DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 377TH AIR BASE WING (AFMC)

ENTERED

24 Nov 1997

MEMORANDUM FOR MR. BENITO GARCIA, CHIEF
HAZARDOUS & RADIOACTIVE MATERIALS BUREAU
NEW MEXICO ENVIRONMENT DEPARTMENT
PO BOX 26110
SANTA FE NM 87502

FROM: 377 ABW/EMR
2000 Wyoming Blvd SE, Ste D-6
Kirtland AFB NM 87117-5659

SUBJECT: Interim Corrective Measures (ICM) Report

1. We are forwarding a copy of our final report for the excavation and removal of debris and surface repair work at SWMU 6-2, Landfill No. 2 (LF-02). A copy of the report is also being submitted to Mr. Steve Pullen of your staff. This ICM was designed to remove trash and debris from near the banks of Tijeras Arroyo at LF-02, as well as to fill in some of the depressions on the surface of the landfill cover. It was a voluntary effort, not required under RCRA or the corrective action schedule of the Part B permit. As such, this report does not require a regulatory review; it is intended to keep your office up to date on activities at SWMU 6-2.

3. Please call me at (505) 846-0053 if you have any questions regarding this document.

CHRISTOPHER B. DEWITT, R.P.G.
Chief, Restoration Branch
Environmental Management Division

cc:
NMED-HRMB (Mr. Pullen)
EPA Region 6 (Ms. Morlock)
USACE Omaha (Mr. Rowe)
Foster Wheeler Environmental (Mr. Foley)

FOSTER WHEELER ENVIRONMENTAL CORPORATION

October 29, 1997
TERC - 0013.0013-97X-046

Ms. Fawn Fox
U.S. Army Corps of Engineers
Northern Area Office
P.O. Box 5010
Albuquerque, NM, 87105

SUBJECT: ACTIVITY SUMMARY FOR INTERIM CORRECTIVE MEASURES AT LANDFILL #02 (LF-02) AT KIRTLAND AIR FORCE BASE

Dear Ms. Fox,

This memorandum provides a summary of the activities performed by Foster Wheeler Environmental Corporation (FWENC) for the Landfill-02 (LF-02) Interim Corrective Measures (ICM) at Kirtland Air Force Base (KAFB). As we discussed, this summary was complied in lue of Daily Quality Control reports. FWENC was tasked by the Air Force's Environmental Restoration Branch, under the Southwest TERC, to implement measures to prevent water from ponding and infiltrating the abandoned landfill. The project commenced on October 6, 1997 and was completed on October 16, 1997. FWENC and its subcontractor, Indian Environmental Services (IES), collected and consolidated tree stumps, concrete, and other miscellaneous debris from the surface of LF-02. A shear unit attached to a trac-hoe was used to breakdown the stumps and debris to pieces, 18 inches maximum dimension. All work performed during this project adhered to the agreed upon work plan, with the only deviation from the original scope of work being the change in stump fragment size from a maximum six inches to a maximum of 18 inches. This deviation is documented in Field Change Request 001 (Attached). The wood and concrete, along with soil stockpiled on the surface of LF-02, were used to fill in low areas around LF-02. A sufficient amount of soil was present on the surface of LF-02 so that no borrow material was required from the KAFB landfill. Attached you will find a daily summary of activities taken by FWENC/IES and a map showing the low areas that were filled.

If you have any questions or require more information, please do not hesitate to call me at, (505) 878-8900.

Sincerely,

Michael Collins,
Construction Project Manager

6605 Uptown Boulevard, N.E., Suite 220
Albuquerque, New Mexico 87110

Enclosures

cc: S. Rowe, USACE
J. Sillerud, KAFB EMR
E. Tow, FWENC
Steve Purdy, USACE
W. Foley, FWENC
P. White, FWENC
C. DeWitt, KAFB EMR
S. Jain, FWENC
TERC File

Site Activity Summary Report -- Interim Corrective Measure - LF-02

Daily work was initiated with a morning safety meeting conducted by the FWENC site supervisor and the IES site safety officer. Safe work practice items were discussed along with the daily scope of work. IES performed daily equipment inspections to ensure work was not delayed by equipment failure. The weather for the duration of the project was fair, with only a few instances of rain, and there were no work delays due to weather. IES stockpiled and crushed stumps in area where they were originally located and then moved the wood, concrete, and other debris to the depressions (See Attached Drawing - Debris Relocation Plan). An outline of day to day progress is provided below.

