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DEPARTMENT OF THE AIR FORCE
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HOLLOMAN AIR FORCE BASE, NEW MEXICO

9 December 2015

ADAM M. KUSMAK, GS-13, USAF
Chief, Installation Management Flight (49 CES/CEI)
49th Civil Engineer Squadron (49 CES)
Holloman Air Force Base, NM

Mr. John E. Kieling
Chief, Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East Bldg. 1
Santa Fe NM 87505-6063

Dear Mr. Kieling,

Holloman AFB is pleased to submit the Responses to Comments document regarding the NMED disapproval dated September 22, 2015 of the Final Remedial Investigation Work Plan for the XU853 Missile Test Stand Area and XU854 Able 51 Area MRSs, Holloman Air Force Base, NM.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions regarding this submittal, please contact me at (575) 572-6675 or by email at adam.kusmak@us.af.mil.

Sincerely,

KUSMAK.ADAM.M.1263331806

Digitally signed by KUSMAK.ADAM.M.1263331806
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USAF, cn=KUSMAK.ADAM.M.1263331806
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ADAM M. KUSMAK, GS-13, USAF

Attachment:
Response to Comments - Final Remedial Investigation Work Plan for the XU853 Missile Test Stand Area and XU854 Able 51 Area MRSs, Holloman Air Force Base, New Mexico.

cc:

(w/Atch)
Mr. David Strasser
Hazardous Waste Bureau
121 Tijeras Dr. NE Ste. 1000
Albuquerque NM 87109-4127

(w/Atch)
Mr. Chuck Hendrickson
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Common Comment and Response Worksheet (Version 3)

Date	Reviewer	Document Title (version)	Contract
		Final RI WP for XU853-XU854 MRSs Holloman AFB	FA8903-13-C-0008

