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Hazardous Waste Bureau

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**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

July 30, 2018

Sylvia A. Waggoner  
Chief, Compliance Branch  
US Army Fort Bliss Garrison  
DPW-Environmental Division  
Building 622, Taylor Road  
Fort Bliss, TX 79916-3803

**RE: APPROVAL WITH MODIFICATIONS  
DRAFT FINAL – FORT BLISS SITE ASSESSMENT  
DONA ANA RANGE  
FORT BLISS, NEW MEXICO  
EPA ID #NM4213720101  
HWB-FB-18-002**

Dear Ms. Waggoner:

The New Mexico Environment Department (NMED) is in receipt of the Fort Bliss (Permittee) *Draft Final – Fort Bliss Site Assessment Dona Ana Range* (Work Plan), dated July 17, 2018. NMED has reviewed the Work Plan and hereby issues this Approval with Modifications. The Permittee must address the following comments.

**1. Section 4, Site Condition, lines 10-11, page 4-1**

**Permittee Statement:** “The presence of the NAPL was reported to the New Mexico Environment Department (NMED), Ground Water Quality Bureau [GWQB].”

**NMED Comment:** The NMED Hazardous Waste Bureau (HWB) is the regulatory agency for the Facility. The Permittee must also report the project-related activities to HWB. If there is any documentation (e.g., monitoring report) that was not submitted to HWB previously, provide the documentation by no later than **September 30, 2018**.

**2. Section 4, Site Condition, lines 12-14, page 4-1**

**Permittee Statement:** “Arcadis developed a conceptual site model (Appendix B) based on the USGS conclusions that the product is light NAPL (LNAPL) and was introduced to the well via dumping down the casing and is not a result of a release from a nearby source.”

**NMED Comment:** Provide the evidence that the product was dumped down the casing. Unless the evidence is provided, a possibility of a release should not be ruled out at this time. Depending on the results of the site assessment, more comprehensive release assessment may be necessary to determine whether the site should be listed as a solid waste management unit (SWMU). The assessment must provide all available site history information including the identification of nearby underground pipelines if present. Revise the Work Plan to conduct more comprehensive release assessment, as necessary.

**3. Section 4, Site Condition, lines 14-20, page 4-1**

**Permittee Statement:** “Based on the information provided, the NAPL is contained within the non-perforated section of the well casing, approximately 270 feet above the first perforated section and the water-bearing sands of the Mesilla Bolson. Any contaminant migration is expected to occur vertically through dissolution and diffusion, but the groundwater gradient is expected to be upward in the semi-confined aquifer conditions (USIBWC, April 2000). Water within the Mesilla Bolson may be unaffected by the NAPL due to the 270-foot vertical distance between the NAPL and the perforated casing.”

**NMED Comment:** The Permittee must demonstrate that the aquifer is unaffected by the NAPL. The Permittee proposes to collect groundwater samples from the contaminated well after NAPL removal and well casing cleaning are completed. However, the proposed groundwater sampling itself does not fully demonstrate that the aquifer is unaffected. Prior to collecting groundwater samples, the well must be completely purged, if possible. A minimum of three well volumes must be purged and NAPL removed to the extent possible. Once the well is allowed to recharge, check for the presence of NAPL. If NAPL is not detected or detected at a thickness less than 0.1 foot, collect groundwater samples as proposed. Regardless of the sample analytical results, the well must be left undisturbed for at least 60 days; then, rechecked for the presence of NAPL. If NAPL is not detected, collect groundwater sample to confirm that the aquifer is unaffected. Revise the Work Plan accordingly.

**4. Section 4, Site Condition, lines 14-16, page 4-1, and Section 4.3, Hydrogeology, lines 4-5, page 4-2**

**Permittee Statements:** “Based on the information provided, the NAPL is contained within the non-perforated section of the well casing, approximately 270 feet above the first perforated section and the water-bearing sands of the Mesilla Bolson.”

“The well site is located in the Hueco Bolson aquifer just north of the Anthony Gap, New Mexico.”

**NMED Comment:** The former statement describes that the well is located within the Mesilla Bolson aquifer while the latter statement describes that the well is located within the Hueco Bolson aquifer. Correct the discrepancy in the report summarizing the results of the investigation.

**5. Section 6.1, NAPL Removal and Well Cleaning, lines 30-32, page 6-1**

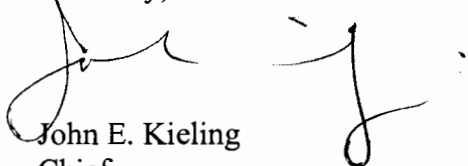
**Permittee Statement:** “Water within the casing above the first perforated zone will be removed and containerized. Arcadis estimates approximately 110-220 gallons of water above the first screen will be removed. The well will be allowed to recharge after the water removal.”

**NMED Comment:** In Section 4, *Site Condition*, lines 3-5, page 4-1, the Permittee states, “[t]he well was drilled on December 1, 1953 and is constructed of 3-inch steel casing to a total depth of 768 feet below ground surface (bgs), with perforated sections at 678-708 feet bgs and 738-768 feet bgs.” Although perforated sections are separated by blank casing, the perforated zones are not separated by seal; therefore, it is not possible to determine which perforated section is screened across the water-bearing zone. Propose to remove entire water column, rather than water column above the first perforated zone in the revised Work Plan. Additionally, while removing entire water column, one well volume is estimated to be 140 gallons. Comment 3 directs that a minimum of three well volumes must be purged. Subsequently, a minimum of 420 gallons of water must be removed. Revise the Work Plan accordingly.

The Permittee must address all comments in this Approval with Modifications. A report summarizing the results of the assessment must be submitted to NMED no later than **December 31, 2018**.

Should you have any questions, please contact Michiya Suzuki of my staff at (505) 476-6059.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
K. VanHorn, NMED HWB  
M. Suzuki, NMED HWB  
L. King, EPA, Region 6 (6MM-RC)  
R. Crites, Fort Bliss

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