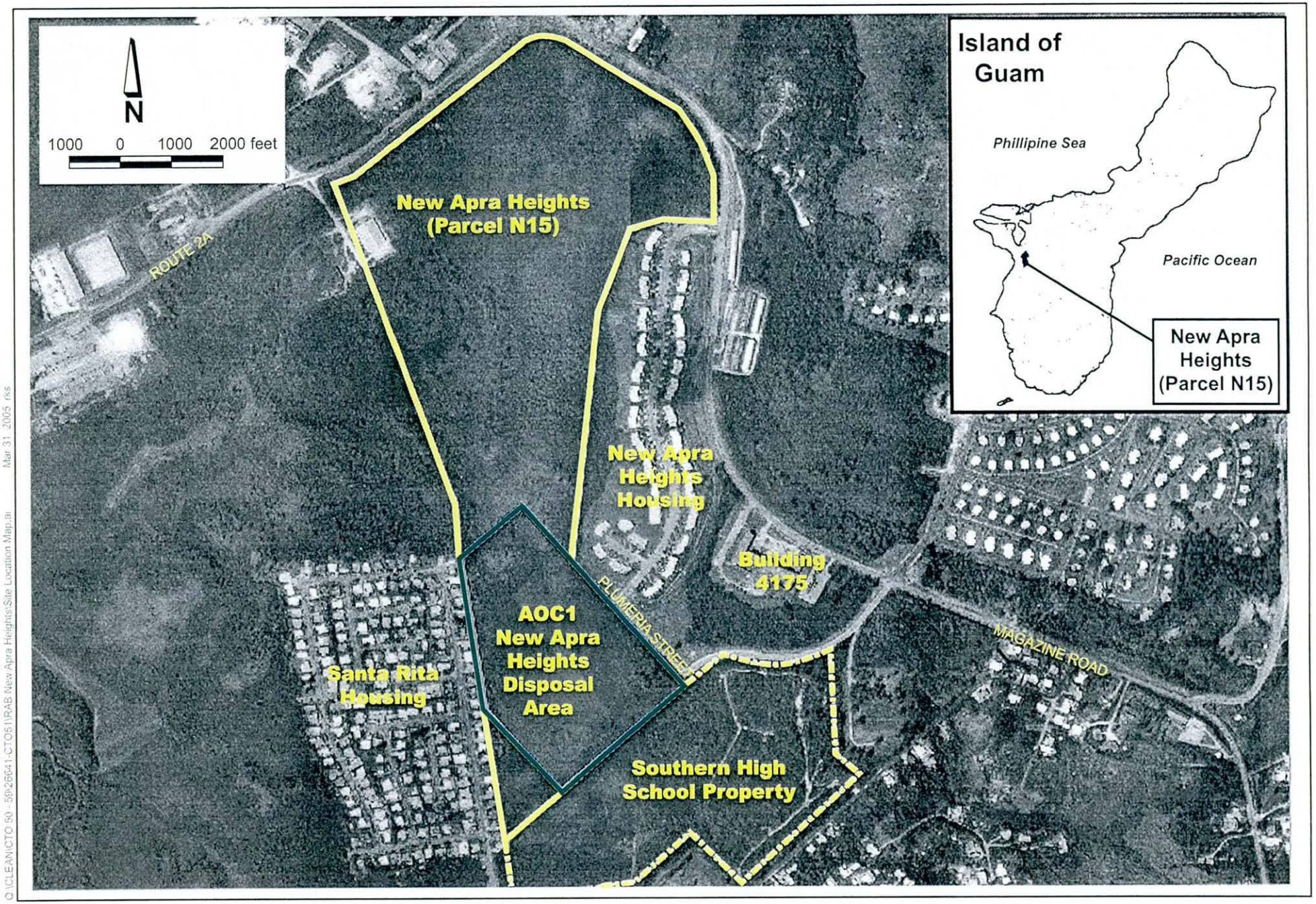
Throughout site investigation and cleanup, the Navy has prepared 10 fact sheets to inform and update the community on the progress of BRAC activities. These fact sheets and other project documents, including work plans, technical reports, and other materials relating to the New Apra Heights parcel investigation, may be found in the information repository (Administrative Record) at the following address:

Nieves M. Flores Memorial Library
254 Martyr Street
Hagatna, Guam 96910

Ask to see the Administrative Record for the New Apra Heights Parcel. Additional project information is located at NAVFAC Pacific, Pearl Harbor.

