

GENERAL  ELECTRIC

VALLECITOS NUCLEAR CENTER

Vallecitos Road M/C _____
Pleasanton, CA 94566



September 30, 1992

GE-VALLECITOS PCB RELEASE

CLEAN CLOSURE

NEO 5-A (REV 3/85)



General Electric Company
Vallecitos Nuclear Center
P.O. Box 460, Vallecitos Road
Pleasanton, CA 94566

11-55

January 26, 1993

Alameda County Health Agency
Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Attention: Jeff Shapiro

Dear Jeff:

On October 2, 1992, GE-Vallecitos notified your office (Tom Spates) via the OES notification/reporting form that on September 30, 1992, a PCB release had been observed under the PCB transformers that were being removed or retrofitted (see Attachment 1 for specifics).

As we indicated in this document, GE would take samples according to EPA 560/5 86-017, "Field Manual for Grid Sampling of PCB Spill Sites to Verify Clean-Up" (see Attachment 2, grid sampling points).

Approximately 15 cubic yards (total) of PCB-contaminated soil were removed and, subsequently, two rounds of soil sampling were conducted. The site had been remediated to the release limits on December 22, 1992 (according to analytical results of the grid sampling dated December 7, 1992, and January 12, 1993).

The December 7, 1992, results (see Attachment 3) indicated that GE grid sample numbers S-8, S-9, S-13, S-21 were greater than the nonrestricted access areas release limit of 10 ppm for PCB-contaminated soil according to 40 CFR Part 761, "TSCA PCB Spill Clean-Up Policy", Federal Register Volume 52, No. 63 dated Thursday, April 2, 1987 (see Attachment 4).

After excavating 4 cubic feet (one cubic foot for each sample location above 10 ppm), GE-Vallecitos sampled these four locations again to assure complete remediation. The results dated January 12, 1993, indicate levels of less than the 10 ppm "TSCA PCB Spill Clean-Up Policy" release limit for all four sample locations; S-8, S-9, S-13 and S-21.

J. Shapiro

-2-

January 26, 1993

GE-Vallecitos would like to request your approval of the clean closure of this project based on the "TSCA PCB Spill Clean-Up Policy" rule release limits and the facts presented above in order to backfill the excavation with clean soil and restore the spill site.

If you have any questions, please contact me at (510) 862-4345.

Sincerely,

Susan A. Dahlin

Susan A. Dahlin
Environmental Programs Engineer

/ca

Attachments

OES NOTIFICATION/REPORTING FORM

State of California

Hazardous Substance Spill Report

Notified OES Alameda County Phone (510) 667-7721 DTG _____

Reported By Susan A. Dahlin Phone (510) 862-4345

Coastal N/A Inland x Water Involved N/A County Alameda

Substance(s) Polychlorinated Biphenyl Quantity Unable to quantify exact, but <2 lbs.

Ship N/A Oil Field N/A Pipeline N/A Freeway/Road N/A Railroad N/A Plant x

Ship/Road/Installation General Electric Company - Vallecitos Site

Location 6705 Vallecitos Road, Pleasanton, CA
PCB transformer concrete pad

What Happened See attached.

LCL Agencies on Scene/Notified: Fire Dept. _____ Sheriff _____ Police _____ DOH _____ F&A _____ CO OES x

LCL Agency Involvement/Contacts Tim Spates, Alameda County Health - Haz. Mat. Division;
Sue Plantz, State OES; Russ Kemmerrer, Federal EPA Region IX; Dionne Cola,
County OES.

Injuries None

Water Involved (Name of Stream, etc) None

Containment in concrete pad

Cleanup By/Action General Electric Apparatus Division (see attached)

Weather Factor None

Report Received By _____ Organization _____

Notified:	Name	Time	Notified:	Name	Time
F&G	N/A		CDF	N/A	
RWQCB	N/A		DPR		
EPA	10/1/92 Marty Robin	1330	USCG	N/A	
CHP	N/A		FEMA 9	N/A	
DOH	N/A		LAFC Dist		
F&A			C C OES	10/1/92 Dionne Cola	1310
Caltrans	N/A		E Bay Pk	N/A	
DWR			SFFD	N/A	
DOG					
Lands					
Cal OSHA	N/A				
Fire Mshl	N/A				
County Contact:	Agency <u>Health Dept. - Haz. Mat.</u>	Name <u>Tim Spates</u>	Time <u>1300</u>		

Attachment to OES Notification/Reporting Form

What Happened:

On Wednesday, September 30, 1992, GE-Vallecitos began a project to retrofit one (1) PCB transformer and remove two (2) PCB transformers.

On September 30, in the process of removing the transformers, two dark brown spots (approximately 2 ft. by 2 ft. each, on two different concrete pads where two of the transformers were housed, near where the conduit comes into the transformer) were discovered by GE employees. GE presumes that this is PCB oil contamination on the concrete pad. A dark brown stain was observed on the inside of the transformers as well. Based on the evidence, GE-Vallecitos concluded that this occurred prior to 1987, likely in the late 60's or early 70's.

This condition was undetectable until the transformers were removed. The area was protected from the weather by the transformers, therefore protected from rainwater and runoff. We are unable to quantify until we saw-cut the concrete pad to determine the extent of vertical contamination.

Cleanup By/Action:

Once the soil below the concrete is accessible, GE will be taking samples according to EPA 560/5 86-017, "Field Manual for Grid Sampling of PCB Spill Sites to Verify Clean-Up".

We will remediate all visual contamination and any samples that indicate remediation is necessary. Remediation will include sending PCB-contaminated transformer sections, contaminated concrete, and soil (if any) to a permitted hazardous waste disposal facility for proper disposal. The waste hauler is General Electric Installation & Service Engineering from Anaheim, CA.

