



DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, HONOLULU  
FORT SHAFTER, HAWAII 96858-5440

DEDUCT

CEPOH

1 October 2001

Memorandum for Record:

Subject: Responses to the Public Meeting comments on the Focused Feasibility Study and Proposed Treatment Plan for Remediation of the PCB contaminated soils at the Tanapag Village, Saipan, CNMI.

1. A member of the community noted the off-site disposal alternative per the briefing chart says ten months to complete; C. Adams noted it would take four years. Why the discrepancy?

*Lt. Col. Light responded that if funding were in place today, it would take ten months to carry out this alternative. However, US Army Engineer District, Honolulu (USAEDH) must administer to as many as 503 Formerly Used Defense Sites (FUDS) located throughout the Pacific Basin with a budget of approximately \$5 million per year to address all those sites. To carry out the off-site disposal alternative (not recommended by USAEDH) would require additional money, which would take up to five years to secure.*

2. A member of the community noted Alternative 4E was recommended. Is this the same formula to implement Alternative #5 (3B, On-Site Treatment by Incineration)?

*Lt. Col. Light responded that USAEDH has \$6 million now and can probably secure \$3 million more, because this site has priority. Funds received each year go to work in progress on the various FUDS within the district. Because of the difficulty in obtaining funds, it may take up to 3-4 years to secure additional monies. However, an additional \$3 million should be obtainable a 4-5 month period with relative ease. He does not think that \$18 million can be secured that quickly.*

3. A community member asked how long would it take to secure the funds to perform the on-site treatment and off-site disposal.

*Lt. Col. Light responded he is not sure, but 3-6 months is likely.*

4. A community member asked why are Alternative 2A (Off-Site Disposal) and Alternative 2B (Off-Site Encapsulation with Stabilization) so different in their costs?

*The response was that Alternative 2A (Off-Site Disposal) transports all the PCB-contaminated soil to the U.S. mainland. Alternative 2B (Off-Site Encapsulation with Stabilization) transports the PCB-contaminated soil away from Tanapag, but to some other location on Saipan. Thus, the cost difference between the two alternatives. USAEDH is not recommending either of these alternatives.*

5. A member of the community noted that he likes the alternative to remove the PCB-contaminated soil from Saipan. Another member of the community concurred by also stating that the soil be taken away.

6. A community member said that one should not only discuss the PCB-contaminated soil, but also land crabs that live in the soil. A report states that PCBs and heavy metals were found in land crabs (collected from Tanapag Village). Yes, they would like to discuss the treatment/disposal alternatives to address the contaminated soil. But why give them all the options and then tell them they are going to have to wait to obtain the funding? What alternatives are there to get rid of the PCBs?

*P. Adler reminded the community that the purpose of this meeting is to discuss how to remove the PCB contamination in the soil. EPA is prepared to discuss the land crab issue, but not at this point in the meeting. USAEDH tested the soil for heavy metals and only found PCBs.*

7. The community member then asked where do the crabs get their contamination from.

*M. Rogow's response: "We did not find any heavy metals of concern in any of the crabs." (corrected 3 Oct 01).*

8. A member of the community noted the people prefer the off-site disposal alternative. Does this mean they will have to wait four years if that alternative is selected?

*Lt. Col. Light responded that the ACE does not currently have enough funding to carry out the off-site disposal alternative. A total of \$2.2 billion is needed for all FUDS under USAEDH purview. However, there is only \$219 million annually in the national FUDS budget.*

9. A community member noted that the military is now admitting responsibility for the contamination.

*Lt. Col. Light responded that USAEDH has been continuously working on this project since 1990. USAEDH convened this meeting and has taken the responsibility to carry out the cleanup process. USAEDH, however, does not believe that the U.S. Army was responsible for bringing the PCB capacitors to Tanapag.*

10. A member of the community asked if USAEDH is intent on performing on-site treatment of the stockpiled PCB-contaminated soil.

*Lt. Col. Light responded that USAEDH thinks it is the best alternative.*

11. A member of the community asked if Alternative 3B (On-Site Treatment by Incineration) would be carried out on the island?

*Chris Vais USAEDH has not utilized the incineration process on Saipan before. The incineration process burns the soil. The thermal blanket process is not a form of incineration; rather it is a process that applies heat to the soil.*

12. A member of the community asked how much water would be used by the preferred alternative (Alternative 4E).

*Environmental Chemical Corporation (ECC) representatives responded that 6,000 gallons per day on the average would be utilized. Consumption would be 20 gallons per minute, with 150 gallons peak usage. The community member noted that no consumer on Saipan uses that much*

*water and the volume may not be available. Villagers sometimes do not have enough water to shower.*

13. A member of the community asked if USAEDH can guarantee the PCB-contaminated soil treated using Alternative 4E (On-Site Treatment by ITD and Off-Site Disposal) will be clean once treated.

