

BILL RICHARDSON Governor

DIANE DENISH Lieutenant Governor

NEW MEXICO ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1 Santa Fe, New Mexico 87505-6303 Phone (505) 476-6000 Fax (505) 476-6030 www.nmenv.state.nm.us



RON CURRY Secretary

JON GOLDSTEIN Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

January 9, 2008

Mark Patterson Ravenna Army Ammunition Plant Building 1037 8451 State Route 5 Ravenna, OH 44266

RE: APPROVAL WITH DIRECTION RELEASE ASSESSMENT REPORT, PARCELS 11, 12, 14 AND 25 DRAFT FORT WINGATE DEPOT ACTIVITY EPA ID# NM6213820974 FWDA-07-007

Dear Mr. Patterson:

The New Mexico Environment Department (NMED) received the Department of the Army (the Permittee's) *Release Assessment for Parcels 11, 12, 14 and 25 Draft* (Report), dated August 28, 2007, and hereby issues this Approval with Direction. All comments included in this letter are required to be addressed in the Investigation Work Plans for Parcels 11, 12, 14 and 25 due to be submitted to NMED on March 7, 2008. NMED will evaluate the information required by this letter when provided in the associated Work Plans.

This document was submitted with the qualifier that it was a "draft" report. NMED considers this Report to be the final version as submitted. NMED does not review draft versions of document submittals.

COMMENT 1

In Section 3.2 (Site Reconnaissance and Confirmatory Sampling), page 3-2, the Permittee states that "[s]ampling of two Areas of Concern (AOCs) within Parcel 11 was completed during the site reconnaissance." The Permittee did not identify which AOCs were sampled or the results of the sampling, NMED cannot use this information to evaluate future site characterization requirements. No response required.

COMMENT 2

In Section 3.2 (Site Reconnaissance and Confirmatory Sampling), page 3-2, the Permittee states that "[a]ll locations were screened with a Photo-Ionization Detector (PID) to identify any potential volatile compounds." In this statement the Permittee does not specify which AOC locations were screened. For future submittals the army should note that the PID is used as a field screening tool only and NMED does not accept PID results for compliance purposes. No response required.

COMMENT 3

In Section 4.3.1 (Historical Records/Document Review) page 4-1, the Permittee states "[a] review of historical drawings and photos showed that the Above Ground Storage Tank (AST) could be filled from underground piping attached to the Underground Storage Tanks (USTs) at Building 6 (SWMU 45) as well as through a fill pipe attached to the USTs on top of the tank." The Permittee also states that there is no record of removal of the underground piping. The Permittee must conduct a geophysical survey or other investigation to determine if the piping is still present. If present, underground piping must be addressed under corrective action for SWMU 45. AOC 46 must be included in the Work Plan for Parcel 11 as a site proposed for further investigation.

COMMENT 4

In Section 4.3.1 (Historical Records/Document Review) page 4-1, the Permittee states "[t]he visible piping at the AST is shown in historical photos (Appendix B)." It is unclear which historical photo and piping the Permittee is referring to. The Permittee must clarify this in the Work Plan for Parcel 11. (See also Comment 3)

COMMENT 5

In Section 4.4 (Release Assessment Conclusion) page 4-3, the Permittee states "[b]ased on the known use of AOC 46 and the findings of the site reconnaissance and confirmatory sampling, it is concluded that a release of hazardous constituents occurred at this location." The Permittee also proposes that structure 65 (AOC 46) be added to SWMU 45 and that AOC 46 be designated "Corrective Action Complete Without Controls." Benzo(a)pyrene was detected at concentrations that exceed cleanup levels. The Permittee must therefore include this AOC in the Work Plan for

Parcel 11 as a site proposed for further investigation.