2.4 SCOPE AND ROLE OF THE NO FURTHER RESPONSE ACTION DECISION

Under CERCLA, the decision to take no further response action is appropriate for sites that pose no current or potential unacceptable risk to human health or the environment. Based on the results of soil investigations at AOC-1, as documented in the 2001 RSE report (Earth Tech 2001b), the post–removal-action confirmation sampling results presented in the RVR (IT 2003), and the 2004 Proposed Plan (Earth Tech 2004), the BCT concluded that the CERCLA removal action successfully lowered risks to human health and the environment and that no further response action is necessary at this site, which is planned for unrestricted use.



Q:\CLEAN\CTO 50 - 5912641-CTO51\RAB New Apra Heights\Site Location Map.ai Mar 31, 2005 rks

Figure 1
Site Location Map
New Apra Heights Disposal Area (AOC-1)
Former NAVACTS, Guam

2.5 SITE CHARACTERISTICS

Initial surface and subsurface soil sampling was conducted during the RSE within specific AOC-1 locations selected on the basis of geophysical survey, wetland survey, observed surface debris, and results of the passive soil-gas survey. Surface soil samples were collected at 20 trench locations and 12 additional areas of suspected contamination. Subsurface soil samples were collected from the 20 trench locations. Samples were analyzed for volatile organic compounds, semi-volatile organic compounds, pesticides, polychlorinated biphenyls, total petroleum hydrocarbons, explosives, and metals. Metals were the only analytes that were detected at concentrations above EPA Region IX industrial and residential preliminary remediation goals (PRGs). The Screening Ecological Risk Assessment (SRA) identified arsenic, lead, and zinc as being present at concentrations that pose an unacceptable risk to ecological receptors based on toxicity reference values supplied by the EPA (Earth Tech 2001b).

2.6 CURRENT AND POTENTIAL FUTURE SITE AND RESOURCE USES

Current Use. On 11 April 2001, the New Apra Heights parcel was transferred to the Government of Guam under the BRAC program. AOC-1 is currently not in use and has not been actively used by the Navy since the 1970s.

Future Use. The Guam Land Use Plan identified the property for future industrial use (GEDA 1996); however, unrestricted use was also evaluated. For this parcel, the BCT determined in 2003 that the site was suitable for unrestricted use.

2.7 SUMMARY OF SITE RISKS

Site risks were evaluated using two separate methods: a preliminary risk evaluation (PRE) for human health and a SRA for ecological effects.

Human Health Preliminary Risk Evaluation. A risk-based evaluation was completed as part of the RSE. The first step of the risk-based evaluation was to develop a conceptual site model (CSM). Taking into account current and proposed land uses, the CSM was designed to evaluate site contaminant exposure pathways to site receptors. Potentially complete pathways were identified as those pathways that have a contaminant source, a transport mechanism, a point at which contact with a contaminant may occur, and a toxicological exposure route (i.e., oral, dermal, or inhalation). The CSM of AOC-1 identified hypothetical future residents and future industrial workers as potential receptors with complete exposure pathways. The complete pathways identified were dermal contact and incidental ingestion of contaminated surface and subsurface soil. A preliminary risk evaluation (PRE) was conducted for chemicals of concern (COCs) detected in surface and subsurface soil in accordance with the EPA *Risk Assessment Guidance for Superfund (RAGS)* (EPA 1989) and the *Supplemental Guidance to RAGS: Calculating the Concentration Term* (EPA 1992). To evaluate risk from exposure to COCs under the risk-based evaluation, the reasonable maximum exposure (RME) was compared to EPA Region IX residential PRGs. The RME is the highest level of human exposure that could reasonably be expected to occur from the chemicals detected on site. The PRGs represent the concentration below which no significant health effects are likely to occur.