Day 1 - October 6, 1997

Mobilization

FWENC, USACE, and IES personnel mobilized to the site and conducted a site and safety orientation. IES brought in heavy equipment; CAT 335 trac-hoe, John Deere 544 LH rubber tire front-end loader, and CAT D-6H dozer. Following the completion of site setup activities, IES began moving and stockpiling tree stumps and concrete debris.

Day 2 - October 7, 1997

Following morning safety meeting, IES assessed if heavy equipment currently onsite would be sufficient to break the stumps into the desirable size. FWENC and IES determined that the dozer tracks would not be sufficient to break the stumps and concrete, so IES put plans into place to bring in additional equipment. While moving stumps, the front-end loader impacted a stump, which caused the transmission case to crack and released the transmission oil onto the surface soil. The impacted soils were consolidated onto plastic sheeting to prevent rainwater from carrying the oil into the arroyo. After notifying USACE, KAFB, and reviewing the Material Safety Data Sheet (MSDS) for the transmission oil, it was determined that the oil laden soil, approximately 1/4 yard, could be incorporated with the stockpiled soil.

While stockpiling stumps, IES uncovered a small, wooden box labeled "POISON - Do Not Remove". Upon discovery, IES removed its personnel from the area and notified FWENC's onsite representative, Michael Collins. M.Collins notified the FWENC project manager and KAFB Environmental Restoration personnel, who following a visual examination, requested that the KAFB's emergency response contractor, Perma-Fix, be dispatched to the scene to investigate the object. After receiving a briefing on the incident, Perma-Fix's personnel approached the box in Level C PPE and examined the box. The box was empty and had apparently been used as a mouse or rat trap. Following the report from Perma-Fix that the box contained no hazardous material, IES returned to work and completed the days' activities.

DAY 3 - October 8, 1997

IES continued consolidating stumps and debris. IES secured a demolition trac-hoe, equipped with a 28 inch shear unit, to crush the stumps. IES began removing the soil berm from the southern area of the staging area.

DAY 4 - October 9, 1997

IES completed consolidating stumps and debris and began cutting a haul road to the first depression, which bisected the main road. IES used dump trucks to move soil and small size debris to the side of the first depression. A meeting was held with Jerry Sillerud of the KAFB Environmental Restoration Branch to determine the priority for filling depressions filled and to assess the number of depressions to be filled with the limited quantity of soil and debris available to IES. The meeting participants included J. Sillerud, M. Collins, and Fawn Fox of USACE, and J. Sillerud agreed with the approach and that the deepest depressions lying within the flood plan, closest to the arroyo, should take priority. Collins relayed this information to IES, who prepared to begin filling in the depressions the next day.

DAY 5 - October 10, 1997

IES completed filling the first depression and continued moving material to the other depressions and cutting roads to low areas. Enough small wood and concrete debris existed allowing IES to fill in this depression without product from the shear unit. FWENC Delivery Order manager Steve Weber and Senior Engineer Bill Foley, toured the site and conducted a site safety review. The only action items identified were the absence of a back-up alarm on one dump truck and the need to reinstall the silt fence along the southern border of the staging area. IES addressed both action items. Final preparation for the shear unit was also completed.

DAY 6 - October 11, 1997

In the morning, while waiting for the shear unit, IES repaired the silt fence along the southern border of the stockpile area. Industrial Demolition and Salvage (IDS), the shear unit operators, were expected to arrive at KAFB at 0700; however, the two transports were delayed in Amarillo, TX. IES, FWENC, and USACE personnel awaited the arrival of the shear unit until 1645. Upon arrival, IES directed the shear unit to LF-02 and set-up procedures were commenced in order to test the equipment's stump crushing effectiveness. Following set up, the shear unit crushed approximately 12 stumps.

DAY 7- October 12, 1997

Following the morning safety meeting, FWENC, IES, USACE and IDS went over the work plan for the shear unit. IES reviewed the Job Safety Analysis procedures they developed for the shear unit. IES established a buffer zone around the shear unit and personnel working in the area were instructed to stay in their equipment during crushing operations. No foot travel was permitted in the work area. FWENC identified a large depression to begin working on next. There was not sufficient material to fill the entire depression, so FWENC instructed IES to raise the lower level of the depression by applying layers of debris and then a cover of clean soil. By days end, IDS had crushed approximately 40 % of the stumps.

