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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 7, 2016

Mr. Adam Kusmak
Chief, Installation Flight Management
49th CES/CEI
550 Tabosa Avenue
Holloman AFB, NM 88330

**RE: DISAPPROVAL
SR859A FORMER SKEET RANGE 2 AND TS862A JEEP TARGET AREA
SKEET RANGE, REMEDIAL INVESTIGATION REPORT, APRIL 2016
HOLLOMAN AIR FORCE BASE, EPA ID # NM6572124422
HWB-HAFB-16-003**

Dear Mr. Kusmak:

The New Mexico Environment Department (NMED) has reviewed the above referenced document submitted by Holloman Air Force Base (the Permittee) on October 7, 2016. NMED finds that the subject document did not respond to NMED's comments presented in the August 27, 2015 Notice of Disapproval for the February 2015 Remedial Investigation Work Plan for the subject sites, as discussed below.

The report for a Phase II Comprehensive Site Evaluation (CSE) conducted in 2013 at both Munitions Response Areas (SR859 and TS862) recommended splitting them into two Munitions Response Sites (MRSs) each: SR859 (34.3 acres) and SR859a (8 acres), and TS862 (34.6 acres) and TS862a (5.7 acres). This was recommended based on the perceived lack of Munitions Constituents (MC) exceeding regulatory screening levels at MRSs SR859 and TS862, which were recommended for No Further Action in the Phase II CSE Report. The smaller MRSs (SR859a and TS862a) were recommended for future munitions response actions due to MCs (lead and polycyclic aromatic hydrocarbons [PAHs]) in soil that exceed NMED soil screening levels. The proposed responses included soil/clay target debris excavation and disposal and post-excavation confirmation sampling. NMED agrees with the recommendations for the smaller MRSs.

However, the subject Remedial Investigation Report (Report) agreed with the recommendations of the Phase II CSE Report in proposing no further munition response actions for the larger MRSs (SR859 and TS862). NMED does not agree with this recommendation. Figures 4 and 7 of the Report (*Visual Reconnaissance Results*) show that lead shot (a source of lead contamination in soil) and clay target debris (a source of PAH contamination in soil) are scattered throughout both MRSs SR859 and TS862. A walkover of both MRSs conducted on July 30, 2015 by NMED and base environmental staff found visible masses of lead shot and clay target debris scattered extensively on the ground surface at both of the larger MRSs. It appears that the Phase II CSE sampling methods failed to detect the contaminants associated with the lead shot and clay target debris, which led to conclusions based upon results which are not representative of site conditions.

The presence of lead shot and PAH-containing clay target debris has clearly been recognized in the Report. What is not recognized are the risks presented by the presence of the shot and target debris. The risk assessment exposure pathway analysis charts on Figures 12 and 13 fail to include the contaminant source that is the range debris. There are current risks from exposure to this debris as well as risks of the future spread of contaminants from the debris to soil and potentially other media. Since the Permittee has not, to date, sampled the debris itself, a proper risk assessment cannot be made. The further action proposed in the Report only addresses remediation of PAH-contaminated soil at the smaller MRSs SR859a and TS862a, the process of which will also result in removal of lead contamination. It does not propose any action to further assess or remediate the lead and PAH-contamination at the larger MRSs SR859 and TS862.

During the Phase II CSE, intrusive X-ray fluorescence (XRF) analysis was conducted to survey the soil at both MRSs for lead. However, as stated in Section 4.5.2 of the Report, “[l]arge particles, organic matter and projectile debris were removed from the samples”. The photos presented in Appendix E of the Phase II CSE Report show the projectile debris to be shot pellets. Had in-situ XRF analysis been conducted, lead concentrations would have likely exceeded screening levels because of the masses of lead shot on the surface. In addition, as stated in Section 4.5.2 of the Report, all clay target debris was removed from the soil prior to sample analysis. This sampling protocol (removing debris) presents soil sample results that are not representative of actual conditions at these MRSs.

The Permittee has advised NMED that a Non-Time Critical Removal Action (NTCRA) Work Plan will be submitted for continued remedial activities at the smaller MRSs SR859a and TS862a. The Permittee shall include a proposal for further remedial actions at MRSs SR859 and TS862.

As one option, the Permittee may propose a sampling protocol that includes laboratory analysis of both surface and subsurface soils to 18 inches below ground surface at areas that are, or may be, impacted by the presence of lead shot and clay target debris, which shall not be removed from the soil samples prior to analysis of the samples. All samples shall be analyzed in an off-site analytical laboratory for antimony, arsenic, copper, lead and zinc and also PAHs. Any

Mr. Adam Kusmak
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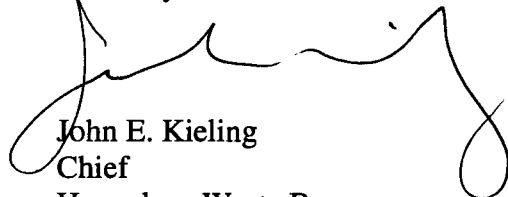
needed remedial measures will be based on the results of this sampling, including analysis of risk to human health and ecological receptors and to groundwater. The sampling protocol must include extensive sampling of soil to ensure that all "hot spots" of contamination are detected.

Preferred by the NMED, and as an alternative to such extensive area-wide sampling and analysis and assessment of risk as described above, the Permittee may propose a presumptive remedy for both MRSs (SR859 and TS862, as well as SR859a and TS862a) by conducting remediation of surface and/or subsurface soils to remove the waste lead shot and clay target debris and contaminated soils followed by post-excavation confirmatory sampling. Any removed debris/soil must be characterized for proper disposal.

As per a letter from NMED dated August 2, 2016, a request to extend the NTCRA Work Plan submittal date to **June 27, 2017** was granted. This should allow adequate time to include the proposal for further remedial actions at MRSs SR859 and TS862.

If you have any questions regarding this matter, please contact Mr. David Strasser of my staff at (505) 222-9526.

Sincerely,



John E. Kielling
Chief
Hazardous Waste Bureau

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