Using the RME, the excess and cumulative cancer risks were calculated for carcinogens. These risks are probabilities that are typically expressed in scientific notation (e.g., 1E–06). An excess lifetime cancer risk of 1E–06 indicates that an individual experiencing the RME estimate has a 1 in 1,000,000 chance of developing cancer as a result of site-related exposure. This is referred to as an "excess lifetime cancer risk" because it would be in addition to the risks of cancer individuals face

from other causes, such as smoking or overexposure to the sun. The cumulative cancer risk is the sum of all excess cancer risks.

The EPA has established a "point of departure" of 1E–06 for excess cancer risk. A finding of cumulative cancer risk greater than the point of departure, but less than 1E–04 (i.e., the "risk range") warrants further evaluation or a response action, which may include land use controls.

The hazard index (HI) evaluates noncarcinogenic effects. The HI is the cumulative total of hazard quotients (HQs). A HQ is the ratio of exposure to toxicity for a given chemical. An HI less than 1 indicates that, based on the sum of all HQs from different contaminants and exposure routes, toxic noncarcinogenic effects from all contaminants are unlikely. A HI greater than 1 indicates that site-related exposures may present a risk to human health.

The results of those evaluations for AOC-1 are summarized in Table 1. The results under a residential exposure scenario are as follows:

- The surface soil maximum and RME cumulative cancer risks for residential exposures of 7.0E–05 and 2.2E–05, respectively, are within the risk range of 1.0E–06 and 1.0E–04.
- The subsurface soil maximum and RME cumulative cancer risks for residential exposures of 1.4E–04 and 1.4E–05, respectively, show that the maximum risks just exceed the risk range of 1.0E–06 and 1.0E–04, and the RME risks are within this risk range.
- The HI is greater than 1 for both surface and subsurface soil.
- Cancer risks are driven primarily by the presence of arsenic in soil. Arsenic in soils may be naturally occurring.
- HIs are driven primarily by iron, which is also likely to be naturally occurring.

Estimated risks and hazards to human health indicated that the arsenic and iron were primary risk drivers but both metals were present within naturally occurring concentrations. Therefore, no remedial action was necessary for the protection of human health. Naturally occurring (background) concentration ranges of metals were estimated for use in the human health and ecological risk assessments. The background metals evaluation was reviewed and agreed to by the BCT and indicated that most metals concentrations exceeding the conservative human health and ecological risk screening criteria resulted from naturally occurring conditions.

Table 1: Summary of Preliminary Risk Evaluation Results for the New Apra Heights Disposal Area, AOC-1

Receptor/Media	Maximum Exposure Cancer Risk	RME Cancer Risk	Maximum Exposure HI	RME HI	Primary Risk Drivers Cancer/HI
Hypothetical Future Resident					
Surface soil	7.0E–05	2.2E–05	2.9E+01	5.7E+00	Arsenic/Iron
Subsurface soil	1.4E–04	1.4E–05	1.8E+01	5.6E+00	Arsenic/Iron
Future Industrial Worker					
Surface soil	1.1E–05	3.2E–06	8.2E+00	1.3E+00	Arsenic/Iron
Subsurface soil	2.0E–05	2.0E–06	2.5E+00	1.3E+00	Arsenic/Iron

Screening Ecological Risk Assessment. A SRA was conducted for AOC-1. Representative mammal and bird species were selected to evaluate the biota potentially at risk in the area. The primary exposure pathways at AOC-1 for ecological receptors are related to contaminated upland and wetland soils. A total of 17 metals were detected in upland surface soil and 18 in wetland surface soil. Pesticides, polynuclear aromatic hydrocarbons, and phthalates were also detected in wetland soil and were retained for consideration in the SRA. Antimony, copper, lead, mercury, and zinc were retained as chemicals of potential ecological concern (COPECs) in upland soils, and arsenic, lead, mercury, nickel, and zinc were retained as COPECs for wetland soils. Potential exposure to contaminants in surface water (surface runoff or groundwater seepage) was considered to be insignificant because surface water does not persist at the site and groundwater contaminants would be diluted and attenuated.