Item	Source	Section	Page	Para	Line	Class	Comment	Response
1	NMED	Section 3.1.1 Section 3.1.3 Section 3.7 Section 3.7 Section 3.7.2 Section 3.7.3 QAPP Worksheet 17	3-1 3-6 3-30 3-31 3-34 3-35 QAPP pages 94, 95.	3rd last			These sections indicate that munitions constituent sampling will be conducted using composite sampling techniques for explosives and metals at confirmed locations of munitions and explosives of concern (MEC) as well as composite sampling for explosives, anions and perchlorate at isolated locations where evidence of potential propellant contamination (e.g., discolored soil) is observed. The section also indicate that representative surface soil samples will be collected at rocket/missile launch pad locations not exhibiting obvious evidence of contamination using the incremental sampling method. NMED does not accept composite sampling as part of site characterization for compliance purposes. Discrete sampling for the constituents specified in the work plan must be conducted as confirmed locations of MEC and at isolated locations showing evidence of potential propellant contamination (e.g., discolored soil). Incremental sampling may be used as a screening tool to located areas that may require further investigation at the rocket/missile launch pad locations as proposed. These locations must be then further characterized using discrete sampling methods.The Permitee shall submit a revised work plan incorporating the above revisions	Comment noted. The US EPA created a guidance, Unexploded Ordnance Management Principles, in 2000 to address the cleanup of "other than operational ranges" (which were then referred to as "closed, transferred and transferring [CTT] ranges)." This remains EPA policy. In that policy document, EPA states: “ -- A process consistent with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and these management principles will be the preferred response mechanism used to address UXO at a CTT range. -- The legal authorities that support site-specific response actions at CTT ranges include, but are not limited to, the CERCLA, as delegated by Executive Order (E.O.) 12580 and the National Oil and Hazardous Substances Contingency Plan (NCP); the Defense Environmental Restoration Program (DERP); and the DoD Explosives Safety Board (DDESB).” Both XU853 and XU854 Munitions Response Sites (MRSs) have been addressed under the U.S. Air Force Military Munitions Response Program (MMRP) created by Congress in 2001 under the DERP as established by Section 211 of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and is codified in Sections 2701-2710 of Title 10 of the United States Code (U.S.C.). As a result, Munitions Constituents (MC) sampling methodology (i.e., incremental and composite sampling [a seven-point “spoke and hub” method]) described in the submitted Remedial Investigation (RI) Work Plan (WP) is in accordance with U.S Army Corps of Engineers Technical Guidance for Military Munitions Response Action EM 200-1-15 (2015). The methods described in the WP for laboratory analysis of incremental and composite samples include EPA SW-846 Methods 8330A and 8330B for explosives and Method 6010C for metals both of which are in compliance with EM 200-1-15 guidance. In addition, the MC sampling methodology described in the subject RI WP was approved by EPA in Novemebr 2014. Based on information provided above, no revisions of the WP are required.
2	USEPA	Table 3-3 Soil Screening Standards	3-32				The following USEPA Regional Screening Levels and recommended Health Soil Screening Values (HHSSVs) need to be revised to correspond to the residential exposure values listed in NMED's Risk Assessment Guidance (December 2014 as updated July 2015): (1) Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX): Should be 60.4 milligrams per kilogram (mg/kg), not 230 mg/kg; (2) Nitrobenzene: Should be 60.4 mg/kg, not 130 mg/kg. In addition, the descriptors in the lettered footnotes of the table (a, b, and c) do not match what is shown in the table headings. Also, either the default value based on a Dilution Attenuation Factor (DAF) of 20 or a calculated site-specific DAF must be included for each component in the table. The Permittee shall submit a revised work plan incorporating the above revisions.	Comment noted. The Final RI WP, revised based on EPA comments, was submitted to NMED as a courtesy copy. The project action limits listed in the RI WP were the most current version at the time of the WP submittal. For each analyzed constituent, FPM used the more conservative value between the EPA RSLs (May, 2014) and the NMED's Risk Assessment Guidance values (February 2012). At the time the RI Reports for the two MRSs were prepared, the project action limits had been updated (EPA RSLs [June 2015] and the NMED's Risk Assessment Guidance values [December 2014 as updated July 2015]); these were presented in the analytical tables of the RI Reports comparing the project action limits to each analyzed constituent. In addition, site-specific DAF were not calculated and default values based on a DAF of 20 were not included in the tables of the RI Report, since we did not identify any potential for contaminant migration to groundwater based on soil sampling results (please see response to comment # 3 for more details).