NORTH

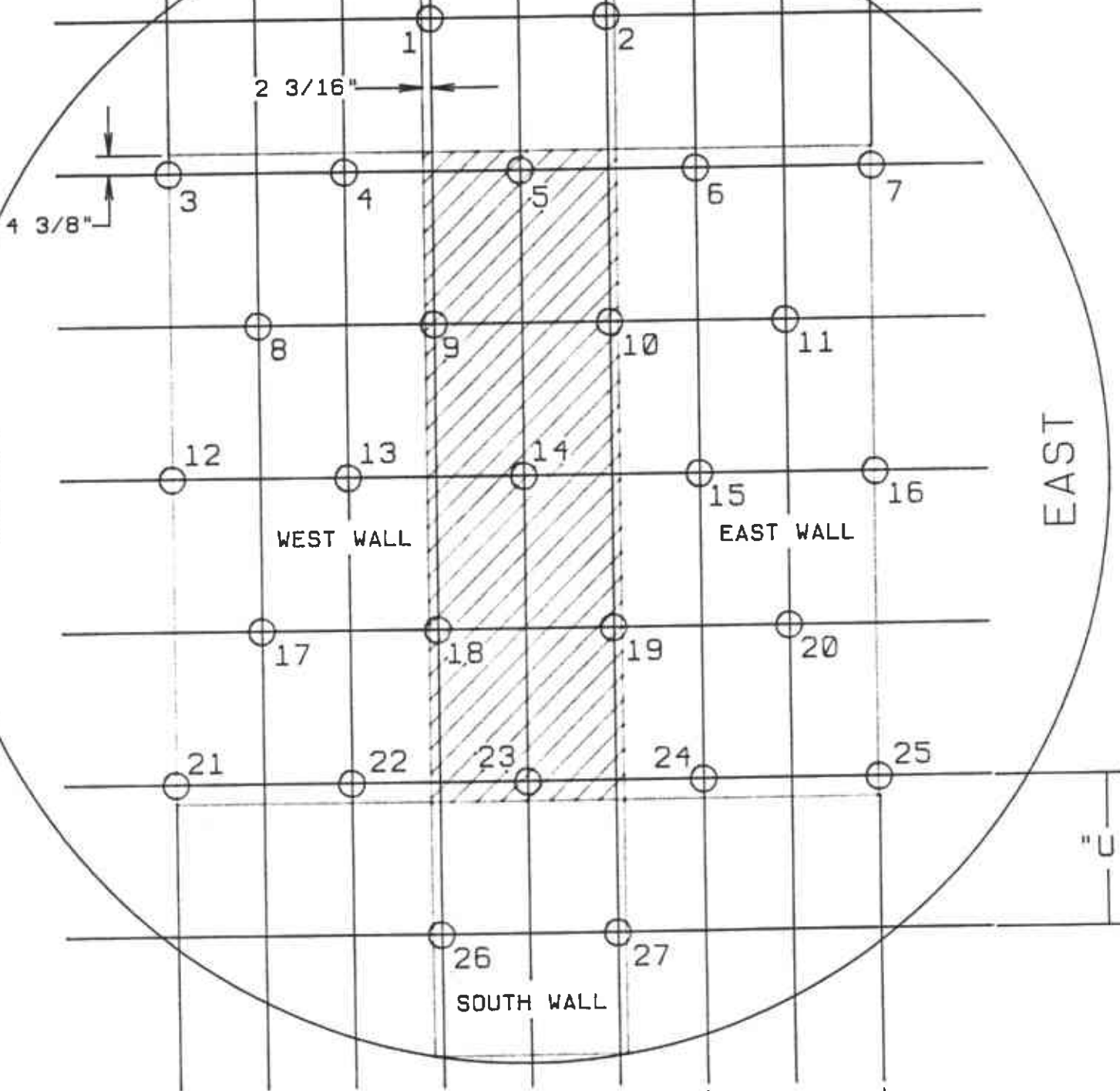
NORTH WALL

SOUTH

SOUTH WALL

WEST

EAST



○ = GRID SAMPLING POINTS

"S" = DISTANCE BETWEEN ADJACENT SAMPLE POINTS 45.6"

"U" = DISTANCE BETWEEN SUCCESSIVE ROWS 39.5"

▨ = BOTTOM

200 AREA PCB TRANSFORMER #2 SPILL CLEANUP SAMPLE PLAN

SK-92-42
R.COOLING 11/12/92

PCB SPILL CLEAN UP SAMPLING WORK, HEALTH & SAFETY PLAN

Supplies Needed:

Sampling Equipment:

- | | |
|--------------------------------|--------------------------|
| 1. Auger | 10. ice chest and ice |
| 2. sample holder | 11. 27 - 1"x1" stakes |
| 3. brass tubes (30) | 12. string or rope |
| 4. brass tube end caps (60) | 13. hammer |
| 5. teflon squares | 14. 1-5 gal. U.I. h20 |
| 6. auger hammer (piston corer) | 15. paper towel |
| 7. 5 ft. extension | 16. plastic garbage bag |
| 8. cross handle | 17. 2-5 gal. buckets |
| 9. sharpie pen | 18. 100 ft. tape measure |

Personal Protective and Monitoring equipment:

- | | |
|---------------------------------------|----------------------|
| 1. Oxygen sensor | 9. safety glasses |
| 2. tyvek coveralls (3) | 10. steel-toed shoes |
| 3. tyvek booties (2 pair) | 11. hard hat |
| 4. latex gloves (3 pair) | 12. barrier tape |
| 5. rubber gloves (3 pair) | 13. decon tarp |
| 6. cotton gloves (optional) | 14. ladder (min. 6') |
| 7. organic vapor cartridge respirator | |
| 8. duct tape | |

Documentation Materials

1. Field log book
2. chain-of-custody forms
3. sample labels (30-if available)
4. camera with film
5. yellow TSCA PCB labels (27)
6. radioactive labels (27)

Work Plan

1. Shore excavation site.
2. Arrange for Hazwoper trained personnel to assist decon.
3. Preclean brass tubes and red end caps
 - a. wash with soap (Direct) and water
 - b. rinse three times with distilled water
 - c. seal tubes with precleaned red end caps
4. Acquire supplies needed and load into vehicle.

PCB SPILL CLEAN UP SAMPLING WORK, HEALTH & SAFETY PLAN
Page 2

5. Prelabel brass sample tubes as follows:
LAB: Controls for Environmental Pollution (CEP)
1925 Rosina Street
Santa Fe, NM 87502
COMPANY: General Electric - VNC
SAMPLE #: (i.e. S-1)
DATE: TIME:
ANALYSIS: PCB Aroclor 1260, EPA Method 8080
6. Prelabel stakes. (S-1, S-2, etc.)
7. Take one (1) sample blank of soil outside the 200 area.
8. Remove excavation cover.
9. Measure the location of the excavation site using the nearest structure as a reference point. Document in the field log book.
10. Set up warm and hot zones and ladder.
hot zone= in excavation area
warm zone= at top of ladder outside excavation
approximately a 10' x 10' area.
11. Using an Oxygen sensor sample excavation at bottom of south two corners, move five feet north, sample at five foot intervals until you have reached the north two corners. If the oxygen content measures in all areas >19.5%, the Hazardous Waste Technician may enter excavation with Level C PPE (as outlined in the safety plan) and the Oxygen sensor shall remain on employee at all times while in excavation.
12. If the Oxygen level at any time is <19.5%, the Hazardous Waste Technician, must evacuate immediately and notify the Environmental Programs Engineer.
13. Put all needed sampling supplies in five gallon bucket to be lowered by rope into excavation later.
14. Hazardous Waste Technician should dress up in Level C PPE as outlined in the safety plan with the assistance of the Decon person.
15. Decon person should dress up in Tyvek, steel-toed shoes, safety glasses, rubber gloves.
16. Start staking out sample grid with 1"x1" stakes.