*An ECC representative responded that approximately 450 tons of PCB-contaminated soil, as the treatment residue, would be shipped to the U.S. mainland. The remaining soil will be clean following treatment.*

14. A member of the community asked the effectiveness of removing PCBs from the soil for all of the alternatives.

*C. Adams responded that No Action is good from a fiscal perspective as there would be no costs associated with this action; however, it does not remove the PCB contamination. Off-Site Disposal is 100% effective as all of the PCBs would be removed from Saipan. Off-Site Encapsulation is 100% effective though all of the PCBs would remain on the island. On-Site Incineration is 100% effective. On-Site ITD and Off-Site Disposal are 100% effective.*

15. A member of the community asked for a discussion of the safety of the alternatives. (Note: response was interrupted.) *The safest treatment/disposal alternative is 4E, which will remove all PCBs. Alternative 3B (On-Site Incineration) is the next safest, but has the potential to produce dioxins. The least safest alternatives are the last two (No Action and Off-Site Encapsulation).*

16. A community member asked if they are present to decide on a treatment/disposal alternative. *Lt. Col. Light responded that USAEDH is present to solicit the public's comments to ensure that the USAEDH is doing the right thing.*

17. A member of the community asked if preferred Alternative 4E is based upon cost. *Lt. Col. Light responded no, that it is not the least costly.*

18. A community member recommended USAEDH obtain a bank loan to carry out Alternative 2A (Off-Site Disposal).

*Lt. Col. Light responded that he did not think a loan would be possible. However, other communities have been able to obtain line item funding within a budget. The community can pursue this route. Another member of the community noted that \$18 million dollars would not be loaned without interest payments added.*

19. A member of the community asked if the treated soil from Alternative 4E (On-Site Treatment by ITD and Off-Site Disposal) will require fertilizer to be added to that clean soil? *An ECC representative responded that the soil would come out of the process sterile. Fertilizers, chicken manure, etc. must be added to amend the treated soil.*

20. A member of the community asked the outcome of the "dead" soil from the ITD treatment process. Will it be spread around and fertilized?

*A representative of ECC replied affirmatively and that it will be deposited at the cemetery. The treated soil would be hydrated, amended with fertilizer, sown with grass, then tilled. The current contract to treat the stockpiled PCB-contaminated soil would include spreading the soil.*

21. A community member noted there are three types of criteria used in the selection process. Where does “Community Acceptance” fit in the process?

*Lt. Col. Light responded that USAEDH is evaluating community acceptance now. The four alternatives are being weighed against the community’s acceptance.*

22. A community member noted that Lt. Col. Light keeps emphasizing the cost will be expensive. When some of the community met 2-3 weeks ago with one of his staff, a question was raised as to USAEDH’s contingencies should the ITD process fail to work. He accused USAEDH of lying, stating that there is no money, and the cleanup can be completed with less than \$18 million. The PCB-contaminated soil can be contained and shipped off-island. He demanded that discussion regarding the four alternatives end. The community wants the stockpiled PCB-contaminated soil shipped off-island. The “CNMI and Community Acceptance” criterion is moot if there is no acceptance.

*Lt. Col. Light responded that USAEDH has \$5-6 million available.*

23. Benigno Sablan, a member of the Tanapag Action Group (TAG) presented the group’s official written position and signatures regarding the disposition of the stockpiled PCB-contaminated soil by transporting it off-island for treatment or disposal. He stated that TAG believes USAEDH pre-selected a treatment/disposal alternative by acknowledging that TAG members Jerry Crisostomo and Juan Tenorio visited California expressly to view the ITD treatment unit. He continued by stating that TAG believes the unit is being transported to Saipan to conduct a pilot test, the treatment/disposal alternatives presented during this meeting are meant to confuse those in attendance, and that USAEDH has and continues to lie to the Tanapag community. B. Sablan also commented that USAEDH’s \$5 million annual FUDS funding makes no sense, raised the issue of PCB-contaminated land crabs, and opined of widespread contamination on Saipan as a consequence of the island’s invasion by U.S. armed forces. He expressed his consternation about USAEDH contracting ECC to treat the stockpiled PCB-contaminated soil despite the firm’s indictment and bankruptcy.

B. Sablan then sought a vote of the meeting attendees through a show of hands. P. Adler reminded participants that this meeting was not convened to take a vote.