3	NMED	Section 3.7.4 QAPP Worksheet # 11 Worksheet # 17	3-35 QAPP pages 17 18 and 95				These sections state that if soil sampling results indicate the potential for contaminant migration into groundwater (i.e., leachibility) then groundwater samples will be collected at the specific source location for the identified contaminant of concern. However, the protocol to be used to assess the potential for contaminant migration to groundwater is not stated. The Permittee shall submit a revised work plan indicating how the potential for contaminant migration to groundwater will be assessed.	Comment noted. The Final RI WP, revised based on EPA comments, was submitted to NMED as a courtesy copy. Based on information available during the preparation of the WP and past experience at similar sites, the likelihood of groundwater contamination due to site activities was considered low. As a result, the WP deferred specifying a protocol for assessing the potential for contaminant migration to groundwater until soil contamination was confirmed. FPM completed the fieldwork at XU853 and XU854 MRSs between November 2014 and February 2015. No MEC or discolored soil was identified during the field activities; as a result no composite samples were collected. Analytical results for surface soil (0-6 inches) incremental sampling did not show any exceedances above the most recent project action limits (the more conservative value between the EPA RSLs [June, 2015] and NMED Risk Assessment Guidance values [December 2014 as updated July 2015]). Therefore, the soil sampling results did not indicate the potential for contamination of groundwater. Based on information provided above, no revisions of the WP are required.
4	NMED	QAPP Worksheet # 15 Project Action Limits Table, Soils	page 84				The following RSLs and recommended HHSSVs need to be revised to correspond to the residential exposure values listed in NMED's Risk Assessment Guidance (December 2014 as updated July 2015): (1) 2,4,-Dinitrotoluene: Should be 17.1 mg/kg, not 120 mg/kg (2) 2,6-Dinitrotoluene: Should be 3.56 mg/kg, not 19mg/kg (3) RDX should be 60.4 mg/kg not 230 mg/kg. The Permittee shall submit a revised work plan incorporating the above revision.	Comment noted. Please see the response to comment # 2.
5	NMED	QAPP, Worksheet # 15, Project Action Limits Table, Aqueous	page 86				The header for the table indicates that the Human Health Groundwater Screening Values (HHGSVs) are shown in "milligram/liter (ug/L)". This should read "micrograms/liter (ug/l)"' Also, the following recommended HHGSVs need to be revised: (1) 2-Amino-4,6-Dinitrotoluene and 4-Amino-2,6-Dinitrotoluene: Should be 39 ug/l, not 3.9 ug/l (2) Nitroglycerin: Should be 2 ug/l, not 0.2 ug/l (3) HMX: Should be 1000 ug/l, not 100 ug/l (4) 2,4,6-Trinitrotoluene: Should be 2.5 ug/l, not 0.98 ug/l. In addition, there are no Project Action Limits provided for the list of explosives to be analyzed using USEPA Method 846, 8330A (as shown on pages 82 and 83 for soils) or for metals in groundwater. The Permittee shall submit a revised work plan incorporating the above revisions.	Comment noted. The Final RI WP, revised based on EPA comments, was submitted to NMED as a courtesy copy. The screening levels for groundwater listed in the QAPP Worksheet # 15 were based on MCLs from the USEPA RSL Table with THQ=0.1 (May 2014, the most current version at the time of the WP submittal). The Air Force agrees that MCLs from the USEPA RSL table with THQ=1 (as NMED suggests) should have been listed as screening levels for groundwater. However, since no groundwater sampling was performed during the fieldwork at XU853 and XU854 MRSs (please see response to comment # 3), no screening levels for groundwater (and therefore no updated values) are provided in the RI Reports for the two sites. In addition, based on historical use of the sites (launching facilities for missiles), only propellants were considered as contaminants of potential concern for groundwater (although we considered the likelihood of groundwater contamination very low as described in the response to comment # 3). As a result, the Project Action Limits for the list of explosives and metals (analyzed using Methods 8330A and 6010c, respectively) in groundwater associated with the MEC presence at two MRSs were not listed in the QAPP. Based on information provided above, no revisions of the WP are required.
6	NMED	General					The Permittee shall submit a revised work plan in the form of an Investigation Work Plan or an Accelerated Corrective Measures Work Plan, if the field work can be completed within 180 days, or a Corrective Measures Work Plan if the field work will take longer than 180 days. If a presumptive remedy for any contaminants found above Project Action Limits is proposed, the work plan must provide a proposal for post-excavation confirmatory sampling and waste profiling and disposal. The Permittee must submit the work plan to NMED on or before December 31, 2015 in the form of the two paper copies and one electronic copy (in MS Word/Excel format).	Comment noted. Please see the response to comment # 1. Since both XU853 and XU854 MRSs have been investigated under the CERCLA authority, the RI WP, as submitted, is the proper planning document for the RI. The main purpose of the RI under CERCLA is to determine the nature and extent of Munitions and Explosives of Concern (MEC) and MC to either focus follow-on restoration efforts on MEC and/or MC delineated areas or to verify that no further action is needed for the MRS. The protocols for excavation, post-excavation confirmatory sampling and waste profiling and disposal are usually included in the Removal Action or Remedial Action WPs (under CERCLA) if a contaminated area is identified during the RI phase, and if the preferred remedy for the site identified in the Feasibility Study or in the Engineering Evaluation/Cost Analysis includes excavation.