RAVENNA ARSENAL, INC.
RAVENNA ARMY AMMUNITION PLANT

STANDARD PROCEDURE

SP NO. ME-4-0019
EFFECTIVE: 12-88
REVISED: 2-92
REVIEW: 2-94

File

SUBJECT: Storage and Handling of Polychlorinated Bipheynl (PCB) Contaminated Items at Building 854.

PREPARED BY: Engineering Maintenance Department

I. PURPOSE

To outline the procedures to be followed in connection with the storage and handling of PCB-contaminated items at RVAAP.

II. POLICY

A. Basic Policy

It is the policy of RAI to store all PCB-contaminated items in building 854, and to comply with all local, state and federal laws regulating their storage.

1. All PCB items, i.e., transformers, capacitors, contaminated oil, hydraulic equipment containing contaminated oil, or any item suspected of being contaminated with PCBs, will be stored in building 854 IAW this Standard Practice (SP) and all other applicable regulations.

2. No PCB-contaminated item(s) will be stored for disposal for longer than nine months. This allows three months to comply with 40 CFR 761.65, which requires that the disposal action be completed within one year of being placed in storage for disposal.

B. Responsibilities

1. The Manager, Maintenance and Installation, has the overall responsibility for establishment of this SP and compliance with all applicable regulations covering storage of PCBs.

2. The Mechanical Maintenance Supervisor is responsible to:

a. Insure that all personnel who are assigned to handle items contaminated with PCBs are trained in safe handling methods IAW this procedure. This training will be done no less than annually and documented in each employee's file. A separate training documentation sheet will be kept for each employee (see attachment 9.)

b. Supervise the overall PCB storage operation and notify the Manager, Maintenance and Installation, immediately of any violation or suspected violation of applicable regulations or this SP.

c. Insure that weekly and monthly inspections/inventories are conducted and updated IAW this SP, and that

written results are provided to the Environmental Engineer in a timely manner.

d. Insure that an accurate inventory of all PCB-contaminated items is maintained.

e. Notify the Environmental Engineer (in writing) when PCB-contaminated equipment or material is properly prepared for shipment as soon as practical prior to date of shipment.

3. The Environmental Engineer is responsible to:

a. Recommend changes to this procedure to conform with current PCB regulations, both Federal and State.

b. Monitor PCB operations and records to verify compliance with applicable regulations and procedures.

c. Inspect all PCB-contaminated equipment or material prior to shipment and notify the Stores, Transportation & Operations Division (in writing) that all items to be shipped have been inspected and approved for shipment IAW all applicable local, state and federal laws and army regulations:

4. The Stores, Transportation & Operations Division is responsible to:

a. Insure timely removal and proper disposal of all PCB-contaminated items stored for disposal in building 854. Note: Items contaminated with PCBs greater than 50 ppm must not be stored for disposal in building 854 for longer than nine months.

b. Coordinate disposal action with the Mechanical Maintenance Supervisor and the Environmental Engineer IAW this procedure and all applicable local, state, and federal laws and Army regulations.

III. PROCEDURES

A. All PCB contaminated items will be stored for disposal or reuse in the east end of building 854. Access to this storage facility will be to authorized personnel only. The entrance doors and storage bays shall be marked with an M (sub L) label (att. 1).

B. All transformers that have not already been tested will be tested to determine PCB contamination within 72 hours after being placed in storage. Any item placed in storage will be immediately tagged. (See attachment 2.)

1. The results of the PCB contamination tests will be marked on the appropriate tag indicating the exact amount of contamination. The terms less than or greater than are not acceptable.

a. The front of the tag used shall read:

(1) In Storage for Reuse; Date Placed in Storage_____; Property No._____; Turn-In No._____; (or)

(2) In Storage for Disposal; Date Placed in Storage _____; Property No._____; Turn-In No._____.

b. The back of the tag shall read (same back on both tags):

(1) PCB Test Results; Test Date_____; PPM_____; Property No._____; Lab I.D._____; Sample No. _____.