COMMENT 6

In Section 5.4 (Release Assessment Conclusion) page 5-3, the Permittee states "[a]s noted above, white powder was observed on the ground surface immediately adjacent to the former building slab during the site reconnaissance in October 2006. It is not known if the observed powder is related to the photoflash spill; the powder is present in an area that was excavated to approximately 2 feet below ground surface (bgs) and backfilled with clean soil during remediation of Building 11 in 2002." TPL's response to NME's July 29, 2004 Request for Information contains only unsupported information and assertions, is therefore not useful in evaluating the need for further investigation at AOC 47. Therefore, the Permittee must characterize the "white powder" and collect soil samples beneath and around the "white powder" release to confirm that further cleanup is not necessary. Proposed investigation activities for this AOC must be included in the Work Plan for Parcel 11.

COMMENT 7

The Permittee requests that AOC 47 be designated "Corrective Action Complete Without Controls." NMED did not approve or respond to TPL's correspondence as stated in *Section XI of the Response of TPL, Inc. to Request for Information Dated July 29, 2004.* According to an email included in Appendix B of this Report, barium was still present following the removal of [approximately] 6 tons of soil. It is unknown if cleanup was conducted as described by TPL. It is also unknown if additional remediation was conducted at this location. The Permittee must collect confirmation samples to verify that the contaminated soil in the vicinity of the spill has been completely removed and that residual contamination is no longer present at the release site. The Permittee must include proposed investigation activities for this AOC in the Work Plan for Parcel 11.

COMMENT 8

In Section 6.3.2 (Site Reconnaissance Findings) page 6-2, the Permittee states "[w]hile the staining within the garage appeared to be from petroleum products, those observed in the boiler room were most likely caused by water." The Permittee must provide photographs of the floor in the boiler room and photographs of the floor in the storage closet that show the condition of the floors. These photographs must be included in the Work Plan for Parcel 11.

COMMENT 9

In Section 6.3.2 (Site Reconnaissance Findings) page 6-2, the Permittee states that "[n]o stains were observed around the building exterior." Although no stains were observed on the exterior of the building, the Permittee must collect soil samples from areas near the building entrances and from beneath the asphalt as shown in Photograph 6 of the Report. The Permittee must include all proposed activities for investigation of AOC 48 in the Work Plan for Parcel 11.

COMMENT 10

Based on Photographs 7 and 9, presented in Appendix C (Site Reconnaissance Photographs) it appears that the floor in Building 34 is in good condition; however, the floor drain is a concern. During vehicle maintenance activities or any other activities, it is likely that any leaks or spills drained or were washed to the floor drain or disposed in the sink drain, creating a potential for groundwater contamination. The Permittee must install groundwater monitoring wells downgradient of Building 34 (downgradient of the NW corner of the Building) to assess releases from the drains or sewer lines and provide additional groundwater monitoring points for Parcel 11 site characterization. Proposed well installation and sampling activities must be included in the Work Plan for Parcel 11.

COMMENT 11

In Section 7.0 (AOC-49 – Structure 38), the Permittee refers to FWDA Drawing No. D-1-96 (Appendix B). This drawing was not included in the Report. The Permittee must include this drawing in the Work Plan for Parcel 11.

COMMENT 12

As described by the Permittee, AOC 49 is comprised of two loading docks (Structure 38 and Structure 39). Although evidence of a release of hazardous waste has been assessed by reviewing historical documents, no samples were collected or analyzed to confirm release. The Permittee must propose to collect soil samples in the vicinity of both loading docks and the associated railroad tracks. Proposed investigation activities for AOC 49 must be included in the Work Plan for Parcel 11.

COMMENT 13

In Photograph 11 (AOC 49, Structure 38, the north side of the loading dock), an access panel is located beneath the loading dock. The Permittee also discusses the two access panels in Section 7.3.2 (Site Reconnaissance Findings). The Permittee must describe the purpose of these access panels (and associated crawl spaces) in the Work Plan for Parcel 11.

COMMENT 14

As shown in Photograph 16 and as stated in the text (page 7-2), a steel rail car bumper is located at the west end of Structure 38. The Permittee must provide proposed investigation activities in the Work Plan for Parcel 11 to assess whether releases have occurred along the rail line at this location.