PCB SPILL CLEAN UP SAMPLING WORK. HEALTH & SAFETY PLAN
Page 3

17. Sample each point using auger hammer (if needed), sampler holder and cross bar. Between each sample rinse sample holder and auger with fresh D.I. water. Collect D.I. water in 5 gallon bucket.
18. Place teflon squares and end caps at the end of each sample, label with sharpie pen date and time sampled, put into 5 gallon bucket with rope.
19. After all excavation site samples are taken rinse sampling equipment with fresh D.I. water. Put lid on used D.I. water bucket and label with "200 Area Soil Sampling rinsewater, Pending Analysis", date and put in secondary containment pool next to PCB bin.
20. Take off booties before stepping on ladder and decon warm zone.
21. All PPE (except respirator without cartridges) should be put in plastic garbage bag and into soil bin.
22. Call Specialist on duty (4265) approximately 1/2 hour prior to completion of decon step.
23. Take sample blank of soil outside 200 area and label with date, time and sample # SB2
24. Place all samples in an ice chest with ice or blue ice.
25. Fill out chain of custody.
26. Fill out shipping documentation with the assistance of Joe Tenorio.
27. Ship samples overnight federal Express to address on sample labels.

Controls for Environmental
Pollution, Inc.

P.O. Box 5351
Santa Fe, NM 87502

Phone: (505) 982-9841/(800) 545-2188

General Elec. Nuclear Energy
Vallecitos Nuclear Center
P.O. Box 460 Mail Code V01
Pleasanton, CA 94566
Attn: Joe Tenorio

Order #: 92-11-501
Date: 12/07/92 15:08
Work ID: Soil (NR)
Date Received: 11/23/92
Date Completed: 12/07/92

Purchase Order: 529-92L105AX
Invoice Number:

Client Code: GE_NUCLEAR

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>	<u>Sample Number</u>	<u>Sample Description</u>
01	SB-1	15	S-14
02	S-1	16	S-15
03	S-2	17	S-16
04	S-3	18	S-17
05	S-4	19	S-18
06	S-5	20	S-19
07	S-6	21	S-20
08	S-7	22	S-21
09	S-8	23	S-22
10	S-9	24	S-23
11	S-10	25	S-24
12	S-11	26	S-25
13	S-12	27	S-26
14	S-13	28	S-27

Order # 92-11-501
12/07/92 15:08

Controls for Environmental

Remainder of sample(s) for routine analysis will be disposed of three weeks from final report date. Sample(s) for bacteria analysis only, will be disposed of immediately after analysis. This is not applicable if other arrangements have been made.



Approved By

Order # 92-11-501
12/07/92 15:08

Controls for Environmental
TEST RESULTS BY SAMPLE

Sample: 01A SB-1

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	10.4		ug/kg	12/04/92	JT

Sample: 02A S-1

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	36.6		ug/kg	12/04/92	JT

Sample: 03A S-2

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	20.7		ug/kg	12/04/92	JT

Sample: 04A S-3

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	12.2		ug/kg	12/04/92	JT

Sample: 05A S-4

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	759		ug/kg	12/04/92	JT

Sample: 06A S-5

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	109		ug/kg	12/04/92	JT

Sample: 07A S-6

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	5.85		mg/kg	12/04/92	JT

Order # 92-11-501
12/07/92 15:08

Controls for Environmental
TEST RESULTS BY SAMPLE

Page 4

Sample: 08A S-7

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
137		ug/kg	12/04/92	JT

Sample: 09A S-8

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
129		mg/kg	12/04/92	JT

Sample: 10A S-9

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
139		mg/kg	12/04/92	JT

Sample: 11A S-10

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
9.3		mg/kg	12/04/92	JT

Sample: 12A S-11

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
2.5		mg/kg	12/04/92	JT

Sample: 13A S-12

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
131		ug/kg	12/04/92	JT

Sample: 14A S-13

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
14		mg/kg	12/04/92	JT

Order # 92-11-501
12/07/92 15:08

Controls for Environmental
TEST RESULTS BY SAMPLE

Sample: 15A S-14

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	233		ug/kg	12/04/92	JT

Sample: 16A S-15

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	65.8		ug/kg	12/04/92	JT

Sample: 17A S-16

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	11.7		ug/kg	12/04/92	JT

Sample: 18A S-17

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	9.7		mg/kg	12/04/92	JT

Sample: 19A S-18

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	517		ug/kg	12/04/92	JT

Sample: 20A S-19

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	3.9		mg/kg	12/04/92	JT

Sample: 21A S-20

Collected: 11/19/92 Category: SOIL

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
PCB-1260	577		ug/kg	12/04/92	JT

Order # 92-11-501
12/07/92 15:08

Controls for Environmental
TEST RESULTS BY SAMPLE

Sample: 22A S-21

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
14		mg/kg	12/04/92	JT

Sample: 23A S-22

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
1.0		mg/kg	12/04/92	JT

Sample: 24A S-23

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
816		ug/kg	12/04/92	JT

Sample: 25A S-24

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
139		ug/kg	12/04/92	JT

Sample: 26A S-25

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
7.4		mg/kg	12/04/92	JT

Sample: 27A S-26

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
253		ug/kg	12/04/92	JT

Sample: 28A S-27

Collected: 11/19/92 Category: SOIL

Test Description
PCB-1260

<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
12		ug/kg	12/04/92	JT

**CONTROLS FOR ENVIRONMENTAL POLLUTION, INC.
CHAIN OF CUSTODY FORM**

Client Name: General Electric Company
Address: 6705 Vallecitos Road
City/State/Zip: Pleasanton, CA 94566
Contact: Susan Dahlin or Joe Tenorio
Telephone No.: (510) 862-4345