2. Any transformer placed in storage will have a copy of the historical record placed in a transparent record protector and affixed to the transformer within 72 hours to provide easy access to all pertinent historical information, and the transformer inventory will be updated within 72 hours by calling the environmental office, extension 3221.

a. All entries must be made in ink and initialed.

3. Any item placed in storage which contains 50 ppm or more PCB shall have an M (sub L) label attached (see attachment 1).

4. Any item placed in storage which contains less than 50 ppm PCB shall have a Non PCB Certification Label attached (see attachment 1).

C. If an item is placed in storage for reuse and is later identified for disposal, the tag shall be immediately changed. The new tag will have the date it was identified for disposal, not the date it originally went into storage.

D. Any PCB-contaminated electrical equipment or container containing 50 parts per million (ppm) or greater brought into storage for disposal or transferred from reuse to disposal will have a turn-in (DD Form 543) prepared (including the actual weight of the item,) and the PCB inventory will be updated. (Turn-in and inventory will be done within 72 hours.)

1. No PCB-contaminated item(s) will be stored for disposal in building 854 longer than nine months.

E. Storage areas, or bays, will be separate, and marked as follows:

1. Electrical equipment containing less than 50 ppm or which contained between 50 and 500 ppm PCB fluid and which have been drained of all free flowing fluid.

2. Electrical equipment containing 50 ppm PCB or greater.

F. Items in storage for reuse and items in storage for disposal will be stored in separate bays.

G. All PCB items and PCB containers in storage for disposal will be

stored in containment pans, on pallets.

H. Non-leaking and structurally undamaged PCB large, high voltage capacitors and PCB contaminated (less than 500 ppm) electrical equipment in storage for reuse are not required to be in pans; however, pans equal in volume to 10% of the total volume of the articles outside the pans, or 200% of the internal volume of the largest article, whichever is greater, will be available for immediate use. If pans are not used, the articles will be placed on pallets and will be inspected for leaks weekly. If pans are available all articles containing 50 ppm PCB or greater will be stored in pans.

1. Containment pans must have minimum four inch (4") high sides and be placed on pallets providing uniform support. They must contain at least two times the internal volume of the largest article to be contained or 25% of the total internal volume of all of the articles to be contained in the pan. Pans will be steel, aluminum or other material that is substantial enough to withstand normal warehouse handling and facilitate easy cleaning. All containment pans shall be determined leakproof prior to use by being able to hold a volume of water for no less than 24 hours without any failure

I. Any PCB item or container found to be leaking will be emptied of all free-flowing fluid, into a DOT 17E tight-head 20/18 gauge 55-gallon drum. See Section III, R, of this SP, for cleanup procedures regarding spilled PCB material within containment pans.

J. Removal of contaminated oil from transformers will be accomplished in the following manner to avoid spilling any contaminated oil on floor or personnel.

1. Draining:

a. All draining will be done with the use of a forklift over a large containment pan, (4'W x 8'L x 1'6" H) into a DOT 17E approved tighthead container (See M, 9, below). See item 2, below, for transference of PCB liquids.

b. Personnel involved in the draining process will wear plastic gloves, coveralls, and face shield (See M, 3, 6, and 7, below.)

c. Absorbent material will be placed in bottom of all drained transformers (except transformers that are to be sent out for repair or rebuild) to eliminate all free-flowing fluid. Absorbent material will be removed to proper containers and replaced if it becomes saturated.

d. All draining or pumping operations will be done with adequate ventilation, i.e., doors open.

e. Do not allow oil to contact skin. If it does, wash affected area thoroughly at once and then report to the plant nurse or to first-aid station at RAI fire department, building 1048.

f. Any PCB liquids that are 500 ppm or greater shall not be mixed with fluids less than 500 ppm, or stored in the same bay.

