



**DEPARTMENT OF THE ARMY**  
US ARMY INSTALLATION MANAGEMENT COMMAND  
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BLISS  
1741 MARSHALL ROAD  
FORT BLISS, TEXAS 79916  
DEC 14 2017



**ENTERED**



Directorate of Public Works

Mr. David Cobrain  
Project Leader  
New Mexico Environmental Department-HWB  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303

RE: Submittal of Annual Post-Closure Site Inspection Reports, Fort Bliss Site No. 12 (FTBL-012)/Solid Waste Management Unit 27 (SWMU-27) Doña Ana Range Camp Rubble Landfill, Fort Bliss, New Mexico

Dear Mr. Cobrain:

On June 7, 2017 and November 9, 2017, the Fort Bliss Directorate of Public Works, Environmental Division (DPW-ED) conducted biannual post-closure site inspections of the Doña Ana Range Camp Rubble Landfill, FTBL-012/SWMU 27. The inspections were conducted before and after the wet summer season respectively, in accordance with the requirements stated in the New Mexico Environmental Department (NMED) Hazardous Waste Bureau letter, dated October 30, 2007.

The NMED correspondence indicated that site inspections be conducted at least twice per year before and after the wet summer season and after major rainfall events that produce more than one inch of rain. The site inspections included observations of the landfill cover and side slopes, water drainage system and vegetative cover.

During the inspection conducted in the pre-wet season on June 7, 2017, the landfill cover and side slopes showed no signs of erosion and the drainage system, vegetative layer, fence and warning signs were found to be in good condition (Enclosure 1).


On August 3, 2017 and August 23, 2017, the Fort Bliss DPW-ED conducted additional post-closure site inspections following three major rain events. The rain events produced more than one inch of precipitation in El Paso, Texas on July 15, 2017 (1.45 inches), July 29, 2017 (1.06 inches) and August 14, 2017 (1.18 inches), according to the El Paso International Airport weather data. During the major rain event inspections, the landfill cover and side slopes showed no signs of erosion and the vegetative layer, perimeter fence and warning signs were found to be in good condition (Enclosures 2 and 3). However, a section of the drainage system (arroyo) on the South side of the site showed significant erosion.

During the post-wet season inspection on November 9, 2017, the landfill cover and side slopes showed no signs of erosion, and the vegetative layer, perimeter fence and warning signs were found to be in good condition (Enclosure 4).

On November 13, 2017, the aforementioned eroded section of the arroyo was repaired by filling with dirt and rocks. Additionally, a fence post situated in the middle of the arroyo, which obstructed flow during rain events causing significant erosion and trenching, was removed. The fence section was then reinforced by installing an additional fence post on each edge of the arroyo (Enclosure 5).

Should you have any question, please contact Ms. Sylvia A. Waggoner, Chief, Environmental Division, Directorate of Public Works, at (915) 568-7031 or [sylvia.a.waggoner.civ@mail.mil](mailto:sylvia.a.waggoner.civ@mail.mil).

Sincerely,



Alfredo J. Riera, P.E.  
Director of Public Works

Enclosures

Enclosure 1:  
Pre-wet Season Inspection

# Doña Ana Range Camp Rubble Landfill - Pre-wet season Inspection FTBL-012/SWMU-27

Unit: IMBL- PWE

Inspector: Victor Garcia

Facility ID: FTBL-012/SWMU-27

Telephone Number: (915) 568-5205

Facility Name: Doña Ana Range Camp Rubble Landfill

Email: victor.h.garcia22.ctr@mail.mil

Inspection Date: June 7, 2017

## List of Observations:

1. The landfill cover was uniform and in good condition. There was no evidence of erosion or depression on the cap's surface and on the side slopes.
2. The vegetative layer was in good condition on the landfill cap and areas in the immediate vicinity within the fenced property.
3. The site perimeter fence and warning signs remain in good condition. There were no locations that required maintenance or repairs.

## Inspection photographs

### Photograph No. 1

View of landfill gate.

Landfill gate and site perimeter fence were in good condition.



**Doña Ana Range Camp Rubble Landfill - Pre-wet season Inspection  
FTBL-012/SWMU-27**

Photograph No.2

View of landfill cap facing North.

No signs of erosion or depression on landfill cap.  
Vegetative layer was in good condition.



Photograph No. 3

View of landfill cap facing East.

No signs of erosion or depression on landfill cap.  
Vegetative layer was in good condition.



**Doña Ana Range Camp Rubble Landfill - Pre-wet season Inspection  
FTBL-012/SWMU-27**

Photograph No. 4

View of landfill cap facing South.