DAY 8- October 13, 1997

FWENC's Certified Industrial Hygienist (CIH), Dina Sassone, visited the site and conducted a site safety audit. The overall review of site activities was satisfactory, with the only concerns being equipment operator's certification and noise level monitoring for open cab equipment. IES addressed both action items by project completion. IDS continued crushing stumps and completed staging the wood and debris. Soil berms from areas around the depression were recontoured and included as fill in low areas.

DAY 9- October 14, 1997

In the morning, IES mobilized two 20-yd dump trailers to the site to move debris from the staging area to the depression. IDS returned to site, loaded their equipment, and demobilized. FWENC filed a Field Change Request (FCR) acknowledging that the majority of the crushed stumps fragments exceeded the size specified in the work plan. The size specified in the work plan was less than 6 inches. This size was unachievable with the type of equipment available. IES offset the impact of increased fragment size, approximately maximum dimension of 18 inches, with a greater number of passes with the dozer, which succeeded in compacting the material. Both FWENC and USACE agreed that the material was being blended with a sufficient amount of soil and adequately compacted. Based on this agreement, the FCR was submitted to USACE for approval.

DAY 10 - October 15, 1997

Demobilization

USACE approved FCR - 001, submitted by FWENC on 10/17/97. IES completed depositing debris into the depression and completed covering the last fill area. Following completion, IES performed a final review of the work site and ensured that all areas were well covered. FWENC's project engineer, E. Tow, toured the site and found

the work to have been completed satisfactorily. USACE's F. Fox and Steve Purdy also toured the site and found all areas satisfactorily covered. Following the final site walk, IES began demobilization activities.

On the following day, October 16, 1997, IES supported FWENC in conducting a limited survey of the Tiejeras Arroyo as part of the LF-02 / Tiejeras Arroyo CMS project.

Figure 14-2

Field Change Request Form

FCR No. 001 Date: 10/14/97

Affected Plans and Procedures: ICM WORK PLAN AT LF-02; D013 WAD13

Description:
Change in dimension size of wood being used to fill land areas @ LF02

Reason for Change:
The 6" max dimension* was unattainable w/o cost prohibitive equipment. The shear unit was able to cut stumps into manageable sections, 10"-14" width to two-three feet length.
* As specified in Scope of Work Section 3.1 - Wood Cutting / Grinding / Chipping

Recommended Disposition:
Continue burial of larger sections. Dozer tracks are being very successful in breaking down sections into smaller pieces + multiple passes are compressing sections into soil tightly. Increase soil cover thickness over debris and increase number of passes over material to enhance compaction.

