

## **Appendix L**

### **Volume 5: Weapons Emplacements Sites Analysis**

#### **Army Air and Missile Defense Task Force**

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Appendix L is classified and security clearance is required to review it.

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USFWS Comments on Army AMDTF Weapons Emplacement Classified Appendix (Appendix L)  
Guam & CNMI Military Relocation Draft EIS  
Provided by Holly Herod (USFWS) to Brian Yamada (NAVFAC Pacific)

Comment: Page 2-4. The THAAD radar will produce an area of uncontrolled EMR hazard. I recommend you provide a definition of “uncontrolled hazard”

*Response: Thank you for your comment. The term “uncontrolled EMR hazard” is not used in the document. The commenter may have seen the text from a figure depicting uncontrolled personnel entry and confused it with uncontrolled EMR hazard. Edited the 2<sup>nd</sup> bullet in the bottom of Fig 2.1-5 to remove the confusing text. It does not change discussion or conclusions.*

Comment: Page 2-7. An EMR hazard will be produced by the Patriot radar antenna. However, the section does not discuss an uncontrolled hazard area. I recommend you clarify if an uncontrolled hazard area will be created.

*Response: Thank you for your comment. The personnel hazard for Patriot radar is the same as for THAAD. Inserted explanation of EMR hazard for Patriot radar and explanation that Patriot radar would be on a raised pad. Modified the Public Health and Safety section accordingly.*

Comment: Page 2-10. There is no information provided that described the EMR hazard area for personnel (and therefore wildlife) or an uncontrolled hazard area for the Sentinel radar for the Avenger/SLAMRAAM. I recommend you include these data in the description of the equipment. It will be necessary in order to analyze habitat loss due to EMR.

*Response: Thank you for your comment. Inserted explanation of EMR hazard for Avenger/SLAMRAAM radar. Ensured this is reflected in the Public Health and Safety section. SLAMRAAM is in development, radar information is not available. Sentinel radar would be applicable for personnel safety. Will not have to clear vegetation for Avenger/SLAMRAAM (unlike for THAAD/Patriot radar).*

Comment: Page 2-17. Sections of the DEIS are not included (2.3.1.2 Facilities and 2.3.2 Munitions Storage) in this volume. I recommend you include a statement as to where this information is discussed in the DEIS.

*Response: Thank you for your comment. Changes made. One of the two headings had no text below it, this was corrected. Also, there was already a statement saying that the Army AMDTF administrative/HQ facilities, maintenance facilities, munitions storage facilities, and housing facilities are addressed in Volume 5 of the EIS.*

Comment: Page 2-18. The DEIS indicates that utilities will be tied into existing utilities infrastructure at NCTS Finegayan or Andersen AFB. I recommend you provide additional detail describing how the tie in will occur. For example, define if the utility lines will be constructed in existing rights of way without removal of essential habitat for endangered species. If essential habitat removal cannot be avoided, impacts from utilities lines should be quantified and pictured on a figure with the impacts from the weapons emplacement sites.

*Response: Thank you for your comment. Utilities would be along the access road alignments, disturbance areas associated w/ utilities were calculated in the roadway effects acreages and were analyzed in the Draft EIS. Updated the DOPAA and impact analysis with more details on proposed utilities disturbance areas.*

Comment: Page 2-18. Avenger/SLAMRAAM certification for each systems crew is required every 6 months average tempo would be approximately 4 times per month. This type of training activity would be conducted at the motor pool, at the proposed weapons emplacement site, or at a secured training location on Guam DoD lands (i.e., on military land). Since this radar does not appear to require a fixed location for training, I recommend that you incorporate the USFWS map of essential habitat for listed species into your training guidance and locate the Avenger/SLAMRAAM, during training operations, at the locations where

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the EMR hazard area does not overlap with essential habitat. No equivalent information regarding flexibility of training position or location is provided in the DEIS for the THAAD or Patriot.

*Response: Thank you for your comment. Avenger/SLAMRAAM would not require vegetation clearing and would be put in place on previously disturbed areas where there already is enough clearance. EMR from Avenger/SLAMRAAM radar would therefore not result in any loss of habitat. Currently approved training sites (e.g., motor pool, DoD lands) would be used. For DoD lands, this would be wherever a HUMVEE is currently authorized to travel; no site clearing is necessary.*

Comment: Page 2-17 and 2-18. Depending on the alternative site layout and if the THAAD and patriot weapons emplacement sites are collocated (see sections 2.4, 2.5, and 2.6), the area of disturbance required would comprise a minimum of 38 acres or a maximum of 136 acres. But descriptions of the alternatives show much larger acreages (see Page 2-20 where it estimates 277 and 91).

*Response: Thank you for your comment. Made one change made (38 acres was incorrect and corrected to 118 acres). The rest of the table is accurate. The acreages cited are for direct disturbance of individual buildings, pads, etc. and for the total area within the fenceline.*

Comment: Page 2-20. Table includes a “radar fan.” Please define radar fan. Is this the EMR hazard area? If not, I recommend you also include the EMR hazard area in this estimate of area needed to support these weapons systems. If so, the Patriot has a larger EMR hazard area than the THAAD (see pages 4 and 7) and this area should be included in the tables as well.

*Response: Thank you for your comment. See response to previous comment re: analysis of Patriot radar.*

Comment: Page 2-21. Infrared perimeter system provides a dependable security barrier of pulsed infrared beams to create multiple detection zones with a range of up to 1,000 ft. This system is not triggered by environmental conditions such as birds, small animals, leaves, grass or mechanical vibrations. Does the infrared perimeter system create a zone that is hostile and therefore will not be used as habitat? For example, infrared waves can increase heat absorption which could result in avoidance of the area by warm-blooded animals. If the infrared zone will render the habitat unsuitable or if studies aren't available that describe the potential affects, I recommend you add a 305 meter buffer zone around the perimeter or each footprint and consider the as habitat lost as it will be unsuitable to support foraging or roosting activities.

*Response: Thank you for your comment. Included new text about IR sensors and that they are similar to commercially available garage door sensor. Clarified that no loss in habitat would occur. The IR sensors only trigger if that line is crossed and along the fenceline only; there is no chance for injury or mortality.*

Comment: Page 2-21 and 2-24 Lighting systems are required for restricted areas and consist of boundary, area, entry point, and special purpose lighting. The lights would likely be 30 feet above the ground and would be pointed downward. Lighting would be placed on the outer fence only at the vehicle entrance are. The access road leading to the outer perimeter fence would not be lit. Lighting can cause a negative impact to foraging Mariana fruit bats. Please clarify the area surrounding the project footprint (in terms of maximum distance from the perimeter) that will be lit, as this area of habitat will be considered lost as it will be unsuitable to support foraging activities.

*Response: Thank you for your comment. The biological resources section included as much information as was available regarding the extent of potential lighting when analyzing the effects. Made minimal revisions regarding lighting. We do not have the distance that lighting will extend away from outer perimeter fenceline and have used the indirect impact estimates for each species based on previous USFWS consultations. Indirect impacts due to lighting were already addressed.*

Comment: Page 2-31. Figure 2.4-5 does not depict EMR hazard area. Please create a new map that depicts the EMR, infrared security zone and area of lighting.

*Response: It is not possible to provide area of lighting, not necessary to depict IR zone. The biological resources section included as much information as was available regarding the extent of potential lighting and IR system usage when analyzing the effects*

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