FCRE
LTC Prall
28 Nov 78

FACT SHEET

SUBJECT: Enjebi (Janet) Surface Contamination Status

PURPOSE: To provide current status of cleanup of surface contamination of Enjebi (Janet).

BACKGROUND: Cleanup of Enjebi to meet Condition C (40 pCi/gm) (Residence use) has been considered by DNA to be a desirable goal. JTG tasked on 15 May 78 to excise Enjebi "...with no specific lower level, but will concentrate on cleaning toward 40 pCi/g as maximum surface level."

DISCUSSION: A single lift of nominal 6" depth has successfully reduced contamination to well below 40 pCi/gm in each area identified by DOE. The technique of removing the areas of highest contamination first in combination with fine survey have resulted in lower volumes of soil to be removed. Initial estimate to reach 40 pCi/gm was 41,500 cy (3 - 4 May Conf), later revised by ERSP to be 54,300 cu yd. Current estimate is 50,833 cu yd. This estimate is based on actual soil removed to date and the current estimate of soil remaining to be removed. (Figures do not include 1300 cy subsurface excision requirement).

STATUS:

EVENT	CY	DATES
Excision 60 pCi/gm	2980	6 Jul 78 - 21 Jul 78 and 15 Aug 78 - 18 Aug 78
Excision 50 pCi/gm	16,492	14 Jul 78 - 14 Aug 78
Excision 45 pCi/gm	18,288	24 Aug 78 - 21 Oct 78
Excision 40 pCi/gm	Est 13,473*	21 Oct 78 - Est 2 Dec 78

* Fine grid (25 m) Imping by ERSP in early November 1978 revealed new areas requiring excision even though 50 m grid Imp data and kriging indicated with a 70 percent confidence that excision would not be required. This increase was approximately 5200 cu yds. Additionally, 29 "hot spots" were identified as being over 40 pCi/gm. These "hot spots", encompassing one each Imp reading in a given area, are not currently programmed for excision. Although it is estimated that all contaminated soil greater than 40 pCi/gm will be excised by 2 December 1978, there remains approximately 13,000 cy in stockpile to be transported to Runit. This removal is estimated to be completed in late February 1979.

TAB C

C
1470

FCRE
MAJ Colio
28 Nov 78

FACT SHEET

SUBJECT: Boken (Irene) Subsurface Contamination

PURPOSE: To provide current status of Boken (Irene) subsurface TRU soil contamination.

BACKGROUND:

a. Boken surface contamination meets Condition B (80 pCi/gm).

b. There are three areas of subsurface soil TRU contamination that exceed Condition D (160 pCi/gm) for a total estimate volume of 1406 cy (See Encl 1).

c. The original excision plan was to begin in Sep 78; however, birds (Sooty terns) moved onto the island in late Aug 78 for annual nesting. Eggs were layed at a minimum density of one per square meter. Nests, eggs and chicks have covered the excision area and haul road since Sep 78 thus delaying soil removal efforts.

DISCUSSION:

a. The soil excision operation will involve one front loader, two five ton dumptrucks and one bulldozer.

b. Each of the three areas to be excised is less than 2230 ft^2 and the maximum depth of cut is 80 - 120 cm (2.6 - 4.0 feet).

c. The work force will be drawn from USAE elements presently on Enjebi as Enjebi soil excision is 98% complete.

d. The haul road from the excision site to the beach stockpile area will be levelled by bulldozer. The beach area will require minor bulldoze preparation for vehicular traffic. Experience indicates the tactical four wheel drive five ton dumptruck will encounter no trafficability problems on the beach.

e. Although the Boken shallow water approaches constrain LCU and LCM 8 movement as severely as Aomon (Sally), the small amount of soil to be excised will be stockpiled rapidly and total transport time for all the soil will not exceed sixty days. In any fourteen day period, at least four days will not have a daylight high tide window adequate to allow access, loading and egress of soil haul craft.

STATUS:

a. As of 25 Nov 78 few eggs are evident in the excavation area and the the chicks are mobile enough to move out of the way of heavy equipment.