Project Name: 200 Area Transformer #2 Retrofit
 PCB Release Soil Clean-Up

Project No.:
 GE Project # 92-41

Company: (Signature)
Remarks:
 Preserved in field yes no
Sampler: (Signature)

Seals in Tact

No. of Containers

Test Requested
 PCB 1260-EPA-8080
REMARKS

Sample No.	Date	Time	Comp.	Grab	Sample Location	Seals in Tact		No. of Containers
						yes	no	
SB-1	11/19/92	1439						1
SB-2	11/19/92	1442			NOT STRIPPED			1
S-1	11/19/92	0830						1
S-2	11/19/92	0840						1
S-3	11/19/92	0850						1
S-4	11/19/92	0915						1
S-5	11/19/92	0915						1
S-6	11/19/92	0925						1
S-7	11/19/92	1135						1

Relinquished by: (Signature)
 Daniel O'Mahoney Jr.
 Date: 11-20-92
 Time: 1056

Received By: (Signature)
 [Signature]
 Date: 11/24/92
 Time: 1100

Relinquished by: (Signature)
 [Signature]
 Date: 11/24/92
 Time: 400P

Received By: (Signature)
 [Signature]
 Date: 11-24
 Time: 400

Relinquished by: (Signature)
 [Signature]
 Date:
 Time:

Received By: (Signature)
 Cheryl Poindexter
 Date: 11/27/92
 Time: 19:00

Relinquished by: (Signature)
 [Signature]
 Date:
 Time:

Received By: (Signature)
 [Signature]
 Date:
 Time:

Laboratory Remarks

510 862 4516 # 2

→

11-17-92 03:17PM

SENT BY:

**CONTROLS FOR ENVIRONMENTAL POLLUTION, INC.
CHAIN OF CUSTODY FORM**

Client Name: General Electric Company
Address: 6705 Vallecitos Road
City/State/Zip: Pleasanton, CA 94566
Contact: Susan Dahlin or Joe Tenorio
Telephone No.: (510) 862-4345

Project Name: 200 Area Transformer #2 Retrofit
 PCB Release Soil Clean-up

Project No.:
 GE Project #92-41

Company (Signature)

Remarks:
 Preserved in field yes no _____
Sampler (Signature)

Seals in Tact

No. of Containers

Test Requested

PCB 1260-EPA 8080

REMARKS

Sample No.	Date	Time	Comp.	Grab	Sample Location	Seals in Tact		No. of Containers	Test Requested	REMARKS
						yes	no			
S-8	11/19/92	1140								
S-9	11/19/92	1145								
S-10	11/19/92	1150								
S-11	11/19/92	1155								
S-12	11/19/92	1200								
S-13	11/19/92	1205								
S-14	11/19/92	1215								
S-15	11/19/92	1220								
S-16	11/19/92	1230								

Relinquished by: (Signature)
 Daniel S. Mahoney
Date 11-20-92
Time 1056

Received by: (Signature)
 [Signature]
Date 11/20/92
Time 1100

Relinquished by: (Signature)
 [Signature]
Date _____
Time _____

Received by: (Signature)
 [Signature]
Date 11/23/92
Time 905

Laboratory Remarks

510 862 4516

11-17-92 00:17:00

**CONTROLS FOR ENVIRONMENTAL POLLUTION, INC.
CHAIN OF CUSTODY FORM**

Client Name: General Electric Company
Address: 6705 Vallecitos Road
City/State/Zip: Pleasanton, CA 94566
Contact: Susan Dahlin or Joe Tenorio
Telephone No.: (510) 862-4345

Project Name: 200 Area Transformer #2 Retrofit
 PCB Release Soil Clean-up

Project No.: GE Project #92-41

Company: (Signature)

Remarks:
 Preserved in field yes no _____

Seals in Tact
No. of Containers
Test Requested

Sampler: (Signature)

Sample No.	Date	Time	Comp.	Grab	Sample Location	Seals in Tact		No. of Containers	Test Requested	REMARKS
						yes	no			
S-17	11/14/92	1235							PCB 1260-EPA 8080	
S-18	11/17/92	1240								
S-19	11/19/92	1245								
S-20	11/19/92	1250								
S-21	11/19/92	1255								
S-22	11/19/92	1300								
S-23	11/19/92	1305								
S-24	11/19/92	1310								
S-25	11/19/92	1315								

Relinquished by: (Signature)
 Daniel S. Mahoney
 Date: 11-20-92
 Time: 1056

Received By: (Signature)
 [Signature]
 Date: 11/20/92
 Time: 11:00

Relinquished by: (Signature)

 Date: _____
 Time: _____

Received By: (Signature)
 [Signature]
 Date: 11/23/92
 Time: 12:00

Laboratory Remarks:

510 862 4516 # 2
 11-17-92 03:17PM
 SENT BY:

**CONTROLS FOR ENVIRONMENTAL POLLUTION, INC.
CHAIN OF CUSTODY FORM**

Client Name: General Electric Company
Address: 6705 Vallecitos Road
City/State/Zip: Pleasanton, CA 94566
Contact: Susan Dahlin or Joe Tenorio
Telephone No.: (510) 862-4345

Project Name: 200 Area Transformer #2 Retrofit
 PCB Release Soil Clean-up
Project No.: GE Project# 92-41

Company: (Signature)
Remarks:
 Preserved in field yes no

Seals in Tact
No. of Containers

Test Requested
 PCB 1260-EPA 8080

Sampler: (Signature)

Sample No.	Date	Time	Comp.	Grab	Sample Location	Seals in Tact		No. of Containers	Test Requested	REMARKS
						yes	no			
S-26	11/19/92	1323							X	
S-27	11/19/92	1330							X	

Relinquished by: (Signature)
 Daniel S. Mahoney

Date: 11-20-92
Time: 1056
Received by: (Signature)
 [Signature]

Date: 11/20/92
Time: 11:09 AM
Relinquished by: (Signature)
 [Signature]

Date: 11/20/92
Time: 9:00
Received by: (Signature)
 [Signature]

510 862 4516 # 2
 11-17-92 03:17PM
 SENT BY:



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RECEIVED JAN 19 1993

General Electric Company	Client Project ID: PCB Soil Clean-up	Sampled: Dec 22, 1992
6705 Vallecitos Road	Sample Descript: Soil, SB-1A	Received: Dec 23, 1992
Pleasanton, CA 94566	Analysis Method: EPA 8080	Extracted: Dec 30, 1992
Attention: Susan Dahlin	Lab Number: 212-4969	Analyzed: Dec 31, 1992
		Reported: Jan 12, 1993