g. Any action that affects the current inventory, (i.e., addition or deletion of PCB-contaminated items, generation of PCB-contaminated waste, draining or pumping PCB oil from a transformer to another container), will be reported by the Mechanical/Electrical Maintenance Supervisor to the Environmental Engineer immediately for proper inventory adjustment.

h. The historical records (original in transformer books and the copy attached to the transformer) will be annotated when fluid has been drained, indicating date, approximate quantity of fluid removed, location (bay number), and identifying number or letter of DOT 17E approved drum to which the fluid was transferred.

i. A "Transfer of PCB & Hazardous Fluids" form, (attachment 8) will be filled out, in ink, by the employee who transferred any PCB-contaminated fluid from one container to another. The original will be placed in the transparent record protector of the transformer drained or pumped; one copy will be filed with the original historical record of the transformer, and one copy will be placed in a transparent record protector and affixed to the DOT 17E drum to which the PCB-contaminated fluid was transferred.

2. Pumping

a. All contaminated oil will be pumped into a DOT 17E approved tighthead container.

b. Pump will be fitted with transparent tubing.

c. Pump will be rinsed with 140 degree flash point solvent or kerosene after each use and placed in a covered containment pan for storage when not in use.

(1) All contaminated solvent used for cleaning or flushing will be placed in a DOT 17E drum (see M, 8, below.) A "Transfer of PCB & Hazardous Fluids" form will be completed by the employee depositing the solvent into the drum (see J, 1, i, above.)

d. Personnel involved in the pumping process or handling pump or related parts will wear plastic gloves, coveralls and face shield (See M, below).

e. Absorbent material will be placed in bottom of all pumped transformers (except transformers that are to be sent out for repair or rebuild) to eliminate all free flowing fluid. Absorbent material will be removed to proper containers and replaced if it becomes saturated.

f. The historical records (original in transformer books and the copy attached to the transformer) will be annotated when fluid has been pumped, indicating date, approximate quantity of fluid removed, location (bay number), and identifying number or letter of DOT 17E approved drum to which the fluid was transferred.

g. A "Transfer of PCB & Hazardous Fluids" form, (attachment 8) will be filled out, in ink, by the employee who transferred any PCB-contaminated fluid from one container to another. The original will be placed in the transparent record protector of the transformer drained or pumped; one copy will be filed with the original historical record of the transformer, and one copy will be placed in a transparent record protector and affixed to the DOT 17E drum to which the PCB-contaminated fluid was transferred.

K. DOT 17E approved tighthead containers will be kept on hand at the storage facility (building 854) for transfer of fluid from a leaking transformer or other PCB container.

L. An adequate supply of the following items will be stored in cabinet in building 854 near the PCB storage bays for easy access:

1. Tags (In Storage for Reuse/Disposal) (See number III, C, 1, 2, and 3, above) (attachment 2.)

2. Labels (See attachment 1).

3. Copies of current PCB inventory, this SP, and 40 CFR 761.79, 761.120, 761.123, 761.125, 761.130, and 761.135 (See attachment 3).

4. Spill alert sheets (attachment 4).

5. Labels "PCB contaminated -- Do not remove from this building" (attachment 5)

6. A list of plant phone numbers of personnel available for technical, medical, or emergency support assistance

M. The following tools and equipment will be neatly stored for easy access in building 854, tagged or labeled "PCB Contaminated -- Do Not Remove From This Building" (attachment 5), and will be inventoried as part of weekly inspection (see attachment 6):

1.	Broom, 24" or larger for floor sweeping	1 each
2.	Shop brush	1 each
3.	Dust pan	1 each
4.	Shovel	1 each
5.	Face shield	2 each
6.	Plastic gloves, disposable, RAI #8415-00-03101	6 pair
7.	Plastic coveralls, disposable, RAI #8415-00-03100	6 pair
8.	Drum, 55 gallon, (DOT 17E) tight-head, 20/18 gauge (for PCB contaminated liquids only)	3 each