The SRA was conducted in accordance with the *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments* (EPA 1997). The SRA evaluated the potential for significant adverse ecological effects from receptor exposure to COPECs detected in soil at the site.

This assessment involves three steps: (1) site characterization or identification of COPECs, (2) biological characterization and an evaluation of the ecological habitat, and (3) pathway assessment and risk characterization. The ecological community is at risk only if there exists a complete pathway to COPECs.

HQs and HIs were compared to the threshold value of 1 to assess potential risks to site ecological receptors. HQ values are used as one indicator (but not a direct measure) of potential risk from a COPEC. Generally, an HQ value greater than 1 suggests a potential for risk to a receptor. Chemical concentrations detected in the soil samples collected during the RSE were used to calculate risk to both terrestrial and aquatic receptors. The SRA indicated that the HQs for AOC-1 exceed the goal of 1; therefore, the site was determined to pose an unacceptable risk to ecological receptors (Table 2).

Table 2: Summary of Potential Risks to Representative Species from Exposure to COPECs at AOC-1

	HQs for Upland Habitats			HQs for Wetland Habitats			
COPEC	House Mouse	Tree Sparrow	Yellow Bittern	House Mouse	Tree Sparrow	Yellow Bittern	Mariana Common Moorhen
Antimony	1	***15***	***12***	NC	NC	NC	NC
Copper	0.8	1	0.8	NC	NC	NC	NC
Lead	***680***	***61***	***110***	***2,600***	***220***	***170***	***97***
Zinc	***3***	1	***2***	***5***	***2***	1	0.8
4,4-DDD	NC	NC	NC	0.0001	0.03	0.07	0.04
4,4-DDE	0.0002	0.04	0.3	NC	NC	NC	NC
4,4-DDT	0.0002	0.06	0.2	NC	NC	NC	NC
Heptachlor	0.01	0.05	0.3	NC	NC	NC	NC
Heptachlor epoxide	0.1	0.76	2	NC	NC	NC	NC
Di-n-butyl phthalate	0.003	0.18	1	NC	NC	NC	NC

Bold Italic HQ value exceeds 1
NC Not a COPEC in this medium

A hot spot removal action at two locations within AOC-1 (IT Corporation 2003) was selected to reduce the unacceptable risks to ecological receptors. Confirmation samples collected after the impacted soils were removed indicate that the cleanup goals set by the RSE were met and soil at the site no longer poses a threat to the environment.

2.8 RESPONSE ACTION SUMMARY

The RSE for AOC-1 documented the nature and extent of contamination and associated potential risks to human health and the environment. The subsequent action memorandum (AM), a primary CERCLA removal action decision document, established cleanup goals and evaluated removal action alternatives to meet these goals (Earth Tech 2001a). The AM specified that the cleanup goal for the protection of ecological receptors would be the removal of metals-contaminated soil until confirmation sampling results indicated that concentrations of metals in the remaining soil were at or below the 95th upper confidence level of their respective background value.