POLYCHLORINATED BIPHENYLS (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
PCB 1016.....	20	N.D.
PCB 1221.....	80	N.D.
PCB 1232.....	20	N.D.
PCB 1242.....	20	N.D.
PCB 1248.....	20	N.D.
PCB 1254.....	20	N.D.
PCB 1260.....	20	40

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


 Tod Granicher
 Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

General Electric Company
6705 Vallecitos Road
Pleasanton, CA 94566
Attention: Susan Dahlin

Client Project ID: PCB Soil Clean-up
Sample Descript: Soil, SB-2A
Analysis Method: EPA 8080
Lab Number: 212-4970

Sampled: Dec 22, 1992
Received: Dec 23, 1992
Extracted: Dec 30, 1992
Analyzed: Dec 31, 1992
Reported: Jan 12, 1993

POLYCHLORINATED BIPHENYLS (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
PCB 1016.....	20	N.D.
PCB 1221.....	80	N.D.
PCB 1232.....	20	N.D.
PCB 1242.....	20	N.D.
PCB 1248.....	20	N.D.
PCB 1254.....	20	N.D.
PCB 1260.....	20	32

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Joe
Tod Granicher
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

General Electric Company
6705 Vallecitos Road
Pleasanton, CA 94566
Attention: Susan Dahlin

Client Project ID: PCB Soil Clean-up
Sample Descript: Soil, S-8A
Analysis Method: EPA 8080
Lab Number: 212-4971

Sampled: Dec 22, 1992
Received: Dec 23, 1992
Extracted: Dec 30, 1992
Analyzed: Dec 31, 1992
Reported: Jan 12, 1993

POLYCHLORINATED BIPHENYLS (EPA 8080)

Analyte	Detection Limit $\mu\text{g}/\text{kg}$	Sample Results $\mu\text{g}/\text{kg}$
PCB 1016.....	20	N.D.
PCB 1221.....	80	N.D.
PCB 1232.....	20	N.D.
PCB 1242.....	20	N.D.
PCB 1248.....	20	N.D.
PCB 1254.....	20	N.D.
PCB 1260.....	20	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Tod Granicher
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

General Electric Company	Client Project ID: PCB Soil Clean-up	Sampled: Dec 22, 1992
6705 Vallecitos Road	Sample Descript: Soil, S-9A	Received: Dec 23, 1992
Pleasanton, CA 94566	Analysis Method: EPA 8080	Extracted: Dec 30, 1992
Attention: Susan Dahlin	Lab Number: 212-4972	Analyzed: Dec 31, 1992
		Reported: Jan 12, 1993

POLYCHLORINATED BIPHENYLS (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
PCB 1016.....	20	N.D.
PCB 1221.....	80	N.D.
PCB 1232.....	20	N.D.
PCB 1242.....	20	N.D.
PCB 1248.....	20	N.D.
PCB 1254.....	20	N.D.
PCB 1260.....	20	47

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


 Tod Granicher
 Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

General Electric Company
6705 Vallecitos Road
Pleasanton, CA 94566
Attention: Susan Dahlin

Client Project ID: PCB Soil Clean-up
Sample Descript: Soil, S-13A
Analysis Method: EPA 8080
Lab Number: 212-4973

Sampled: Dec 22, 1992
Received: Dec 23, 1992
Extracted: Dec 30, 1992
Analyzed: Dec 31, 1992
Reported: Jan 12, 1993

POLYCHLORINATED BIPHENYLS (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
PCB 1016.....	20	N.D.
PCB 1221.....	80	N.D.
PCB 1232.....	20	N.D.
PCB 1242.....	20	N.D.
PCB 1248.....	20	N.D.
PCB 1254.....	20	N.D.
PCB 1260.....	20	28

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Tod Granicher
Project Manager



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680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

General Electric Company
6705 Vallecitos Road
Pleasanton, CA 94566
Attention: Susan Dahlin

Client Project ID: PCB Soil Clean-up
Sample Descript: Soil, S-21A
Analysis Method: EPA 8080
Lab Number: 212-4974

Sampled: Dec 22, 1992
Received: Dec 23, 1992
Extracted: Dec 30, 1992
Analyzed: Dec 31, 1992
Reported: Jan 12, 1993

POLYCHLORINATED BIPHENYLS (EPA 8080)

Analyte	Detection Limit $\mu\text{g}/\text{kg}$	Sample Results $\mu\text{g}/\text{kg}$
PCB 1016.....	20	N.D.
PCB 1221.....	80	N.D.
PCB 1232.....	20	N.D.
PCB 1242.....	20	N.D.
PCB 1248.....	20	N.D.
PCB 1254.....	20	N.D.
PCB 1260.....	20	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

General Electric Company
6705 Vallecitos Road
Pleasanton, CA 94566
Attention: Susan Dahlin

Client Project ID: PCB Soil Clean-up

QC Sample Group: 212-4969-74

Reported: Jan 12, 1993

QUALITY CONTROL DATA REPORT

ANALYTE

PCB 1260

Method: EPA 8080
Analyst: L. Laikhtman
Reporting Units: $\mu\text{g}/\text{kg}$
Date Analyzed: Dec 17, 1992
QC Sample #: BLK121792

Sample Conc.: N.D.

Spike Conc.
Added: 500

Conc. Matrix
Spike: 400

Matrix Spike
% Recovery: 79

Conc. Matrix
Spike Dup.: 410

Matrix Spike
Duplicate
% Recovery: 82

Relative
% Difference: 2.5

SEQUOIA ANALYTICAL


Tod Granicher
Project Manager

% Recovery: $\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$

2124969.GEN <7>



SEQUOIA ANALYTICAL CHAIN OF CUSTODY

819 W. Striker Ave. • Sacramento, CA 95834 (916) 960-6000
 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Company Name: General Electric Company Project Name: PCB Soil Clean-Up
 Address: 6705 Vallecitos Rd Billing Address (if different): P.O. Box 460
 City: Pleasanton State: CA Zip Code: 94566 Pleasanton, CA 94566
 Telephone: (510) 862-4345 FAX #: (510) 762-4511 P.O. #: 529-92A052A
 Report To: Susan Dahlin Sampler: Fred Arlt QC Data: Level A (Standard) Level B Level C CLP

Turnaround Time: 15 Working Days 3 Working Days 2 - 8 Hours
 10 Working Days 2 Working Days
 5 Working Days 24 Hours

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Analyses Requested										Comments			
						1	2	3	4	5	6	7	8	9	10				
1. SB-1a	12-22-92 10 AM	soil	1	brass tube	212969														
2. SB-2a	12-22-92	soil	1	brass tube	70														
3. S-8a	12-22-92	soil	1	brass tube	71														
4. S-9a	12-22-92	soil	1	brass tube	72														
5. S-13a	12-22-92	soil	1	brass tube	73														
6. S-21a	12-22-92	soil	1	brass tube	74														
7.																			
8.																			
9.																			
10.																			