24. A community member noted that village residents are guardedly optimistic, and have a long history with the issue. Alternative 2A (Off-Site Disposal) is acceptable. Alternative 3B (On-Site Treatment by Incineration) will generate another poison, i.e., dioxin. They believe and are hearing that the ITD unit is on its way to Saipan, and that the treatment method has been pre-determined.

*Lt. Col. Light reiterated that USAEDH selected its preferred alternative, and is what was required of the organization. USAEDH will take the community’s comments and consider them. One year ago, USAEDH met with the community and heard the community supported the ITD process on-site. That is why USAEDH went forward with constructing the treatment unit.*

25. A community member stated that no one from Tanapag said that.

*Lt. Col. Light noted that the ITD treatment unit can be used at other sites if the community is opposed to its use on-island to treat the stockpiled PCB-contaminated soil. The equipment is still in California to the best of his knowledge.*

26. A member of the community noted that Alternative 2A (Off-Site Disposal) will cost \$18 million. Could that amount be reduced if military ships were used to transport of the PCB-contaminated soil? There are military vessels in (waters off) Saipan now and the crews are already paid.

*An ECC representative responded that it had not explored the idea of utilizing military ships for transport.*

27. A community member noted that \$12 million of the \$18 million is for shipping costs. Is the \$6 million for processing the PCB-contaminated soil?

*An ECC representative responded that Alternative 2A (Off-Site Disposal) will not treat the contaminated soil. Rather, the soil will be placed in a landfill.*

28. On the impact to groundwater, a community member noted that USAEDH's primary goal is to eliminate the risk of PCB contamination and leave the site clean for future use. That individual's opinion is to eliminate the risk by removing the stockpiled material from the site because PCBs will migrate to the groundwater and the contaminant is a soluble compound. Because PCB contamination in the bedrock has not been addressed, he asked how USAEDH is going to realistically remove the risk. He does not think USAEDH has performed comprehensive groundwater, bedrock, soil, and chlorine analyses, opined that it is the obligation of the U.S. government to study the matter, and cited the issue as complex and one that must be discussed with the community. Experts are needed to ensure the facts are accurate and he believes the U.S. government is trying to rush this through the process. An example he cited was the Bikini Island contamination. He recommends conducting a much more comprehensive investigative study of PCB contamination in Tanapag Village.

*Lt. Col. Light responded that a groundwater study is forthcoming. A work plan to that end was prepared, is in draft form, and is presently undergoing review.*

29. A community member stated that there must be a complete study of the village to make sure it is completely cleaned up. USAEDH must find out how many capacitors were shipped by the U.S. military and compare that to the number discovered in Tanapag Village to date.

30. A community member asked if USAEDH tested for pesticides, herbicides, dioxins, and heavy metals prior to selection of its preferred alternative?

*An ECC representative responded that soil samples were subjected to numerous analyses to determine the presence and concentration of a number of contaminants including pesticides, herbicides, dioxins, heavy metals, VOCs (volatile organic compounds), and SVOCs (semi-volatile organic compounds).*

29. A member of the community stated that the rainy season in CNMI is approaching and is concerned about damage to the stockpile covers by typhoons and the regional solar radiation. A

request was made to add six inches of soil (crushed coral) over the stockpile covers if treatment/disposal will take a while to complete.

*An ECC representative noted the cover manufacturer's literature states the material is good for two years and is rated for areas exposed to typhoon conditions. If Alternative 4E is used, it is expected that the stockpiled soil will be treated before the cover deteriorates. If another alternative is selected, USAEDH may need to re-visit the life of the covering.*

30. A member of the community noted already observing repairs to the stockpile covers.

*An ECC representative responded that the repairs were made following the collection of soil samples from the stockpiles after the impermeable covers were installed. The repaired areas are located where the covers were punctured for sample collection.*

31. A member of the community stated that Saipan is always in Typhoon Condition 4, with typhoon-strength winds likely to occur within 72 hours, and asked if USAEDH is aware of that condition? Another asked if Saipan's climatic conditions were taken into consideration when selecting the liner.