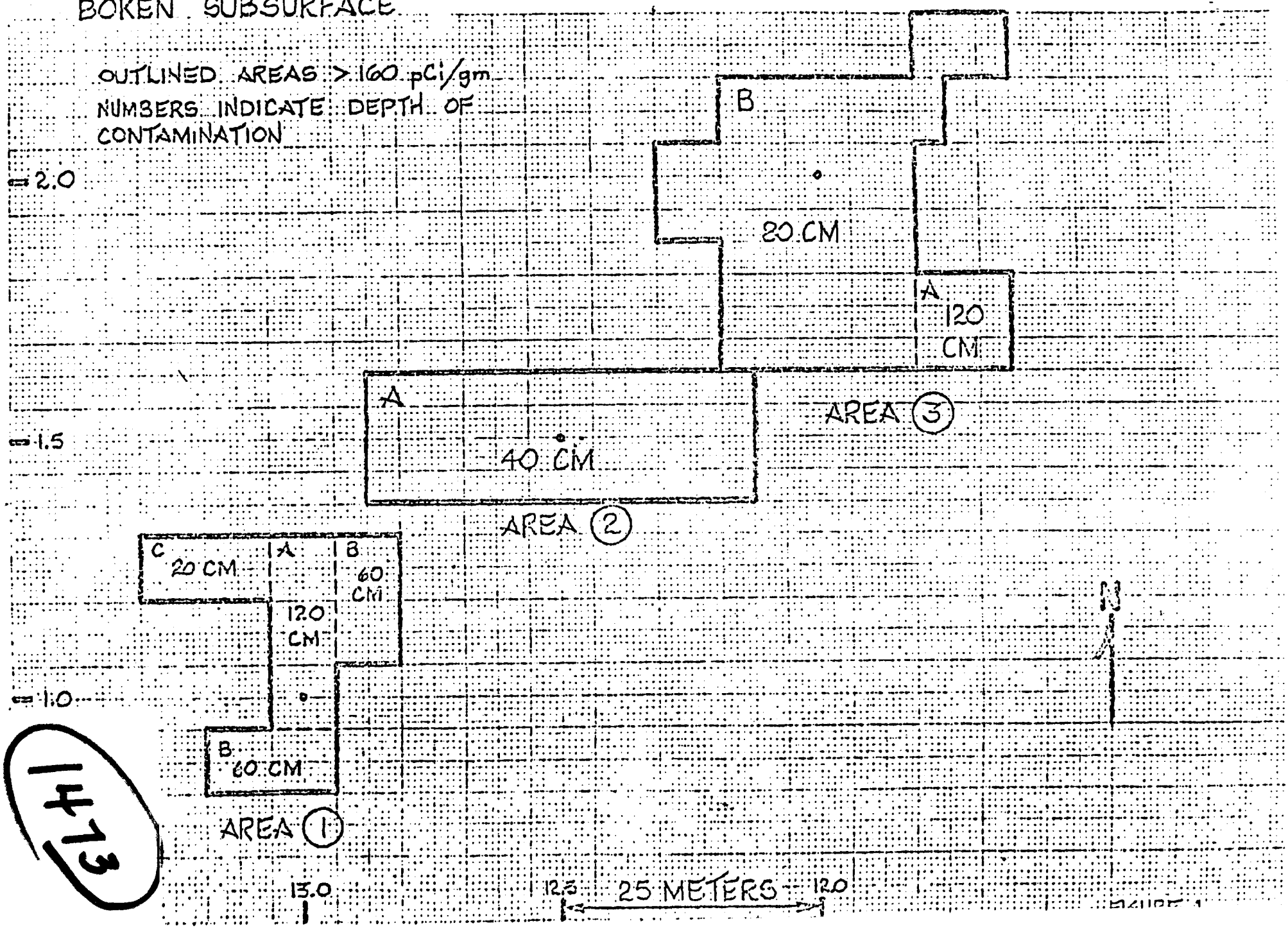
TAB I

(1491)

b. MPML has no objections to the immediate start of operations and has indicated that new nesting should be anticipated.

c. The soil excision and stockpiling to begin week of 4 Dec 78.

1472


BOKEN SUBSURFACE
OUTLINED AREAS > 160 pCi/gm
NUMBERS INDICATE DEPTH OF CONTAMINATION
= 2.0
= 1.5
= 1.0
B
20 CM
A
120 CM
AREA (3)
A
40 CM
AREA (2)
C
20 CM
A
B
60 CM
120 CM
B
60 CM
AREA (1)
13.0
12.5
25 METERS
12.0
N
1473

FCRE
MAJ Colio
28 Nov 78

FACT SHEET

SUBJECT: Enjebi Subsurface Contamination

PURPOSE: To provide current status of Enjebi (Janet) subsurface contamination.

BACKGROUND:

a. On 27 Sep 77, DOE-ERSP outlined to CJTG a ground zero (Easy - X Ray and Item sites) subsurface exploration plan for Enjebi. The plan was to verify NVO-140 data by backhoe soil profile sampling.

b. On 5 Oct 77, CJTG directed soil sampling priority to Lujor, Boken, Aomon and Runit. It was implied by CJTG that the Enjebi subsurface was secondary to characterizing surface TRU contamination. This prioritization was IAW the mission and personnel safety considerations inasmuch as subsurface contamination presents less of an immediate hazard than surface contamination.

c. On 16 Aug 78, almost one year later, DOE-ERSP extracted 740 soil samples in the Easy - X Ray and Item Ground Zero sites, using sidewall sampling in backhoe trenches to a depth of 120 cm (4 ft).

d. On 30 Sep 78, DOE-ERSP reported to CJTG that two areas in the NW quadrant of Enjebi had subsurface TRU greater than 160 pCi/g, thereby exceeding Condition D. The assumed depth of cut to excise the approximate 1307 cy of subsurface TRU contamination was 100 cm (3.3 ft).

DISCUSSION: None

STATUS: The Enjebi subsurface excision is scheduled to begin o/a 27 Nov 78.

1474
I