Initiator (Signature): [signature] Date: 10/14/97

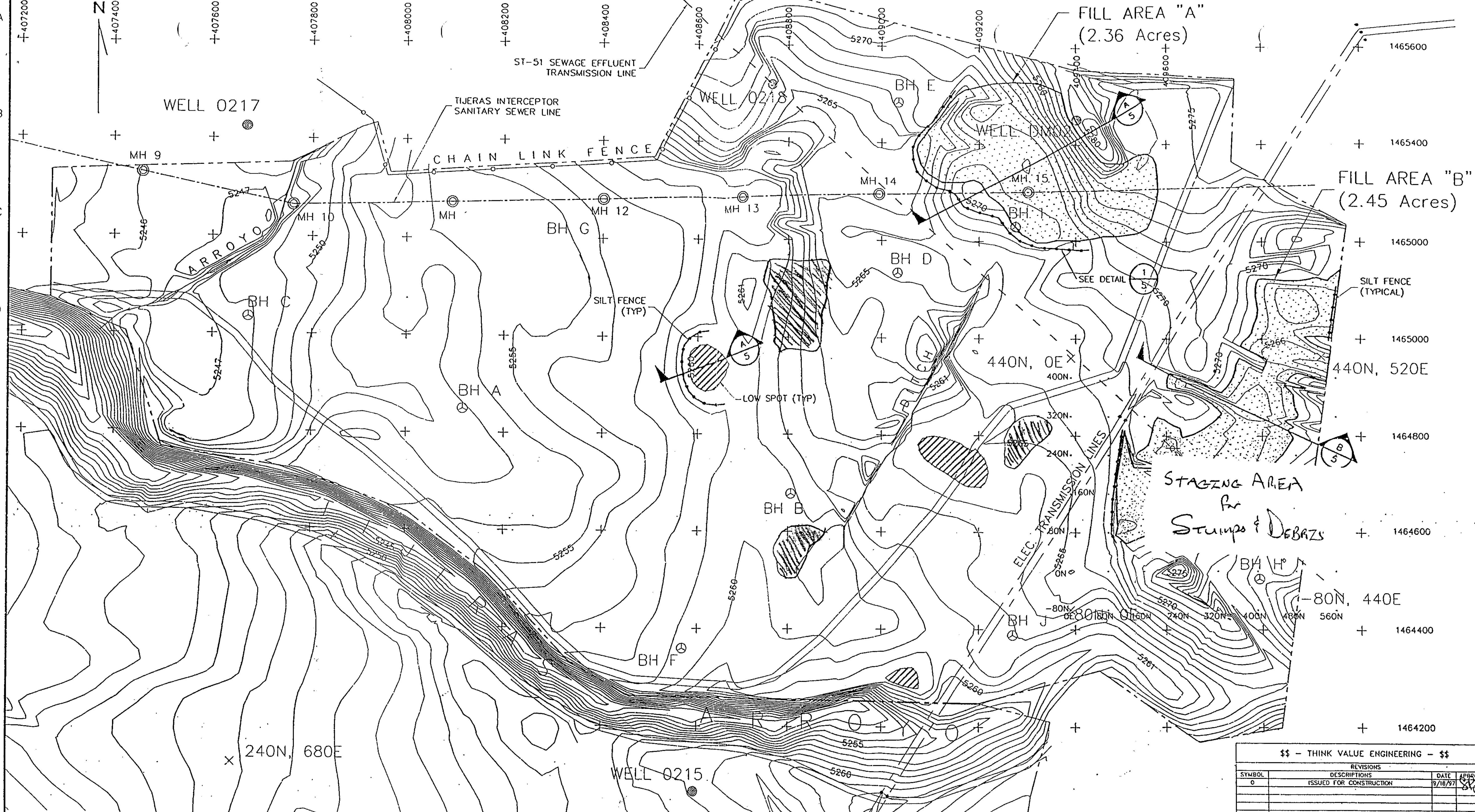
Disposition:
Visual inspection verifies success of recommended change. With adequate soil cover and compaction, intent of specification is achieved.

Project Manager (Signature): [signature] Date: 10-15-97

Actual Disposition:

Verified By (Signature): [signature] Date: 10/15/97
USACE - COR

Distribution:
Project Manager
Quality Assurance Manager
Initiator
USACE
File
KAFB
Others as required: S. Jain, Bellevue



NOTES:

1. SEE SHEET 5 FOR NOTES.

SCALE IN FEET (100 0 100 200 300)

LEGEND

Symbol	Description
	ROADS
	CONTOURS
	100 YEAR FLOOD PLAIN BOUNDARY
	LF-02 PROPERTY BOUNDARY
	TIJERAS INTERCEPTOR SANITARY SEWER LINE
	ST-51SEWAGE EFFLUENT TRANSMISSION LINE
	CHAIN LINK FENCE
	FILL AREA
	LOW SPOTS
	SILT FENCING
	WELL LOCATION
	BORE HOLE
	BRASS CAP
	GAS VALVE
	WATER VALVE
	MANHOLE
	LATH

$$ – THINK VALUE ENGINEERING – $$

REVISIONS

SYMBOL	DESCRIPTIONS	DATE	APPROVED
0	ISSUED FOR CONSTRUCTION	9/18/97	[signature]

FOSTER WHEELER ENVIRONMENTAL CORP. BELLEVUE, WA

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ALBUQUERQUE, NEW MEXICO

KIRTLAND AFB, NEW MEXICO

DEBRIS RELOCATION PLAN

DESIGNED BY: TDG

DRAWN BY: KK

CHECKED BY: [signature]

REVIEWED BY: [signature]

SUBMITTED BY: [signature]

DESIGN FILE: BE131304

DATE: 9/15/97

SHEET NUMBER: 4

REVISION: 0

CONTRACT NO.: DACW 45-94-D-0003

BE131304.DWG