9.	Drum, 55 gallon, (DOT 17H) Removable head, 20/18 ga. (for PCB contaminated solid waste material only)	2 each
10.	Large funnel, plastic or metal	1 each
11.	Absorbent material (Zorball) RAI #7930-00-00030 50 pound bags.	3 each
12.	Tags, "In Storage for Reuse/Disposal"	12 each
13.	Labels, "Non PCB Certification Label"	12 each
14.	Labels, "M (sub L)"	12 each
15.	Labels, "PCB Contaminated - Do not remove from this building"	12 each
16.	Copy of current PCB inventory	1 each
17.	Copy of SP ME-4-0019, with attachments	1 each
18.	Spill Alert Sheets	6 each
19.	List of plant phone numbers for technical, medical, or emergency support assistance personnel	1 each

N. All contaminated disposable items, i.e., rags, floor sweepings, wood scraps, plastic gloves and coveralls, etc., will be disposed of in a DOT approved container, (DOT 17H) removable head, 20/18 gauge, 55 gallon drum, marked "PCB Contaminated Trash", and kept near the PCB storage bays in building 854. The container will be stored on a pallet with removable head fastened at all times.

O. Any movable equipment or tools which come in direct contact with PCBs must be decontaminated IAW 40 CFR 761.79 (attachment 3) before removal from building 854.

P. The handling and movement of PCB contaminated items will be as follows:

1. Do not handle any PCB items without protective clothing, as listed in M, above:

   a. Plastic gloves
   b. Plastic coveralls
   c. Face shield.

2. Do not move any PCB items or containers without first checking to make sure that all lids, plugs, caps, etc., are secured to a leakproof condition.

3. Move PCB items and containers in a manner that is safe from tipping over or falling while in transit. Secure to forklift with chain if required.

Q. Accidental spills or leaks will be handled in the following manner: (This includes leaks from items with less than 50 ppm.)

1. Minor spills/leaks up to one gallon: Immediately apply the absorbent material (Zorball) onto the spill or leaking fluid. Allow time for all liquid to be absorbed.

   a. Collect the contaminated material with provided broom and dust pan and place into the provided, properly labeled, DOT approved container marked "PCB Contaminated Trash".

b. Do not leave removable head or lid off contaminated trash container.

2. Major spills/leaks, one gallon or greater: immediately follow directions for reporting, on spill alert sheet (attachment 4).

a. Contain the leak/spill with absorbent material forming a dike around the fluid.

b. Remove diked fluid from floor to approved container, then follow steps Q, 1, a and b, above).

3. Concrete floor surface shall be cleaned/decontaminated (after spilled oil has been properly containerized) in the following manner:

a. Use 140 degree flash point solvent and rags to thoroughly cleanse affected area, insuring that no oil stain remains when floor is dry.

b. Dispose of rags in DOT 17H removable head drum. Assure proper labeling of drum.

c. Affected area of concrete floor must be sampled and tested for presence of PCB contamination IAW contracted laboratory's procedures and CFR 761.130 (attachment 3) after cleanup is completed.

R. Spills or leaks or freeflowing liquid in containment pans must be removed immediately, as follows:

1. Immediately apply the absorbent material (Zorball) onto the spill or leaking fluid. Allow time for all liquid to be absorbed.

a. Collect the contaminated material and place into the provided, properly labeled, DOT approved container marked "PCB Contaminated Trash", and replace lid onto container.

S. Reporting of spills -- Spill Contingency Plan use applies to spills both within the containment pans as well as outside the containment pans.

T. Weekly inspections shall be made of building 854 and the PCB contaminated items stored there. Inspection report forms (attachment 6) must be signed and dated by inspector.

U. Monthly inspection/inventory of all PCB-contaminated items stored at building 854 will be accomplished using the Master Inspection Form (attachment 7). This form is generated and maintained by the Equipment Records Section, Engineering Division. The completed original form will be returned to the Equipment Records Section, with a copy sent to the Environmental Engineer.

V. Preparation for Shipment:

1. Any transformers containing <u>any</u> amount of PCB will have the fluid removed, pumped or drained prior to shipment.

