WESTON
DESIGNERS CONSULTANTS

BY [redacted] DATE 02/05/85 DIV _____ SHEET 7 OF 7 OF _____
CHKD BY _____ DATE _____ DEPT _____ W.O. NO. _____
PROJECT _____
SUBJECT _____

ORIGINAL (Red)

SEMS DocID 2261281

ALTERNATIVE - 4

18" removed for half the area

$= \frac{8200}{2} \times \frac{1.5}{3}$ {TOTAL AREA = 8200 SQ.Y

$= \underline{2050}$ C. YDS

ALTERNATIVE - 5

24" removed for half the area

$= \frac{8200}{2} \times \frac{2}{3} = \underline{2734}$ CU. YDS

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BY [redacted] DATE 02/02/85 DIV TAT/III SHEET Three OF

CHKD BY DATE DEPT W.O. NO.

PROJECT SHAFFER EQUIPMENT SITE

SUBJECT LAB ANALYSIS

ORIGINAL (Red)

COMMENTS — (B)

CALCULATIONS

AVERAGE WIDTH OF THE SITE $\left(\frac{2'3'' + 2'5'' + 1'6'' + 3'' + 3'7'' + 3}{6}\right)$

$= 2'68'' \times 50 =$

$= 134$ feet

AVERAGE LENGTH OF THE SITE

$= 11'' \times 50 = 550'$ feet

AREA $= \frac{550 \times 134}{9}$ SQ. YDS [= 1.7 ACRES]

$= 8189 \approx 8190 \approx 8200$ SQ. YDS

[1 ACRE = 4840 SQ. YDS]

ALTERNATIVE — (1)

6" SOIL REMOVAL FROM SITE ARE

$= 8200 \times \frac{1}{2} \times \frac{1}{3}$

$= 1367$ CU. YDS

ALTERNATIVE — (2)

6" ALL AREA + EXTRA 6" HALF AREA

$= 1367 + 8200 \times \frac{1}{3} \times \frac{1}{2} \times \frac{1}{2}$

$= 1367 + 684 = 2051$ C.Y

ALTERNATIVE — (3) 6" ALL AREA + EXTRA 12" HALF AREA

$= 1367 + 1368$

$= 2734$ C.Y

For 1.1 acre (as by Garrett)
$1 \times 4840 \times \frac{1.5}{3}$
$= 2662$ C.Y

For 1.0 acre
$1 \times 4840 \times \frac{1.5}{3}$

RFW 338-5-81

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BY [redacted] DATE 02/02/85 DIV TAT-III SHEET two OF

CHKD BY DATE DEPT W.O. NO.

PROJECT

SUBJECT COMMENTS ON THE LAB ANALYSIS FINDINGS

COMMENTS — (A)

ORIGINAL (Red)

1. More creek water, creek sediment and back yard soil sampling is necessary in between 500 feet to 1600 feet and ~~to~~ 1600 feet to 5200 feet

2. More core sampling is needed at 12", 18", 24" and 30" depth to know the ~~exact exact depth of soil to~~ extent of contamination with depth of soil.

This will help to know the exact volume of soil ORIGINAL (Red) be removed from the site.

3. 50% of the area is approximately in the normal zone, if danger level is accepted as 50 ppm of PCB

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BY [redacted] DATE ~~01/29/85~~ 02/02/85 DIV TAT-III SHEET One OF

CHKD BY DATE DEPT W.O. NO.

PROJECT SHAFER EQUIPMENT ~~ORIGINAL~~ (Red)

SUBJECT ~~CHRONOLOGY OF EVENTS~~ FINDINGS FROM LAB ANALYSIS

FINDINGS

Laboratory results of the 235 samples, which included Soil, Water, creek sediment, drum capacitors, transformers etc from and around the Shaffer equipment site, reveals that:-

1. Maximum PCB concentration of the creek sediment is across the garage and which is 73 ppm

2. Off site migration of PCB occured at the back yard of some residents, who are approximately 1600 feet and 5200 feet away from the site. Back ~~yard~~ yard maximum concentration is 15 ppm

3. On site pcb concentration, for soil only, varies from 2 ppm to 47,000 ppm

4. From site configuration and soil contamination plotting it appears that ~~east~~ east half of the site is contaminated with PCB in the range of 59 ppm to 47,000 ppm.