COMMENT 15

In Section 8.1 (Location, Description, and Operational History) page 8-1, the Permittee states that at AOC 51 (Structure 64), a former diesel Underground Storage Tank (UST) and associated piping was abandoned in place in June 1961. In Section 8.4 (Release Assessment Conclusion) page 8-2, the Permittee states "[b]ased on the known use of AOC 51 and the findings of the site reconnaissance, it is possible that a release of diesel fuel occurred at this location." The Permittee also proposes that structure 64 (AOC 51) be added to SWMU 45 and that AOC 51 be designated "Corrective Action Complete Without Controls."

Based on a geophysical survey, it appears that the UST is still in place. The Permittee must demonstrate that the UST and associated piping were removed. The Permittee must also determine if a release has occurred at this site, therefore the Permittee must include proposed investigation activities at AOC 51 in the Work Plan for Parcel 11.

COMMENT 16

In Section 9.0 (AOC-52 Building 79 and Building 80, Storage Vaults) the Permittee states that based on a 1961 Facility Data report, Buildings 79 and 80 were primarily used for the storage of documents and inflammable materials. The Permittee must specify what types of inflammable materials were stored in each building. The Permittee must propose to characterize the site (e.g., sample soils around the footprint of the building) to confirm that hazardous constituents were not released in or around the buildings.

If the Permittee provides documentation that specifically identifies the types of inflammable material stored in the buildings and demonstrates that the materials did not contain hazardous constituents, then the Permittee must include this information in the Work Plan for Parcel 11.

If Buildings 79 and 80 are to be demolished, site characterization and confirmation sampling must be completed following demolition. Investigation of AOC 52 must be proposed in the Work Plan for Parcel 11.

COMMENT 17

In Section 9.4 the Permittee states "Arsenic concentrations in the previous coal bottom ash samples ranged from 4.92 to 8.42 mg/kg, exceeding the Permit cleanup level of 3.90 mg/kg; however, the detected arsenic concentrations are of the same magnitude as the maximum concentration of arsenic detected in soil samples collected from unimpacted areas of FWDA." The Permittee must remove and properly dispose of the coal bottom ash and collect soil samples beneath the coal bottom ash and evaluate the site for the presence of residual contamination. The Permittee must conduct an appropriate background study before comparisons can be made to background concentrations of naturally occurring inorganic constituents. Background studies conducted at the Facility must be approved by NMED. Proposed removal and investigation details must be included in the Work Plan for Parcel 11.

COMMENT 18

AOC 93 is listed as the Bivouac and Tank Training Area. It is unclear how long the Bivouac and Training area was used. The Permittee must include this background information in the Work Plan for Parcels 12, 14, and 25.

COMMENT 19

AOC 93 (Bivouac and Tank Training Area) encompasses part of Parcel 25 which consists mainly of Interstate 40. The Permittee must explain what type of activities related to AOC 93 may have occurred on Parcel 25. This information must be included in a separate Investigation Work Plan for Parcels 12, 14 and 25.

COMMENT 20

In the 1978 Aerial Photo interpretation, the Permittee identifies a dark image located in the northeast corner of Parcel 25 as "probable coal". The Permittee must confirm that coal was stored at this location. No additional work is required if the supporting evidence and references, which must be included in the Work Plan for Parcel 12, 14 and 25, are sufficient.

COMMENT 21

In Section 10.4 (Release Assessment Conclusion), page 10-4, the Permittee states "[t]wo 3.25 inch rocket motor tubes were observed on the ground near AOC 93, however, they appeared to be empty tubes used as a marker for a valve box." The Permittee must identify the Parcel where rocket motor tubes were found and propose removal activities in the Work Plan for Parcels 12, 14, and 25.

COMMENT 22

In Section 10.3.1 (Historical Records/Document Review), page 10-2, the Permittee states "[t]he equipment was trucked in from Gallup to FWDA." It is unclear if the equipment was trucked in from Gallup to FWDA for each training exercise or if the equipment was trucked in one time and stored at FWDA. The Permittee must clarify this in the Work Plan for Parcels 12, 14, and 25.

COMMENT 23

In Section 10.3.2 (Site Reconnaissance Findings), page 10-3 the Permittee discusses the presence of trenches, gravel pits, and ground scars on Parcel 14 and borrow pits, ground scars, and debris in some pits on Parcel 12. It is unknown what types of activities may have taken place at these pits and trenches in the past. The Permittee must therefore investigate each of these sites to confirm that contamination or waste is not present. Proposed investigations for each site identified in Section 10.3.2 must be included in the Work Plan for Parcels 12, 14, and 25.