2. Residual amounts of fluid remaining in transformers after pumping or draining will be absorbed with absorbent material (see M, 11, above) to eliminate any free-flowing fluid.

3. All containers of PCB-contaminated fluids will be thoroughly inspected prior to shipment to insure:

   a. Proper labeling and marking
   b. Structural integrity
   c. Lids, bungs, caps, etc. are tight and do not leak
   d. Adequate secondary containment is provided
   e. Container and secondary containment are placed on pallet or skid
   f. Properly loaded and secured to carrier's truck/trailer
   g. All required documentation is present and complete.

ATTACHMENTS:

1. Labels [PCB Certification and M (sub L)]
2. Tags (In Storage for Reuse/Disposal)
3. 40 CFR 761.120, 761.123, 761.125, 761.130, 761.135, 761.79
4. Spill Alert Sheet
5. Label (PCB Contaminated -- Do Not Remove from this Building)
6. Inspection Report Forms (Weekly)
7. Monthly Inspection Form
8. Transfer of PCB & Hazardous Fluids Form
9. Training Documentation

DISTRIBUTION: Plant Engineer
Mgr., Maintenance & Installation
Maintenance File-1035
Maintenance Supervisors (4)
Supervisor, Scrap & Salvage Dept.
Mgr., Stores, Transportation & Operations (4)

APPROVAL:

(signed) H. R. Cooper, Plant Engineer	12-30-88 Date
(signed) G. L. Wolfgang, Sr. Safety Engineer	12-30-88 Date
(signed) J. D. McGee, Mgr., Maint. & Installation	12-28-88 Date
(signed) T. M. Chanda, Environmental Engineer	12-28-88 Date

APPROVAL OF REVISION OF 10-89:

(signed) H. R. Cooper, Plant Engineer	10-27-89 Date
(signed) G. L. Wolfgang, Sr. Safety Engineer	12-21-89 Date
(signed) J. D. McGee, Mgr., Maint. & Installation	10-25-89 Date
(signed) T. M. Chanda, Environmental Engineer	12-15-89 Date

APPROVAL OF REVISION OF 1-92:

H. R. Cooper H. R. Cooper, Plant Engineer	2/3/92 Date
G. L. Wolfgang G. L. Wolfgang, Sr. Safety Engineer	2/6/92 Date
J. D. McGee J. D. McGee, Mgr., Maint. & Installation	2/7/92 Date
T. M. Chanda T. M. Chanda, Environmental Engineer	2/3/92 Date
Roger E. Holford R. E. Holford, Stores/Transportation Mgr	Feb 5, 1992 Date

ATTACHMENT 1

NON PCB
CERTIFICATION
LABEL

LESS THAN
50 PPM

CERTIFIED

THE DIELECTRIC FLUID IN THIS UNIT HAS BEEN TESTED TO DETERMINE THE AMOUNT OF POLYCHLORINATED BIPHENYL(S) (PCB CONTENT). WE CERTIFY THAT, BASED ON THE TEST SAMPLE, THE FLUID CONTAINED LESS THAN 50 PPM PCB AND IS THEREFORE CLASSIFIED A NON-PCB AS DEFINED IN THE MAY 31, 1979, VOL 44, NO. 105 OF THE FEDERAL REGISTER.

Ravenna Army Ammunition Plant
Ravenna, Ohio 44266-9297
(216) 297-3117

CERTIFIED

M (sub L)
LABEL

GREATER THAN
50 PPM

CAUTION

CONTAINS

PCBs

(Polychlorinated Biphenyls)

A toxic environmental contaminant requiring special handling and disposal in accordance with U.S. Environmental Protection Agency Regulations 40 CFR 761—For Disposal information contact the nearest U.S. EPA Office

In case of accident or spill, call toll free the U.S. Coast Guard National Response Center: 800:424-8802

Also Contact

Tel. No.