Relinquished By: Susan G. Dahlin Date: 12-23-92 Time: 11:55 Received By: MA Kordian Date: 12-23 Time: 11:55
 Relinquished By: MA Kordian Date: 12-23 Time: 1440 Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By Lab: [Signature] Date: 12-23-92 Time: 1440

12-23-92 09:11 AM 415 364 9233 SEQUOIA REDWOOD CITY

Post-It™ brand fax transmittal memo 7671 # of pages 3

To	Sue Dahlin	From	Debbie Hasler
Co.	GE	Co.	GE
Dept.	823-4516	Phone #	
Fax #		Fax #	

*Spill Cleanup Policy
Return to D. Hasler*

1987 / Rules and Regulations

1068

ENVI
AGE

40 CFR Part 761

(OPTS 62051; FRL 3179-1)

**Polychlorinated Biphenyls Spill
Cleanup Policy**

AGENCY: Environmental Protection
Agency (EPA).

ACTION: TSCA PCB spill cleanup policy
rule.

SUMMARY: This rule presents the Toxic Substances Control Act (TSCA) policy for the cleanup of spilled polychlorinated biphenyls (PCBs). The TSCA policy establishes the measures which EPA considers to be adequate cleanup for the majority of situations where PCB contamination occurs during activities regulated under TSCA. While cleanup in accordance with this policy constitutes adequate cleanup of spills within the scope of this policy and creates a presumption against enforcement for penalties or further cleanup, EPA will not exercise enforcement abeyance for a disposal violation if the spill was the result of gross negligence or knowing violation.

Since this rule is a policy statement, it does not require notice and comment under the provisions of the Administrative Procedures Act. However, the Agency welcomes comment on and additional relevant information about the TSCA policy.

DATE: The TSCA policy shall be effective on May 4, 1987.

ADDRESSES: Information or comments for consideration by the Agency should be submitted in triplicate to: TSCA Public Information Office (TS-783), Office of Toxic Substances, Environmental Protection Agency, Rm. 6004 NE Mall, 401 M St., SW, Washington, DC 20460.

Information and comments should include the docket number OPTS-62051. Information and comments received in connection with this document will be available for reviewing and copying from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays, in Rm. 6004 NE Mall, Environmental Protection Agency, 401 M St., SW, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Edward A. Klein, Director, TSCA Assistance Office (TS-799), Office of Toxic Substances, Environmental Protection Agency, Rm. E-543, 401 M St., SW, Washington, DC 20460. (202-554-1404).

Ass.
Toxic Sub.
Environmental Protection Agency
Washington, DC

- I. Background
- II. Scope of the Policy
 - A. Excluded Spills
 - B. Spill Situations Within the Scope of the Policy That May Warrant more Stringent Cleanup Levels
 - C. EPA Flexibility to Allow Less Stringent or Alternative Requirements
 - D. The Relationship of This Policy of Other Statutes
- III. Definitions
- IV. Requirements for PCB Spill Cleanup
 - A. General Requirements
 - B. Requirements for Cleanup of Low-concentration Spills Which Involve Less Than 1 lb PCBs by Weight (Less Than 270 Gallons of Untested Mineral Oil)
 - C. Requirements for Cleanup of High-concentration Spills and Low-concentration Spills Involving 1 lb or more PCBs by Weight (270 or More Gallons of Untested Mineral Oil)
- V. Sampling Requirements
- VI. EPA Enforcement and the Effect of Compliance with this Policy
- VII. Development of the TSCA PCB Spill Cleanup Policy
 - A. Risks Posed by Leaks and Spills of PCBs
 - B. Costs of Cleanup
 - C. Risk/Benefit Discussion of Cleanup Requirements
 - D. Scope of the Policy
 - E. Issues

I. Background

EPA regulations controlling the disposal of PCBs, promulgated in the Federal Register of February 17, 1978 (43 FR 7150) and May 31, 1979 (44 FR 31514), broadly define the term "disposal" to encompass accidental as well as intentional release of PCBs to the environment. Under these regulations, EPA considers intentional, as well as unintentional, spills, leaks and other uncontrolled discharges of PCBs at concentrations of 50 parts per million (ppm) or greater (defined by the concentration of PCBs in the material which spills) to be improper disposal of PCBs. For purposes of this discussion, and as defined in this policy under Unit III, the term "Spill" means spills, leaks, or other uncontrolled discharges of PCBs where the release results in any quantity of PCBs running off or about to run off the surface of the equipment or other PCB source, as well as the contamination resulting from those releases. When PCBs are improperly disposed of as a result of a spill of material containing 50 ppm or greater PCBs, EPA has the authority under section 17 of TSCA to compel persons to take actions to rectify damage or clean up contamination resulting from the spill.

Policies for the cleanup of PCB spills are currently established separately by each EPA regional office, and owners of

spilled PCBs are required to meet these standards or face potential penalties under TSCA section 16 for improper disposal of PCBs. Once cleanup occurs to the standard set by the EPA regional offices, the material which has been cleaned, e.g., soil, metal, or equipment, may be processed, distributed in commerce and used (unless the regional office has placed restrictions on these other activities).

EPA standards for the cleanup of spilled PCBs have been established at the EPA regional office level since 1978. Each region sets PCB cleanup standards in the form of general guidelines and then applies the general guidelines on a case-by-case basis for specific spill situations. The general guidelines and their application to spills have differed among regions. For certain spill situations, regions have required cleanup to 50 ppm PCBs. In other spill situations, regions have required cleanup to preexisting background levels or the limit of detection of PCBs.

For PCB spill cleanup, EPA has already in place certain requirements for timely cleanup. In the final PCB Electrical Equipment Rule, published in the Federal Register of August 25, 1982 (47 FR 37342), EPA requires the initiation of PCB Transformer spill cleanup within 48 hours of spill discovery and defines disposal specifically to include leaks, spills, and other unintentional discharges of PCBs. However, the PCB Electrical Equipment Rule did not establish numerical criteria for PCB spill cleanup.