COMMENT 24

In Section 11.3.1.4 (Vault C, Building 2) the Permittee states that the former transformers leaked. Although the transformers were removed, it is unclear whether site characterization activities were completed. The Permittee must propose investigations to asses contaminant releases at Vault C in the Work Plan for Parcel 11.

COMMENT 25

In Section 11.3.1.6 (Building 29 Pole Mounted Transformer), the Permittee states "The transformer was classified as PCB-contaminated with a PCB concentration of 240 ppm." Although the Permittee states that no evidence of a hazardous release was observed at this location (Section 11.3.2.6); the Permittee must collect soil samples from this location to demonstrate that a release from the transformer did not occur. Sampling details must be included in the Section for AOC 75 of the Work Plan for Parcel 11.

COMMENT 26

In Section 11.3.1.8 (Other Transformer Locations), the Permittee states that "FWDA records (Appendix B) show several other transformer locations in either Parcel 11 or Parcel 12." The Permittee must include a figure with each of the listed transformer locations. This figure must be included in the Work Plans for Parcel 11 and Parcels 12, 14, and 25. Proposed sampling activities must be included for sites within each parcel in the appropriate Work Plan.

COMMENT 27

In Section 11.4, page 11-5, the Permittee states that staining was observed on the interior surfaces of the existing vaults that contain transformers. On December 6, 2007, NMED observed that Vaults A, B, and C contained staining beneath the transformers. In addition, the vaults contained holes in the vault floors that appeared to be floor drains.

As stated by the Permittee, samples were collected only from Structure 81 and not from other locations during previous investigations. The Permittee must demonstrate that a release from these vaults has not occurred. The Permittee must collect soil samples beneath each floor drain found in Vaults A, B, and C for analysis of PCBs and metals. In addition the stained areas in each vault must be tested for the presence of PCBs and other contaminants. Proposed sampling methods and locations must be included in the Work Plan for Parcel 11.

COMMENT 28

In Section 12.0 (Additional Areas Evaluated) page 12-2, the Permittee requests that the Former Underground Storage Tank at Building 11 (Structure 64), the AST located near Building 11 (Structure 65), the fuel valve or box, and remaining ancillary piping be added to the SWMU 45. As stated in Comments 5 and 15, proposed investigation of AOC 46 (Structure 65) and AOC 51

(Structure 64) must be included in the Work Plan for Parcel 11. The fuel valve/meter box and the associated underground piping must be addressed as part of SWMU 45 and also included in the Work Plan for Parcel 11.

Two separate RFI Work Plans (Parcel 11 Work Plan and Parcels 12, 14, and 25 Work Plan) must be submitted to NMED. The Permittee must address all comments contained in this letter in each work plan as specified above. The Work Plans must include a letter that details where all comments included in this letter have been addressed and identifying NMED's numbered comments. The Permittee must submit both the RFI Work Plan for Parcel 11 and the RFI Work Plan for Parcels 12, 14, and 25 to NMED no later than March 7, 2008.

If you have any questions regarding this letter, please call Tammy Diaz-Martinez of my staff at (505) 476-6056.

Sincerely,

James P. Bearzi Chief Hazardous Waste Bureau

- cc: Tammy Diaz-Martinez, NMED HWB Dave Cobrain, NMED HWB Cheryl Frischkorn, NMED HWB Steve Smith, USACE-SWF Laurie King, U.S EPA Region 6 Chuck Hendrickson, U.S. EPA Region 6 Sharlene Begay-Platero, Navajo Nation Eugenia Quintana, Navajo Nation Steve Beran, Zuni Pueblo Edward Wemytewa, Zuni Pueblo Philana Booqua, Zuni Pueblo Clayton Seoutewa, Southwest Region BIA Link Lacewell, DOI/BLM Rose Duwyenie, Navajo BIA
 - File: FWDA 2008 and Reading HWB-FW-07-004