CARLTON INDUSTRIES INC. LA GRANGE, TEXAS 78945 STOCK NO. 1408

IN STORAGE FOR REUSE

FRONT, REUSE TAG

DATE PLACED IN STORAGE

PROPERTY NO.

TURN-IN NO.

IN STORAGE FOR DISPOSAL

FRONT, DISPOSAL

DATE PLACED IN STORAGE

PROPERTY NO.

TURN-IN NO.

PCB TEST RESULTS

BACK, BOTH TAGS

TEST DATE _____ PPM _____

PROPERTY No. _____

LAB I.D. _____

SAMPLE No. _____

§ 761.120

(q) Removed and Reserved.

(r) Removed and Reserved

(Sec. 6, Pub. L. 94-469, 90 Stat. 2020 (15 U.S.C. 2605))

[49 FR 28171, July 10, 1984, as amended at 51 FR 28509, Aug. 8, 1986]

Subpart F—[Reserved]

Subpart G—PCB Spill Cleanup Policy

Source: 52 FR 10705, Apr. 2, 1987, unless otherwise noted.

§ 761.120 Scope.

(a) *General.* This policy establishes criteria EPA will use to determine the adequacy of the cleanup of spills resulting from the release of materials containing PCBs at concentrations of 50 ppm or greater. The policy applies to spills which occur after May 4, 1987.

(1) Existing spills (spills which occurred prior to May 4, 1987, are excluded from the scope of this policy for two reasons:

(i) For old spills which have already been discovered, this policy is not intended to require additional cleanup where a party has already cleaned a spill in accordance with requirements imposed by EPA (through its regional offices, nor is this policy intended to interfere with ongoing litigation of enforcement actions which bring into issue PCB spills cleanup.

(ii) EPA recognizes that old spills which are discovered after the effective date of this policy will require site-by-site evaluation because of the likelihood that the site involves more pervasive PCB contamination than fresh spills and because old spills are generally more difficult to clean up than fresh spills (particularly on porous surfaces such as concrete). Therefore, spills which occurred before the effective date of this policy are to be decontaminated to requirements established at the discretion of EPA, usually through its regional offices.

(2) EPA expects most PCB spills subject to the TSCA PCB regulations to conform to the typical spill situation considered in developing this policy. This policy does, however, exclude from application of the final numerical cleanup standards certain spill situations from its scope: Spills directly into surface waters, drinking water sewers, grazing lands, and vegetable gardens. These types of spills are subject to final cleanup standards to be established at the discretion of the regional office. These spills are, however, subject to the immediate notification requirements and measures to minimize further environmental contamination.

(3) For all other spills, EPA generally expects the decontamination standards of this policy to apply. Occasionally, some small percentage of spills covered by this policy may warrant more stringent cleanup requirements because of additional routes of exposure or significantly greater exposures than those assumed in developing the final cleanup standards of this policy. While the EPA regional offices have the authority to require additional cleanup in these circumstances, the Regional Administrator must first make a finding based on the specific facts of a spill that additional cleanup must occur to prevent unreasonable risk. In addition, before a final decision is made to require additional cleanup, the Regional Administrator must notify the Director, Office of Toxic Substances at Headquarters of his/her finding and the basis for the finding.

(4) There may also be exceptional spill situations that requires less stringent cleanup or a different approach to cleanup because of factors associated with the particular spill. These factors may mitigate expected exposures and risks or make cleanup to these requirements impracticable.

(b) *Spills that may require more stringent cleanup levels.* For spills within the scope of this policy, EPA generally retains, under § 761.135, the authority to require additional cleanup upon finding that, despite good faith efforts by the responsible party, the numerical decontamination levels in the policy have not been met. In addition, EPA foresees the possibility of exceptional spill situations in which site-specific risk factors may warrant additional cleanup to more stringent numerical decontamination levels than are required by the policy. In these situations, the Regional Administrator has the authority to require cleanup to levels lower than those included in this policy upon finding that further cleanup must occur to prevent unreasonable risk. The Regional Administrator will consult with the Director, Office of Toxic Substances, prior to making such a finding.