Most recently, the regions have applied the "lowest practicable level" guideline set up in the January 27, 1984, Administrative Law Judge decision on *General Electric v. U.S.E.P.A.* The Agency has, however, experienced several areas of difficulty in applying the "lowest practicable level" approach. First, the guideline is subject to, and has resulted in, disparate interpretations. Second, the term "lowest practicable level" cannot be easily applied by the regulated community without guidance from EPA. This can delay cleanup, and delays in cleanup can result in prolonged exposures to humans and more widespread environmental contamination. Finally, the owner of the PCBs may disagree with the EPA regional office's interpretation of the "lowest practicable level" standard. This may occur when the EPA regional office interpretation would require more stringent and costly measures than the owner believes are warranted. This too can delay complete cleanup, as the application of this guideline has, in fact, led to protracted Agency actions in some cases.

requirements have been met and that the information contained in the record is true to the best of his/her knowledge.

While not required for compliance with this policy, the following information would be useful if maintained in the records: (1) Additional pre- or postcleanup sampling; and (2) the estimated cost of the cleanup by man-hours, dollars, or both.

C. Requirements for Cleanup of High-Concentration Spills and Low-Concentration Spills Involving 1 LB or More PCBs By Weight (270 Gallons or More of Untested Mineral Oil)

Cleanup of low-concentration spills involving 1 lb or more PCBs by weight, and of all other spills of regulated materials shall be considered complete if all of the immediate requirements, cleanup standards, sampling, and recordkeeping requirements below are met.

1. **Immediate requirements.** The following four actions must be taken as quickly as possible and within no more than 24 hours (or within 48 hours for PCB Transformers) after the owner of the equipment or container from which the spill occurred, or other responsible representative of the owner such as a facility manager, was notified or became aware of the spill, except that actions described in paragraphs 1. b., c., and d. of this unit may be delayed beyond 24 hours if circumstances (e.g., civil emergency, hurricane, tornado, or other similar adverse weather conditions, lack of access due to physical impossibility, or emergency operating conditions) so require for the duration of the adverse conditions. The occurrence of a spill on a weekend or overtime costs are not acceptable reasons to delay response. Owners of spilled PCBs who have delayed cleanup because of these types of circumstances must keep records documenting the fact that circumstances precluded rapid response. The responsible party shall:

a. Notify the EPA regional office and the NRC as required by Unit IV.A.1 or by other applicable statutes.

b. Effectively cordon off or otherwise delineate and restrict an area encompassing any visible traces plus a 3-foot buffer, and place clearly visible signs advising persons to avoid the area, to minimize the spread of contamination as well as the potential for human exposure.

c. Record and document the area of visible contamination, noting the extent of the visible trace areas and the center of the visible trace area. If there are no visible traces, the responsible party shall record this fact and contact the regional office of the EPA for guidance

in completing statistical sampling of the spill area to establish spill boundaries.

d. Initiate cleanup of all visible traces of the fluid on hard surfaces and initiate removal of all visible traces of the spill on soil and other media, such as gravel, sand, oyster shells, etc.

If there has been a delay in reaching the site and there are insufficient visible traces of PCBs remaining at the spill site, the owner of the PCBs must estimate (based on the amount of material missing from the equipment or container) the area of the spill and immediately cordon off the area of suspect contamination. The owner must then utilize a statistically based sampling scheme to identify the boundaries of spill area as soon as practicable.

Although this policy requires certain immediate actions, as described above, EPA is not placing a time limit on completion of the cleanup effort since the time required for completion will vary from case to case. However, the Agency expects that decontamination will be achieved promptly in all cases and will consider the promptness of completion in determining whether a responsible party made good faith efforts to clean up in accordance with this policy.

2. **Requirements for decontaminating spills in outdoor electrical substations.** Spills which occur in outdoor electrical substations (as defined in Unit III) shall be decontaminated in accordance with paragraphs a. and b. of this unit. Conformance to the cleanup standards in paragraphs a. and b. of this unit shall be verified by postcleanup sampling as specified in Unit V. At such times as outdoor electrical substations are converted to another use, the spill site shall be cleaned up to the non-restricted access requirements in Unit IV.C.4.

a. Contaminated solid surfaces (both impervious and non-impervious) shall be cleaned to a PCB concentration of 100 $\mu\text{g}/100\text{ cm}^2$ (as measured by standard wipe tests).

b. At the option of the responsible party, soil contaminated by the spill will be cleaned: (1) To 25 ppm PCBs by weight, or (2) to 50 ppm PCBs by weight provided that a label or notice is visibly placed in the area. Upon demonstration by the responsible party that cleanup to 25 ppm or 50 ppm will jeopardize the integrity of the electrical equipment at the substation, the EPA regional office may establish an alternative cleanup method or level and place the responsible party on a reasonably timely schedule for completion of cleanup.

3. **Requirements for decontaminating spills in other restricted access areas.**

Spills which occur in restricted access locations other than outdoor electrical substations (as defined in Unit III) shall be decontaminated in accordance with paragraphs 3.a through e. of this unit. Conformance to the cleanup standards in paragraphs a. through e. of this unit shall be verified by postcleanup sampling as specified in Unit V. At such times as restricted access areas other than outdoor electrical substations are converted to another use, the spill site shall be cleaned up to the nonrestricted access area requirements under Unit IV.C.4.

a. High-contact solid surfaces (see definition of high-contact industrial surfaces in Unit III) shall be cleaned to 10 $\mu\text{g}/100\text{ cm}^2$ (as measured by standard wipe tests).

b. Low-contact, indoor, impervious solid surfaces will be decontaminated to 10 $\mu\text{g}/100\text{ cm}^2$.

c. At the option of the responsible party, low-contact, indoor, nonimpervious surfaces will be cleaned either: (1) To 10 $\mu\text{g}/100\text{ cm}^2$; or (2) to 100 $\mu\text{g}/100\text{ cm}^2$ and encapsulated. The Regional Administrator, however, retains the authority to disallow the encapsulation option for a particular spill situation upon finding that the uncertainties associated with that option pose special concerns at that site. That is, the Regional Administrator would not permit encapsulation if he/she determined that if encapsulation failed at a particular site this failure would create an imminent hazard.

d. Low-contact, outdoor surfaces (both impervious and non-impervious) shall be cleaned to 100 $\mu\text{g}/100\text{ cm}^2$.

e. Soil contaminated by the spill will be cleaned to 25 ppm PCBs by weight.

