United States Department of the Interior

FISH AND WILDLIFE SERVICE
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Anchorage, Alaska 99503-6199

IN REPLY REFER TO:

FWS/AFWFO/AFES

SEP 19 2007

Ms. Carrie McEnteer
Directorate of Public Works
Attention: IMPA-FWA-PWE (C. McEnteer)
1060 Gaffney Road #4500
Fort Wainwright, Alaska 99703-4500

Dear Ms. McEnteer:

The U.S. Fish and Wildlife Service (Service) appreciates the opportunity to comment on the Notice of Intent, **Preparation of an Environmental Impact Statement (EIS) for Resumption of Year-Round Live-Fire Training at Eagle River Flats (ERF), Fort Richardson, AK** (FR Doc. 07-4038). The Service has been an involved participant in many of the activities surrounding the remediation of white phosphorous (WP) at ERF, and we hope to continue working in partnership with the U.S. Army (Army), the U.S. Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC) as the Army develops this new EIS.

The Service commends the Army for the dedication it has shown since the 1980s in discovering the cause of high waterfowl mortality in ERF and its perseverance in cleaning up sites highly contaminated with WP. The Army's collaboration with the Cold Regions Research and Engineering Laboratory has been particularly useful in addressing the WP and waterfowl mortality issues. Restricting live-fire in the ERF to winter months, the cessation of using WP in munitions, and the remediation methods employed according to conditions set forward in EPA's 1998 Record of Decision (ROD), have substantially reduced the number of bird deaths occurring in ERF. We believe that these successes demonstrate the effectiveness of the current practices.

As the Army moves forward with developing the EIS, the Service requests the following considerations be addressed:

1) **Exposure and Redistribution of Previously Buried WP and Alteration of Habitat:** White phosphorous contamination still exists in ERF. Although the numbers have been decreasing since 1996, duck mortality still occurs, and "hotspots" of contamination are still being found. Not all of ERF has been sampled for WP, and those areas that have been treated through drying (by pumping) are treated only to a depth of 30 cm. Cold Regions Research and Engineering Laboratory reports indicate that WP exists at least to 55 cm in the sediments, and that Highly Explosive (HE) rounds can create craters up to 70 cm deep. An estimated 10,000 unexploded or partially exploded ordinances (UXOs) still exist in ERF, with an unknown percentage of those being WP rounds. Mortality can

occur in waterfowl from ingestion of as little as 1.5 mg of WP, and a single HE round could contain several thousand lethal 'doses.' Not all of the areas with WP contamination have been treated. Some areas could not be treated and have been or are going to be capped. The potential exists for HE rounds to destroy these containment caps. Given the contamination scenarios, WP could continue to be exposed during firing and redistributed in areas that are used by waterfowl could increase the likelihood of ingestion by birds. Assessing the risk of exposure to waterfowl as a result of a new firing scenario and the impact on waterfowl mortality rates should be included in the EIS. Additionally, changing the hydrology and habitat conditions of ERF could also change bird use patterns and could potentially force birds into areas that were not previously preferred. This could alter foraging behavior and birds could be pushed into WP-contaminated sites that were not historically high-use areas.

2) **Bird Disturbance:** The ERF is an important part of the Upper Cook Inlet salt marsh complex and use of the area varies by bird species, season and year. Migrating waterfowl are abundant during the spring and fall, while June and July are the time periods least used by migrating ducks, geese and swans. July is a major migration period for shorebirds through ERF. Arctic terns, mew gulls, glaucous gulls, dabbling ducks and sandhill cranes also nest in ERF. Finally, four active bald eagle nests border ERF.

Disturbance of these birds may occur due to increased noise and human presence in the ERF and these activities should be addressed in the EIS. The EIS should also describe how bird use of the area will be incorporated into a weapons training program, and include specifics on any proposed restrictions (e.g., non-firing periods during spring and fall migration) and a description of the types of munitions used during the ice-free periods.

3) **Compliance with EPA's 1998 ROD:** The EIS should address how the objectives set forth in EPA's 1998 ROD will be met given that conditions under which that ROD was signed will change substantially, should year-round firing resume. Active treatment of the most highly contaminated, accessible ponds ended in 2007, which was four years later than anticipated in the ROD. Only preliminary capping of inaccessible contaminated sites has occurred. Further capping is planned for the 2007-2008 winter. One of the goals of the 1998 ROD was a measurable decrease in waterfowl mortality, and the current declining trajectory at ERF looks promising, but additional data will be needed to verify remediation success. The ROD specified a 20-year monitoring period, but if year-round firing resumes at ERF, determining the cause and incidence of waterfowl deaths could be confounded by 1) exposure of buried WP and increased ingestion by birds; 2) changes in bird movement patterns; or 3) alteration of habitat. Because of these complicating factors it will be difficult to determine the long-term success of the remediation methods outlined in the 1998 ROD.

4) **Alternative Locations:** An alternative upland location should be considered as one of the options. An upland location would eliminate the possibility of exposing an increased number of waterfowl to toxic concentrations of WP through disturbance of capped WP, exposing buried concentrations of WP in areas that were not treated, and altering bird use patterns. The nesting and staging habitat used by many waterbird species would not be disturbed and the Army would continue to meet the benchmarks established in the 1998 ROD.

5) **Training:** The specific nature and type of training that will occur on ERF should be clearly described in the EIS. Issues related to training that should be addressed include 1) the timing of training, 2) the type, amount and sizes of HE rounds that will be fired, 3) the use of non-impact (above ground) explosives, and 4) the location of primary designated impact areas on ERF. Understanding how year-round firing will occur on ERF is critical to evaluating the potential disturbance of and mortality to birds utilizing ERF.

We recognize the importance of training in maintaining the readiness of our troops. Our hope is that future training be conducted in a manner that maintains the significant progress already achieved at ERF. The Service will continue to provide technical assistance and comments on all documents relating to the EIS. We would appreciate the opportunity to attend all agency and federal facilities meetings regarding this issue. Please contact Kim Trust, Environmental Contaminants Program, at (271-2783; kim_trust@fws.gov) for further assistance.

Sincerely,

Acting Regional Director

cc: J. Mark Vaughn, U.S. Army
Kevin Gardner, U.S. Army
Dan Rosenberg, Alaska Department of Fish and Game
Louis Howard, Alaska Department of Environmental Conservation
Bill Adams, U.S. Environmental Protection Agency