(1) For example, site-specific characteristics, such as short depth to ground water, type of soil, or the presence of a shallow well, may pose exceptionally high potential for ground water contamination by PCBs remaining after cleanup to the standards specified in this policy. Spills that pose such a high degree of potential for ground water contamination have not been excluded from the policy under paragraph (d) of this section because the presence of such potential may not be readily apparent. EPA feels that automatically excluding such spills from the scope of the policy could result in the delay of cleanup—a particularly undesirable outcome if potential ground water contamination is, in fact, a significant concern.

(2) In those situations, the Regional Administrator may require cleanup in addition to that required under § 761.125 (b) and (c). However, the Regional Administrator must first make a finding, based on the specific facts of a spill, that additional cleanup is necessary to prevent unreasonable risk. In addition, before making a final decision on additional cleanup, the Regional Administrator must notify the Director of the Office of Toxic Substances of his finding and the basis for the finding.

(c) *Flexibility to allow less stringent or alternative requirements.* EPA retains the flexibility to allow less stringent or alternative decontamination measures based upon site-specific considerations. EPA will exercise this flexibility if the responsible party demonstrates that cleanup to the numerical decontamination levels is clearly unwarranted because of risk-mitigating factors, that compliance with the procedural requirements or numerical standards in the policy is impracticable at a particular site, or that site-specific characteristics make the costs of cleanup prohibitive. The Regional Administrator will notify the Director of OTS of any decision and

the basis for the decision to allow less stringent cleanup. The purpose of this notification is to enable the Director of OTS to ensure consistency of spill cleanup standards under special circumstances across the regions.

(d) *Excluded spills.* (1) Although the spill situations in paragraphs (d)(2) (i) through (vi) of this section are excluded from the automatic application of final decontamination standards under § 761.125 (b) and (c), the general requirements under § 761.125(a) do apply to these spills. In addition, all of these excluded situations require practicable, immediate actions to contain the area of contamination. While these situations may not always require more stringent cleanup measures, the Agency is excluding these scenarios because they will always involve significant factors that may not be adequately addressed by cleanup standards based upon typical spill characteristics.

(2) For the spill situations in paragraphs (d)(2)(i) through (vi) of this section, the responsible party shall decontaminate the spill in accordance with site-specific requirements established by the EPA regional offices.

(i) Spills that result in the direct contamination of surface waters (surface waters include, but are not limited to, "waters of the United States" as defined in Part 122 of this chapter, ponds, lagoons, wetlands, and storage reservoirs).

(ii) Spills that result in the direct contamination of sewers or sewage treatment systems.

(iii) Spills that result in the direct contamination of any private or public drinking water sources or distribution systems.

(iv) Spills which migrate to and contaminate surface waters, sewers, or drinking water supplies before cleanup has been completed in accordance with this policy.

(v) Spills that contaminate animal grazing lands.

(vi) Spills that contaminate vegetable gradens.

(e) *Relationship of policy to other statutes.* (1) This policy does not affect cleanup standards or requirements for the reporting of spills imposed, or to be imposed, by other statutory authorities, including but not limited to, the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA). Where more than one requirement applies, the stricter standard must be met.

(2) The Agency recognizes that the existence of this policy will inevitably result in attempts to apply the standards to situations within the scope of other statutory authorities. However, other statutes require the Agency to consider different or alternative factors in determining appropriate corrective actions. In addition, the types and magnitudes of exposures associated with sites requiring corrective action under other statutes often involve important differences from those expected of the typical, electrical equipment-type spills considered in developing this policy. Thus, cleanups under other statutes, such as RCRA corrective actions or remedial and response actions under SARA may result in different outcomes.

§ 761.123 Definitions.

For purposes of this policy, certain words and phrases are used to denote specific materials, procedures, or circumstances. The following definitions are provided for purposes of clarity and are not to be taken as exhaustive lists of situations and materials covered by the policy.