No signs of erosion or depression on landfill cap.  
Vegetative layer was in good condition.



Photograph No. 5

View of landfill cap facing West.

No signs of erosion or depression on landfill cap.  
Vegetative layer was in good condition.



**Doña Ana Range Camp Rubble Landfill - Pre-wet season Inspection  
FTBL-012/SWMU-27**

Photograph No. 6

View of arroyo facing North.

No sign of significant erosion caused by water runoff on arroyo.



Photograph No. 7

View of swale facing South.

No sign of significant erosion caused by water runoff on drainage swale.



**Doña Ana Range Camp Rubble Landfill - Pre-wet season Inspection  
FTBL-012/SWMU-27**

Photograph No. 8

View of Southern fence facing West.

Site perimeter fence and warning signs were in good condition.



Photograph No. 9

View of Western fence facing South.

Site perimeter fence and warning signs were in good condition.





Enclosure 2:  
July 15 and July 29, 2017 Rain Event Inspection

# Doña Ana Range Camp Rubble Landfill – Rain Events Inspection July 15 and July 29, 2017 - FTBL-012/SWMU-27

Unit: IMBL- PWE

Inspector: Victor Garcia

Facility ID: FTBL-012/SWMU-27

Telephone Number: (915) 568-5205

Facility Name: Doña Ana Range Camp Rubble Landfill

Email: victor.h.garcia22.ctr@mail.mil

Inspection Date: August 03, 2017

## List of Observations:

1. The landfill cover was uniform and in good condition. There was no evidence of erosion or depression on the landfill cap's surface and on the side slopes.
2. The vegetative layer was in good condition on the landfill cap and areas in the immediate vicinity within the fenced property.
3. The site perimeter fence and warning signs remained in good condition.
4. A section of the drainage system (arroyo) on the South side of the site showed significant erosion.

## Inspection photographs

### Photograph No. 1

View of landfill cap facing North.

No signs of erosion or surface depression resulting from the rain event.



**Doña Ana Range Camp Rubble Landfill – Rain Events Inspection  
July 15 and July 29, 2017 - FTBL-012/SWMU-27**

Photograph No.2

View of landfill cap  
facing East.

No signs of erosion  
or surface  
depression resulting  
from the rain event.



Photograph No. 3

View of landfill cap  
facing South.

No signs of erosion  
or surface  
depression resulting  
from the rain event.



**Doña Ana Range Camp Rubble Landfill – Rain Events Inspection  
July 15 and July 29, 2017 - FTBL-012/SWMU-27**

Photograph No. 4

View of landfill cap facing West.

No signs of erosion or surface depression resulting from the rain event.



Photograph No. 5

View of arroyo facing North.

No signs of significant erosion or surface depression on arroyo resulting from the rain event.



**Doña Ana Range Camp Rubble Landfill – Rain Events Inspection  
July 15 and July 29, 2017 - FTBL-012/SWMU-27**

Photograph No. 6

View of swale facing South.

No signs of significant erosion or surface depression resulting from the rain event.



Photograph No. 7

View of arroyo facing North.

Drainage system (arroyo) on the South side of the site showed significant erosion. Debris obstructed water flow during rain event.



Enclosure 3:  
August 14, 2017 Rain Event Inspection

# Doña Ana Range Camp Rubble Landfill – Rain Event Inspection August 14, 2017 - FTBL-012/SWMU-27

Unit: IMBL- PWE

Inspector: Victor Garcia

Facility ID: FTBL-012/SWMU-27

Telephone Number: (915) 568-5205

Facility Name: Doña Ana Range Camp Rubble Landfill

Email: victor.h.garcia22.ctr@mail.mil

Inspection Date: August 23, 2017

## List of Observations:

1. The landfill cover was uniform and in good condition. There was no evidence of erosion or depression on the landfill cap's surface and on the side slopes.
2. The vegetative layer was in good condition on the landfill cap and areas in the immediate vicinity within the fenced property.
3. The site perimeter fence and warning signs remained in good condition.

## Inspection photographs

### Photograph No. 1

View of landfill cap facing North.

No signs of erosion or surface depression resulting from the rain event.



**Doña Ana Range Camp Rubble Landfill – Rain Event Inspection  
August 14, 2017 - FTBL-012/SWMU-27**

Photograph No.2

View of landfill cap facing East.

No signs of erosion or surface depression resulting from the rain event.



Photograph No. 3

View of landfill cap facing South.

No signs of erosion or surface depression resulting from the rain event.





