



DEPARTMENT OF MICROBIOLOGY AND ENVIRONMENTAL TOXICOLOGY
DIVISION OF NATURAL SCIENCE
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February 17, 2011

Mr. Carlton Morris, FWS Project Manager
U.S. Fish and Wildlife Service, Division of Engineering
911 NE 11th Avenue
Portland, Oregon 97232
email carlton_morris@fws.gov

Re: Engineering Evaluation/Cost Analysis (EE/CA) for Removal of Lead-based Paint from
Structures and Lead-contaminated Soil from Midway Atoll National Wildlife Refuge

Dear Mr. Morris:

These comments are submitted with the hope they will aid in the prompt initiation of the removal of lead-based paint from Sand Island at Midway Atoll National Wildlife Refuge, part of Papahānaumokuākea Marine National Monument. I have been examining the lead poisoning of Laysan albatross on Midway Atoll for the last decade and am incredibly thrilled to see a comprehensive plan to clean up lead-based paint from Sand Island. The prompt removal of lead-based paint from structures and lead-contaminated soil from Midway Atoll will prevent the lead poisoning deaths of thousands of albatrosses each year as well as protect other species such as the endangered Laysan duck from being lead poisoned in the future.

Comments with respect to specific items designated by DOI:

1. The proposed cleanup level of 75 mg/kg for lead in soil (Appendix C, Streamlined Risk Evaluation in Midway EE/CA Report).

I support the proposed cleanup level of 75mg/kg for lead in soil and agree with the EE/CA that this level will be protective of wildlife health on Midway Atoll with respect to lead poisoning.

2. Schedule and cleanup priorities as the FWS will not be able to address the entire site in the first year of cleanup.

The six year phase of remediation is one of my major concerns with the EE/CA. I understand the logistical constraints with respect to working on Midway Atoll as well as the short annual window during the non-breeding season make the prompt removal of lead-based paint and lead contaminated soil challenging, but all efforts should be made to expedite the removal process to prevent further lead-induced mortalities on Midway.

I suggest that the total removal of the buildings in Units 1 (with the exception of building 643) and 2 be accomplished this year along with remediation of lead-based paint from the buildings in Unit 6 as well removing all lead contaminated soil that is above the 75 mg/kg level in Units 1, 2 and 6.

I agree with the EE/CA's prioritization of Units, 1, 2 and 6 for lead-based paint removal.

3. The removal of historic buildings in Decision Unit 1 and Decision Unit 2 (Sections 8.1 and 8.2 in Midway EE/CA Report).

The most protective solution would be to remove all of the structures that are not and will not be used by the U.S. FWS. This would be the preferred alternative. Absent that, DOI should act immediately to remove the crumbling lead-contaminated buildings in Units 1 and 2.

In Unit 1 the abandoned cable company buildings are significantly deteriorated and it is my personal observation that they host the highest numbers of lead poisoned (droopwing) Laysan albatross chicks on Sand Island. Thus, I strongly agree with the EE/CA's recommendation to demolish the cable company buildings (with the exception of building 643) and that this demolition should be considered a high priority and completed as soon as possible.

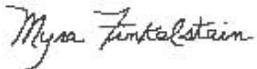
It is also my personal observation that Unit 2 (the abandoned Marine barrack buildings) hosts very high numbers of lead poisoned (droopwing) Laysan albatross chicks. Additionally, I have observed an endangered Laysan duck foraging between the Marine barrack buildings during my visit to the island in 2006. Thus, I strongly agree with the EE/CA's recommendation to demolish the Marine barrack buildings and that this demolition should be considered a high priority and completed as soon as possible.

Comments on other aspects of the EE/CA

- 1) The ideal solution to ensure no further action is needed to prevent lead poisoning from unused buildings on Sand Island would be to remove all the buildings with lead-based paint that are not in current use or that will not be used in the future.
- 2) The use of geomembranes on Sand Island is concerning with respect to their structural integrity in a harsh environment and that any deterioration of the membrane could pose a risk to wildlife through entanglement as well as other unforeseen issues.
- 3) If it is not plausible to remove all lead-based paint from specific buildings on Sand Island and encapsulation is needed to prevent lead contamination, funds should be set aside and strict guidelines set forth to assure that these buildings will have proper maintenance and encapsulation on a regular schedule. Without proper maintenance, the buildings with lead-based paint will become a future hazard for wildlife and human health on Sand Island.
- 4) I support the planned on site disposal of debris and soil with lead paint in the R2 concrete lined consolidation unit and the stabilization with Portland cement. If the volume of contaminated soil exceeds the capacity of the R2 unit, then off-site removal should be considered in order to avoid the use of geomembranes on Midway Atoll. Before geomembranes are used on Midway Atoll, their use and degradation should be evaluated in terms of risk to wildlife (e.g., burrowing seabirds).

Thank you for this opportunity to comment, I am very excited about the proposed plan to clean-up the lead-based paint from buildings and soil on Midway Atoll and hope that the clean-up process can begin in 2011 and be expedited as much as possible.

Sincerely,



Myra Finkelstein, PhD
Assistant Researcher