4. **Requirements for decontaminating spills in non-restricted access areas.** Spills which occur in nonrestricted access locations (as defined in Unit III) shall be decontaminated in accordance with paragraphs 4.a. through e. of this unit. Conformance to the cleanup standards in paragraphs 4.a. through e. of this unit shall be verified by postcleanup sampling as specified in Unit V. At such times as outdoor electrical substations and other restricted access areas are converted to another use, the spill site shall be cleaned up to the non-restricted access area requirements.

a. Furnishings, toys, and other easily replaceable household items shall be disposed of in accordance with the provisions of 40 CFR 761.60 and replaced by the responsible party.

b. Indoor solid surfaces and high-contact outdoor solid surfaces (see definition of high contact residential/

restricted
area
25 ppm

commercial surfaces in Unit III) shall be cleaned to 10 $\mu\text{g}/100\text{ cm}^2$ (as measured by standard wipe tests).

c. Indoor vault areas, and low-contact, outdoor, impervious solid surfaces shall be decontaminated to 10 $\mu\text{g}/100\text{ cm}^2$.

d. At the option of the responsible party, low-contact, outdoor, nonimpervious solid surfaces shall be either: (1) cleaned to 10 $\mu\text{g}/100\text{ cm}^2$; or (2) cleaned to 100 $\mu\text{g}/100\text{ cm}^2$ and encapsulated. The Regional Administrator, however, retains the authority to disallow the encapsulation option for a particular spill situation upon finding that the uncertainties associated with that option pose special concerns at that site. That is, the Regional Administrator would not permit encapsulation if he/she determined that if the encapsulation failed the failure would create an imminent hazard at the site.

e. Soil contaminated by the spill will be decontaminated to 10 ppm PCBs by weight, provided that soil is excavated to a minimum depth of 10 inches. The excavated soil will be replaced with clean soil (i.e., containing less than 1 ppm PCBs), and the spill site will be restored (e.g., replacement of turf).

5. **Records.** The responsible party or appropriate agent shall document the cleanup with records of decontamination. The records must be maintained for a period of 5 years. The records and certification shall consist of the following:

a. Identification of the source of the spill (e.g., type of equipment.)

b. Estimated or actual date and time of the spill occurrence.

c. The date and time cleanup was completed or terminated (if cleanup was delayed by emergency or adverse weather; the nature and duration of the delay).

d. A brief description of the spill location and the nature of the materials contaminated (this information should include whether the spill occurred in an outdoor electrical substation, other restricted access location, or in a nonrestricted access area).

e. Precleanup sampling data used to establish the spill boundaries if required because of insufficient visible traces, and a brief description of sampling methodology used to establish the spill boundaries.

f. A brief description of the solid surfaces cleaned.

g. Approximate depth of soil excavation and the amount of soil removed.

h. Postcleanup verification sampling data and, if not otherwise apparent from the documentation, a brief description of

the sampling methodology and analytical technique used.

While not required for compliance with this policy, information on the estimated cost of cleanup (by man-hours, dollars, or both) would be useful if maintained in the records.

EPA will soon issue for publication in the *Federal Register* a proposed rule to require these recordkeeping measures to facilitate EPA's monitoring of PCB spill cleanups.

V. Sampling Requirements

Postcleanup sampling is required to verify the level of cleanup under Unit IV.C. 2 through 4. The responsible party, or designated agent, may use any statistically valid, reproducible, sampling scheme (either random samples or grid samples), provided that the requirements of paragraphs 1. and 2. of this unit are satisfied.

1. The sampling area is the greater of (1) an area equal to the area cleaned plus an additional 1-foot boundary, or (2) an area 20 percent larger than the original area of contamination.

2. The sampling scheme must ensure 95 percent confidence against false positives.

3. The number of samples must be sufficient to ensure that areas of contamination of a radius of 2 feet or more within the sampling area will be detected, except that the minimum number of samples is 3 and the maximum number of samples is 40.

4. The sampling scheme must include calculation for expected variability due to analytical error.

EPA recommends the use of the sampling scheme developed by the Midwest Research Institute (MRI) for use in EPA enforcement inspections: "Verification of PCB Spill Cleanup by Sampling and Analysis." Guidance for the use of this sampling scheme is available in the MRI report "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup." Both the MRI sampling scheme and the guidance document are available from the TSCA Assistance Office at the address and telephone number given under "FOR FURTHER INFORMATION CONTACT." The major advantage of this sampling scheme is that it is designed to characterize the degree of contamination within the entire sampling area with a high degree of confidence while using fewer samples than any other grid or random sampling scheme. This sampling scheme also allows some sites to be characterized on the basis of composite samples.

At its discretion, EPA may take samples from any spill site. If EPA's sampling indicates that the remaining

concentration level exceeds the required level, EPA will require further cleanup. For this purpose, the numerical level of cleanup required for spills cleaned in accordance with Unit IV.B are deemed to be the equivalent of numerical cleanup requirements required for cleanups under Unit IV.C. 2 through 4. EPA may sample using its best engineering judgment, a statistically valid random or grid sampling technique, or both. When using engineering judgment or random "grab" samples, EPA will take into account that there are limits on the power of a grab sample to dispute statistically based sampling of the type required of the responsible party. EPA headquarters will provide guidance to the EPA regions on the degree of certainty associated with various grab sample results.

VI. EPA Enforcement and the Effect of Compliance With This Policy

Although a spill of material containing 50 ppm or greater PCBs is considered improper PCB disposal, this policy establishes requirements that EPA considers to be adequate cleanup of the spilled PCBs. Cleanup in accordance with this policy means compliance with the procedural as well as the numerical requirements of this policy. Compliance with this policy creates a presumption against both enforcement action for penalties and the need for further cleanup under TSCA. The Agency reserves the right, however, to initiate appropriate action to compel cleanup where, upon review of the records of cleanup, EPA finds that the decontamination levels in the policy have not been achieved. The Agency also reserves the right to seek penalties where the Agency believes that the responsible party has not made a good faith effort to comply with all provisions of this policy, such as prompt notification of EPA of a spill, recordkeeping, etc.

EPA's exercise of enforcement discretion does not preclude enforcement action under other provisions of TSCA or any other Federal statute. This includes, even in cases where the numerical decontamination levels set forth in this policy have been met, civil or criminal action for penalties where EPA believes the spill to have been the result of gross negligence or knowing violation.

The TSCA policy has been reviewed by the Office of Management and Budget.

This concludes EPA's TSCA policy. Unit VII, which follows, contains the rationale for the policy, the data on which the policy was based, and the

unrestricted access
10 ppm