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ORIGINAL (Red)

Levels Exceeding 500 ppm

Area	Size (ft)	Quantity (yd^3)	# Drums
A	60x40 x 1.5	133	532
B	80x20x .5	44	178
C	20 x20x .5	21.5	86
D	30 x 30 x .5	16.6	66.6
E	10x 20 x .5	3.7	14.8
F (Surface)	30x30x.5	16.6	66.6
		235.4	944

Remaining Contaminated Soils

Quantity = 2049 yd^3

WVP
000000537

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BY _____ DATE _____ DIV _____ SHEET _____ OF _____
CHKD BY _____ DATE _____ DEPT _____ W.O. NO. _____ 8.4 gal/cu. ft
PROJECT _____
SUBJECT _____

400 ft measurement from ditch → concrete pad

ORIGINAL (Red)

2x 2½ 1/4" = 10'
1" = 40'

80 x 100 = 8,000 x 3 = 24,000 cu ft ÷ 27 889

889 cu yds ÷ 2 445 cu yds

ACRE
4840 sq yds x .5 = 2420 cu. yds
43,560 sq ft
x 1½ =
65,340 cu ft ÷ 27 = 2420 cu. yds

A Triangle = 133 yds = 532 drums / 1½ deep

B → 21.5 yds
86 drums 20 x 20 x ½

C → 89 cu. yds 18 ft deep 120 x 20 x 1
120
20
2400

D surface ½ drum = 3 cu ft

E surface 1 drum = 6 cu ft

F surface ½ drum

G surface ½ drum

244 cu. yds required 7 500 ppm

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DESIGNERS CONSULTANTS

BY _____ DATE _____ DIV _____ SHEET _____ OF _____
CHKD BY _____ DATE _____ DEPT _____ W.O. NO. _____
PROJECT Shaffer Equipment 2 weeks
SUBJECT 2343 1103 3182

(b) (4) [redacted]

ORIGINAL (Red) Ink

Please make base map like the site sketch map only without Sample Points. Then prepare sample map & remaining 4 maps on Mylar overlays. Also please make a copy of each on 8½ x 11 paper. If you have any Questions please call

[redacted]

Thanks,

(b) (4) [redacted]

TAT III

RFW 338-5-81

WESTON
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BY _____ DATE _____ DIV _____ SHEET _____ OF _____
CHKD BY _____ DATE _____ DEPT _____ W.O. NO. _____
PROJECT _____
SUBJECT _____

ORIGINAL
(Red)

(a) West Virginia Department of Natural Resources (DNR) discovered the Shaffer Equipment Site in late September, 1984.

(b) ~~After a number of~~ A number of surface soil, core and water samples were analyzed time to time.

(c) Analytical results emphazide the presence of PCB on Shaffer Equipment Property. The concentration of pcb varied from 0 ppm to 47,000 ppm.

(d) Now it is stressed to remove the contaminated soil off site to some secured dumping area. For safe excavation of the area, and to keep the drinking water supply safe from possible pcb contamination, it was felt necessary to remove the existing, on site 6" PVC pipe line to other side of the creek.

BC = Length of pipe line on site = 500'
ABCD = Length of pipe line off roadid = 855'

AB'C'D = Length of new pipe line (other side of the creek) 1035'

(e) New pipe line will be laid and hooked up on 02/21/84. During the work all sorts of health and safety measures are ~~bei~~ being taken properly.

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Shaffer Equipment Maps

Use site sketch to create base map (do not include points + numbers) + add additional area (to Right) from New Water Line map

ORIGINAL

from base make 5-11X17 (Red) maps

plot points from other maps

make film pos's (5) add to base map for presentation

Maps will be reduced to 8½x11 for final report.

- Make 1 by 11x17 Base Map.
- For 5 drawings put info in each on overlay.
- Sandwich each overlay with Base + make 8½x11.

There will be

5 8½x11

5 11x17 overlay + 1 11x17 Base Sta