*An ECC representative responded that he is aware that Saipan is in Typhoon Condition 4 and that the impermeable cover was selected based on its rated use in such an environment, albeit on a short-term basis per the manufacturer's specifications. Other protective measures must be implemented if it is probable that treatment or off-site transport of the stockpiled soil is prolonged or otherwise delayed.*

32. A member of the community asked if the cover material protected the contaminated soil against typhoons.

*ECC representative responded that the preferred alternative would get the soil out of here relatively fast.*

33. A member of the community acknowledged competition with other FUDS within USAEDH for funding, and that there is no assurance that monies will be appropriated for the Tanapag Village cleanup as it is unclear as to its priority level. *Lt. Col. Light noted that USAEDH has the funds to implement its preferred alternative and realizes the need to remove the PCB hazard posed by the stockpiled soil on a timely basis to protect the community.*

34. A member of the community noted that a request for Superfund monies was made one year ago.

*M. Rogow noted that preliminary evaluation of the data indicates that Tanapag Village may not be eligible for inclusion on EPA's National Priorities List (NPL). An EPA investigation was performed in 2000 and included sampling and analysis of the biota (e.g., soil, fish, crabs, and taro) as well as a soil and groundwater evaluation to determine if the site would score high enough for recognition as a Superfund site. The data evaluation by EPA is ongoing to ascertain the village's relative ranking. EPA is waiting to see if the soil will remain here. It appears the risk from the soil has been removed, but the agency is awaiting the results. EPA hopes to have the final documents within a few months.*

35. A community member noted that EPA has not performed a risk assessment. *M. Rogow responded that it is an evaluation process.*

36. A member of the community asked how far along is Tanapag Village in the process for its inclusion on the NPL. *M. Rogow responded that EPA has not completed its final scoring for the site. The agency is awaiting more groundwater data. The levels of PCB contamination in village soils are low when compared to national levels, but data analysis is incomplete. Data gaps have been identified and must be resolved for a complete analysis. She said she could respond to TAG with the information, but concluded that it does not appear that Tanapag Village will qualify as a Superfund site.*

37. A community member commented that information on high risk factors may bring in money faster.

38. A member of the community asked if the low rating is because the PCB contaminated soils are now contained in the stockpiles.

39. The community member then asked if the community can obtain that information as well as a description of the evaluation process.

*M. Rogow responded that the report should be out within the next few months, but reiterated that it does not appear that Tanapag Village will rank high enough to be placed on the NPL. EPA, however, is currently collecting more information to assist the agency in ranking the village.*

*Lt. Col. Light noted that last year USAEDH spent \$5 million on the Tanapag Village cleanup, and considers this the number one site out of the 503 FUDS.*

40. Juan Tenorio, a TAG member who visited ECC's ITD unit in California, expressed his frustration regarding the potential for not being listed as a Superfund site citing analytical data from 1998 and 1999 samples would justify a ranking sufficient for NPL inclusion. He also expressed concern regarding Alternative 4E (On-Site Treatment by ITD and Off-Site Disposal) and its potential inability to effectively treat the stockpiled soil, though is pleased that the overall cleanup process is at its present stage.

*An ECC representative responded that the ITD equipment J. Tenorio et al. visited is a third generation unit. There are spare parts available from the U.S. mainland that can be shipped to Saipan in short time. Questions about damage to the ITD unit while in transit to Saipan or by a typhoon once erected have been addressed in the planning process. Any catastrophic damage to the unit could be repaired within two months.*

41. Community members noted that previous discussions addressed the environmental differences between Tanapag Village and sites in the mainland U.S. where the ITD process was employed, and asked what USAEDH would do if the ITD process does not work on Saipan.

*Lt. Col. Light responded that the evaluation process would be reactivated to address the remaining alternatives identified during the focused feasibility study and perhaps new treatment technologies that may become available at that time. However, USAEDH believes the ITD process will work. If it does not, USAEDH will stand by its responsibility to treat or dispose the stockpiled PCB-contaminated soil through other methods.*

42. A member of the community asked to what extent can USAEDH can accomplish in treating the stockpiled soil utilizing Alternative 4E (On-Site Treatment by ITD and Off-Site Disposal) with available funding?

*Lt. Col. Light responded that USAEDH has available and intends to spend \$5-6 million for treatment of all the stockpiled soil.*

43. A member of the community asked what will happen in the next eight months. *Lt. Col. Light responded that the process would include taking comments from the public and providing EPA with a preferred alternative for the agency's consideration. USAEDH's contractor can mobilize 60 days after EPA grants its approval of the preferred alternative. The 20,000 tons of stockpiled PCB-contaminated soil would be treated within four months. Most of the water used in the treatment process will be made up of rainwater.*

44. A community member asked if there was consideration given to the price and availability of fuel.

*An ECC representative responded that regional fuel suppliers contacted have made assurances about the availability of fuel.*

45. TAG member Juan Tenorio thanked USAEDH and its contractors despite differences in opinions and resultant frustrations. He opined that it has not been easy living in an environment with known health concerns and believes the community should be given the benefit of the doubt in this matter. He also stated that this meeting went well and was very educational.