**Doña Ana Range Camp Rubble Landfill – Rain Event Inspection  
August 14, 2017 - FTBL-012/SWMU-27**

Photograph No. 4

View of landfill cap facing West.

No signs of erosion or surface depression resulting from the rain event.



Photograph No. 5

View of arroyo facing North.

No signs of significant erosion on arroyo resulting from the rain event.



**Doña Ana Range Camp Rubble Landfill – Rain Event Inspection  
August 14, 2017 - FTBL-012/SWMU-27**

Photograph No. 6

View of swale facing South.

No signs of significant erosion or surface depression resulting from the rain event.



Enclosure 4:  
Post-wet Season Inspection

# Doña Ana Range Camp Rubble Landfill - Post-wet season Inspection FTBL-012/SWMU-27

Unit: IMBL- PWE

Inspector: Victor Garcia

Facility ID: FTBL-012/SWMU-27

Telephone Number: (915) 568-5205

Facility Name: Doña Ana Range Camp Rubble Landfill

Email: victor.h.garcia22.ctr@mail.mil

Inspection Date: November 9, 2017

## List of Observations:

1. The landfill cover was uniform and in good condition. There was no evidence of erosion or depression on the cap's surface and on the side slopes.
2. The vegetative layer was in good condition on the landfill cap and areas in the immediate vicinity within the fenced property.
3. The site perimeter fence and warning signs remain in good condition.

## Inspection photographs

### Photograph No. 1

View of landfill cap facing North.

No signs of erosion or depression on landfill cap.  
Vegetative layer was in good condition.



**Doña Ana Range Camp Rubble Landfill - Post-wet season Inspection**  
**FTBL-012/SWMU-27**

Photograph No.2

View of landfill cap facing East.

No signs of erosion or depression on landfill cap.  
Vegetative layer was in good condition.



Photograph No. 3

View of landfill cap facing South.

No signs of erosion or depression on landfill cap.  
Vegetative layer was in good condition.



**Doña Ana Range Camp Rubble Landfill - Post-wet season Inspection  
FTBL-012/SWMU-27**

Photograph No. 4

View of landfill cap facing West.

No signs of erosion or depression on landfill cap.  
Vegetative layer was in good condition.



Photograph No. 5

View of arroyo facing North.

No sign of significant erosion caused by water runoff on arroyo.



**Doña Ana Range Camp Rubble Landfill - Post-wet season Inspection  
FTBL-012/SWMU-27**

Photograph No. 6

View of swale facing South.

No sign of significant erosion caused by water runoff on drainage swale.



Photograph No. 7

View of Western fence facing North.

Site perimeter fence and warning signs were in good condition.



**Doña Ana Range Camp Rubble Landfill - Post-wet season Inspection  
FTBL-012/SWMU-27**

Photograph No. 8

View of Northern  
fence facing West.

Site perimeter fence  
and warning signs  
were in good  
condition.



Photograph No. 9

View of Southern  
fence facing West.

Site perimeter fence  
in good condition.





Enclosure 5:  
Landfill Erosion Repairs

# Doña Ana Range Camp Rubble Landfill – Site Repairs November 13, 2017 - FTBL-012/SWMU-27

Unit: IMBL- PWE

Inspector: Victor Garcia

Facility ID: FTBL-012/SWMU-27

Telephone Number: (915) 568-5205

Facility Name: Doña Ana Range Camp Rubble Landfill

Email: victor.h.garcia22.ctr@mail.mil

Inspection Date: November 13, 2017

## List of Observations:

1. A section of the drainage system (arroyo) on the South side of the site showed significant erosion after rain events on July 15, 2017, July 29, 2017 and August 14, 2017.
2. On November 13, 2017, the eroded section of the arroyo was repaired by filling with dirt and rocks
3. Additionally, a fence post situated in the middle of the arroyo, which obstructed flow during rain events causing significant erosion and trenching, was removed. The fence section was then reinforced by installing an additional fence post on each edge of the arroyo

## Inspection photographs

### Photograph No. 1

View of arroyo facing North.

Drainage system (arroyo) on the South side of the site showed significant erosion. Debris obstructed water flow during rain events. Identified during the site inspection conducted August 3, 2017.



**Doña Ana Range Camp Rubble Landfill – Site Repairs  
November 13, 2017 - FTBL-012/SWMU-27**

Photograph No.2

View of arroyo facing North.

Eroded section of the arroyo was repaired by filling with dirt and rocks



Photograph No. 3

View of reinforced fence facing West.

The fence post situated in the middle of the arroyo, which obstructed flow during rain events, was removed. The fence section was reinforced by installing an additional fence post on each edge of the arroyo.

