DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P. O. BOX 17300
FORT WORTH, TEXAS 76102-0300

REPLY TO
ATTENTION OF:

CESWF-EV-D (415-10e)

27 October 1997

MEMORANDUM FOR COMMANDER, TOOELE ARMY DEPOT ACTIVITY (TEAD), ATTN: SIOTE-IRE (MR. LARRY FISHER), BLDG T-8, TOOELE, UT 84074-5000

SUBJECT: Interim Stabilization of Debris Piles at Fort Wingate Depot Activity

1. Reference SAB and letter from New Mexico Environment Department (NMED) dated 23 September 1997, subject: U.S. Army Ft. Wingate Depot Debris Piles/Burial Sites and OB/OD Site Visit.

2. Enclosed is a plan presenting the strategy for stabilizing and maintaining areas at the Central Landfill, the Group C Disposal Area, and the OB/OD Areas to minimize movement of refuse into watercourses due to erosion caused by storm water events as requested in the referenced letter. The plan should be forwarded to the NMED Surface Water Quality Bureau no later than 29 October 1997, in order to meet the response target date of 30 days after receipt of the letter. Please note that implementation of the plan will require purchase of hay bales and labor associated with emplacement of the bales, regular inspection, and picking up debris which has been moved downstream from its original location within the debris piles. Implementation of the plan in the OB/OD Areas will require coordination with the Corps of Engineers, Huntsville Division.

3. Additionally, three maps have been prepared as requested by the NMED Surface Water Quality Bureau during a site visit on 16 September 1997, showing areas of concern (AOCs), site topography, and surface water drainage areas.

4. Storm water sampling data from the Corps of Engineers, Albuquerque District, are also provided for forwarding to NMED Surface Water Quality Bureau. Questions regarding storm water sampling should be directed to Mr. David Gregory, telephone (505) 342-3478.

5. If there are questions about the landfills and interim stabilization prior to final remediation, please contact Mr. Dwayne Ford of our Environmental Design Branch, telephone 817/978-9924, EXT 1644.

FOR THE COMMANDER:

for MICHAEL G. ENSCH
Chief, Environmental Division

3 Encls
1. Interim Stabilization Plan
2. Drawings (7)
3. Storm Water Data

CF (w/encls 1-3):
Mr. Stan McAllister
U.S. Army Corps of Engineers
P.O. Box 399
Church Rock, NM 87311

CF (w/encl 1):
Mr. Steve Egnaczyk
ERM Program Management Company
855 Springdale Drive
Exton, PA 19341

Interim Stabilization for Investigated Areas
In or Near Watercourses
Fort Wingate Depot Activity
24 October 1997

The following paragraphs specify measures to be utilized at Fort Wingate Depot Activity to minimize movement of refuse into watercourses due to erosion caused by storm water events. The measures will be implemented at areas where debris or refuse is present within an arroyo or watercourse or has the potential for migrating into a watercourse. These measures are intended to provide interim stabilization in these areas until final remedial actions at the areas are initiated and the requirements of 20 NMAC 6.2 are fully satisfied. The measures defined here have been established as "performance-based" (e.g., rather than showing specific, detailed measures) to allow the utilization of best professional judgment during field construction and installation.

A number of erosion control measures are available which satisfy the guidelines specified in the EPA document "Storm Water Management for Construction Activities", EPA-832-R-92-005, including silt fences, staked hay bales, diversion dikes, check dams, berms, and sediment traps. Consultation with Mr. Phil Wright of the McKinley County Conservation District indicates that hay bales and/or rock placement were used by the conservation district as Best Management Practices (BMPs), with rock placement used in more permanent applications. Due to considerations for unexploded ordnance and the free roaming buffalo herd at FWDA, it appears the most readily implemented BMPs include removal of materials which have already migrated into a watercourse followed by use of hay bales to mitigate further movement of refuse into watercourses due to erosion caused by storm events. Rock check dams will be used in areas unsuitable for hay bales. Additional or more rigorous techniques will be implemented should the measures currently specified prove ineffective.