The removal action (IT Corporation 2003), conducted on 7–8 May 2002, consisted of two excavation areas (herein referred to respectively as Excavation Areas 1 and 2) from which approximately 20 cubic yards of metals-contaminated soil were removed. Excavation Area 1 measured approximately 20 feet × 20 feet × 1 foot deep, while the Excavation Area 2 measured approximately 10 feet × 10 feet × 1 foot deep. Excavated soil was placed directly into Supersacks and shipped off island to U.S. Ecology's landfill in Beatty, Nevada, which is approved to accept CERCLA waste. Nine confirmation samples from Excavation Area 1 and four from Excavation Area 2 were collected from within the excavated areas and submitted for laboratory analysis. These samples were analyzed for total antimony, lead, and zinc. The analytical results were compared to site-specific background levels identified in the RSE report. For Excavation Area 1, all sampling results indicated metals concentrations were at naturally occuring background levels. Excavation Area 1, following soil excavation and confirmation sampling, was not backfilled because of possible impacts to wetlands. At Excavation Area 2, analytical results indicated that one lead value exceeded the industrial PRG of 700 milligrams per kilogram. Subsequent removal of the top 1 foot of contaminated soil together with backfilling and compacting with clean onsite borrow materials effectively reduced risks to ecological receptors at this location.

It was concluded that the removal action objectives had been met for both excavation areas and that no further response action is required to be protective of human and ecological receptors.

2.9 DOCUMENTATION OF SIGNIFICANT CHANGES

No significant changes to the Proposed Plan were required based on the public comments received (see Appendix B).

3. Responsiveness Summary

The public comment period for the proposed plan was held between 22 July and 23 August 2004. No written comments were received during this period. Verbal comments were received during a public meeting for the Proposed Plan held on 22 July 2004. Responses to these verbal comments are presented in **Appendix B**.

3.1 COMMUNITY PREFERENCES

No community preferences were requested or identified.

3.2 INTEGRATION OF COMMENTS

Comments received and corresponding responses are integrated in **Appendix B**. No changes to the decision are indicated in these comments.

3.3 EPA REGION IX AGREEMENT WITH SELECTED REMEDY

The EPA agrees with the proposed no further response action (see Appendix A).

4. References

Earth Tech, Inc. 2001a. *Action Memorandum for Time-Critical Removal Action at the New Apra Heights Disposal Area, Former NAVACTS, Guam.* Pearl Harbor, HI: Pacific Division, Naval Facilities Engineering Command. November.

_____. 2001b. *Removal Site Evaluation, Area of Concern 01, New Apra Heights Disposal Area, NAVACTS, Guam.* Pearl Harbor, HI: Pacific Division, Naval Facilities Engineering Command. January.

———. 2004. *Proposed Plan, New Apra Heights Disposal Area (AOC-1), NAVACTS, Guam.* Pearl Harbor, HI: Pacific Division, Naval Facilities Engineering Command. March.

Environmental Protection Agency, United States (EPA). 1989. *Risk Assessment Guidance for Superfund (RAGS): Vol. 1- Human Health Evaluation Manual, Part A.* December.

———. 1992. *Supplemental Guidance to RAGS: Calculating the Concentration Term.* Memorandum from Larry G. Reed, Director of Hazardous Waste Site Evaluation Division, Office of Emergency and Remedial Response. EPA/9285.7-081. 22 June.

———. 1997. *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments.* Interim Final. EPA/540-R-97-006.

Environmental Protection Agency, United States, Region IX (EPA Region IX). 2000. *Region IX Preliminary Remediation Goal (PRG) Table.* San Francisco.

Guam Economic Development Authority (GEDA). 1996. *Reuse Plan for Guam Land Use Plan (GLUP) '94 Navy Properties.* October.

Guam Environmental Protection Agency. 2001. Variance Letter.

IT Corporation. 2003. *Final Remediation Verification Report, Time–Critical Removal Action, Naval Computer and Telecommunications Area Master Station Barrigada and Naval Activities New Apra Heights Sites, Guam.* Pearl Harbor, HI: Pacific Division, Naval Facilities Engineering Command. April.

Ogden Environmental and Energy Services (Ogden). 1995. *Southern High School Site Investigation (SI), Santa Rita, Guam.* May.