Group C Disposal Area - Disposal Area 1 at the Group C Disposal Area does not contain materials requiring stabilization; therefore, no immediate measures are currently proposed. In Disposal Area 2, visible waste materials (fuze cans, banding, etc.) which have migrated from the disposal area downstream will be picked up and placed in bags for proper disposal or, if the waste is not amenable to ready disposal, such as construction debris, it will be reconsolidated at the disposal area in a location and method which minimizes the possibility of future migration. As shown on Figure 1, new hay bales will be installed on existing metal posts along the arroyo bank toe of slope. In order to slow the flow in the channel, thereby minimizing erosion and exposure of subsurface debris in the bottom of the arroyo, three rock check dams will be constructed and placed at the locations shown in Figure 1. Because the area to the north of the arroyo bank is well-vegetated and flat, no measures should be required at the top of slope to redirect storm water run on.

Central Landfill - The Central Landfill is located in an abandoned arroyo adjacent to an active arroyo. The landfill area is well vegetated and most debris is buried under a 2 - 3 foot layer of soil. Except for storm water run on from the railroad culvert at the northwest end of the landfill at its confluence with the active arroyo, minimal water transport occurs through the Central Landfill area. At the confluence with the active arroyo, material in the landfill can be exposed and migrate from the 'face' of the landfill into the active arroyo. Hay bales placed at the confluence with the active arroyo in 1996 following the site investigation will be replaced as shown on Figure 2. Hay bales will also be placed at the location where storm drainage enters the Central Landfill to slow it down without affecting the ability of the existing culvert to convey drainage. Debris which has migrated into the active arroyo will be picked up and bagged for proper disposal or reconsolidated at the Central Landfill in an area where remigration is unlikely.

Western Landfill - The Western Landfill is not located in or proximal to a watercourse. The landfill material is buried and the area is well vegetated with no evidence of erosion or channeling by surface water. Interim measures at the Western Landfill are not required prior to final remediation and closure of the landfill.

Current and Closed OB/OD Areas - The Current and Closed OB/OD Areas contain several areas where debris is located within or adjacent to an arroyo. While much of the material is buried within the banks above the arroyos, there are areas where debris is exposed or can slough from the bank into the arroyo. Visible waste materials (fuze cans, banding, etc.) which have moved from the arroyo bank downstream will be picked up and removed for proper disposal or replaced within the debris piles in such a manner to minimize the likelihood for future migration. Hay bales will be installed/reinstalled at the toe of arroyo banks where there are exposed wastes/debris with the potential to move into a watercourse due to erosion caused by storm water events. Hay bales will also be installed at the top of the arroyo banks at selected locations as necessary to minimize storm water run on. Maps showing the drainage courses and areas of observed wastes/debris are included as Figures 3 and 4. No specific locations for BMP installation have been shown. Field personnel will use their best professional judgment in placement. At the OB/OD Areas, consideration of unexploded ordnance is of paramount importance and any activities, including picking up downstream debris or the driving of stakes for hay bales must be subordinate to UXO safety requirements.

Inspection and Maintenance -

Best management practices implemented at FWDA will be inspected following each rainfall event of 0.5 inches or more. At a minimum, the sites will be inspected every 30 days. Inspection will be performed by on-site personnel, either a Corps of Engineers representative or by the resident FWDA caretakers. Routine maintenance, such as replacing deteriorated hay bales, will be performed as required by the inspector.

Tooele Army Depot will be notified in the event major maintenance actions are required. Inspection personnel will also be responsible for identifying the need for additional or alternative BMPs.

Future FWDA Projects

The Central Landfill and Group C Disposal Area are scheduled for remedial actions consisting of excavation and proper disposal of the landfill contents. Prior to the start of excavation at these landfills, a Storm Water Pollution Prevention Plan will be prepared in accordance with EPA-832-R-92-005 Storm Water Management for Construction Activities and a Notice of Intent will be submitted under the National Pollutant Discharge Elimination System. Stabilization of the sites during excavation will be specified in the Storm Water Pollution Prevention Plan.

Should future environmental investigations be performed at FWDA in areas where debris or refuse is present in a watercourse or could migrate into a watercourse, BMPs will be implemented at those sites to minimize negative effects on surface water quality, both during the investigation and in the interim prior to permanent stabilization. Except while work is actively being conducted at a site, staging of equipment, supplies, or investigative-derived wastes (IDW) within a watercourse will not be performed.