Appendix A
Letter from EPA Region IX: Agreement with Selected Remedy

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

February 3, 2005

Dear Mr. Melvin Z. Waki, P.E.
Business Line Manager, Environmental
Department of the Navy
Naval Facilities Engineering Command, Pacific
258 Makalapa Dr., STE 100
Pearl Harbor, Hawaii 96860-3134

RE: Draft Decision Documents, New Apra Heights Disposal Area, AOC-1, Former NAVACTS, Guam; and Five Disposal Areas, Former NCTAMS Barrigada, Guam, November 2004.

Dear Mr. Waki:

The U.S. Environmental Protection Agency (EPA), has reviewed the above referenced Draft Decision Documents. Based upon this review the EPA found the decision documents to be prepared in accordance with EPA's Record of Decision Guidance for no action decisions. While EPA found the subject documents overall to be well written, please find as an attachment to this letter, suggested comments for your consideration.

Sincerely,

Michael K. Wolfram
Remedial Project Manager

cc: Walter Leon Guerrero, Guam Environmental Protection Agency
Richard Hosokawa, PACDIV

U.S. Environmental Protection Agency Comments
on the
Draft Decision Document,
Five Disposal Areas, Former NCTAMS Barrigada, Guam,
dated
November 2004.

1. **Page 2-2, 2.3, 1st paragraph, Community Participation.** The Navy may wish to consider expanding this discussion to include: The year when the RAB was established; the frequency which RAB meetings have been held; and the preparation of numerous fact sheets throughout the investigation and cleanup process to inform and update the community on the progress of BRAC activities.

2 **Page 2-3. Figure 1.**

- A north arrow and scale would be helpful on Figure 1;
- The title of the figure should be revised to include... *Five Disposal Areas, Barrigada, Guam*; and
- A Parcel location map with respect to the Island of Guam (as was superimposed for the New Apra Heights map), would be helpful.

3. **Page 2-5.** The adjective"conservative" seems to add a negative connotation in describing the human health and ecological risk assessment processes. The EPA suggests removing this adjective from the text or substituting "health protective".

4. **Page 2-6, 2.8 Response Actions.** Please incorporate into the text of this section the targeted PCB clean-up level for the discussed removal action.

Appendix B
Response to Comments

Project Title: Proposed Plan New Apra Heights Disposal Area, AOC-1
Former NAVACTS, Guam
Reviewer: Public at 22 July 2004 meeting

Comment No.	Speaker	Comment
1	Public-1	The speaker wanted to know if the remainder of Parcel M15 outside of AOC-1 was investigated.
Response: Mr. Bill Burke (Earth Tech, Inc.) responded that the large area identified as AOC-1 was established to ensure that anything found at the Southern High School that could have been released to the parcel, would be evaluated. The area outside of AOC-1 was not believed to have been connected to any of the releases. Mr. Eric Shigaki (NAVFAC Pacific) added that the BRAC team found surface metal debris in the area of AOC-1 and conducted a geophysical survey to look for metals and also did a soil gas survey to look for other contaminants. Mr. Burke added that it was not believed that any releases from Southern High School would have extended into the northern part of the parcel.		
2	Public-1	The speaker wanted to know if Parcel M15 would be released back to the original owners.
Response: Mr. Eric Shigaki stated that it would be the responsibility of the Government of Guam to determine the transfer of the parcel. There was additional discussion concerning the responsibility of the Navy to come back and clean up additional areas of contamination, if found on the parcel, if it was determined that the releases were directly related to DD activities. Mr. Leon Guerrero (GEPA) stated that it was his understanding that property going back to original landowners would be handled through the Ancestral Land Commission and they should be contacted. He went on to explain the process for handling a discovery of a release after the parcel has been transferred. Mr. Shigaki and Mr. Burke further explained that a covenant in the deed ensures that the Navy or the DD will come back and clean up contamination found on the parcel if it was related to historical DD activities.		
3	Public-2	The speaker expressed concern that without a guarantee that a property is clean, the property values can be adversely affected.
Response: Mr. Bill Burke and Mr. Shigaki expressed that the BRAC cleanup teams worked hard to ensure that contaminants were removed and that the sites were free from restrictions.		
No other public comments were received.		