"Double wash/rinse" means a minimum requirement to cleanse solid surfaces (both impervious and nonimpervious) two times with an appropriate solvent or other material in which PCBs are at least 5 percent soluble (by weight). A volume of PCB-free fluid sufficient to cover the contaminated surface completely must be used in each wash/rinse. The wash/rinse requirement does not mean the mere spreading of solvent or other fluid over the surface, nor does the requirement mean a once-over wipe with a soaked cloth. Precautions must be taken to contain any runoff resulting from the cleansing, and to dispose properly of wastes generated during the cleansing.

"High-concentration PCBs" means PCBs that contain 500 ppm or greater PCBs, or those materials which EPA requires to be assumed to contain 500 ppm or greater PCBs in the absence of testing.

"High-contact industrial surface" means a surface in an industrial setting which is repeatedly touched, often for relatively long periods of time. Manned machinery and control panels are examples of high-contact industrial surfaces. High-contact industrial surfaces are generally of impervious solid material. Examples of low-contact industrial surfaces include ceilings, walls, floors, roofs, roadways and sidewalks in the industrial area, utility poles, unmanned machinery, concrete pads beneath electrical equipment, curbing, exterior structural building components, indoor vaults, and pipes.

"High-contact residential/commercial surface" means a surface in a residential/commercial area which is repeatedly touched, often for relatively long periods of time. Doors, wall areas below 6 feet in height, uncovered flooring, windowsills, fencing, bannisters, stairs, automobiles, and children's play areas such as outdoor patios and sidewalks are examples of high-contact residential/commercial surfaces. Examples of low-contact residential/commercial surfaces include interior ceilings, interior wall areas above 6 feet in height, roofs, asphalt roadways, concrete roadways, wooden utility poles, unmanned machinery, concrete pads beneath electrical equipment, curbing, exterior structural building components (e.g., aluminum/vinyl siding, cinder block, asphalt tiles), and pipes.

"Impervious solid surfaces" means solid surfaces which are nonporous and thus unlikely to absorb spilled PCBs within the short period of time required for cleanup of spills under this policy. Impervious solid surfaces include, but are not limited to, metals, glass, aluminilin siding, and enameled or laminated surfaces.

"Low-concentration PCBs" means PCBs that are tested and found to contain less than 500 ppm PCBs, or those PCB-containing materials which EPA requires to be assumed to be at concentrations below 500 ppm (i.e., untested mineral oil dielectric fluid).

"Nonimpervious solid surfaces" means solid surfaces which are porous and are more likely to absorb spilled PCBs prior to completion of the cleanup requirements prescribed in this policy. Nonimpervious solid surfaces include, but are not limited to, wood, concrete, asphalt, and plasterboard.

"Nonrestricted access areas" means any area other than restricted access outdoor electrical substations, and other restricted access locations, as defined in this section. In addition to residential/commercial areas, these areas include unrestricted access rural areas (areas of low density development and population where access is uncontrolled by either man-made barriers or naturally occurring barriers, such as rough terrain, mountains, or cliffs).

"Other restricted access (nonsubstation) locations" means areas other than electrical substations that are at least 0.1 kilometer (km) from a residential/commercial area and limited by man-made barriers (e.g., fences and walls) to substantially limited by naturally occurring barriers such as mountains, cliffs, or rough terrain. These areas generally include industrial facilities and extremely remote rural locations. (Areas where access is restricted but are less than 0.1 km from a residential/commercial area are considered to be residential/commercial areas.)

"Outdoor electrical substations" means outdoor, fenced-off, and restricted access areas used in the transmission and/or distribution of electrical power. Outdoor electrical substations restrict public access by being fenced or walled off as defined under § 761.30(l)(1)(ii). For purposes of this TSCA policy, outdoor electrical substations are defined as being located at least 0.1 km from a residential/commercial area. Outdoor fenced-off and restricted access areas used in the transmission and/or distribution of electrical power which are located less than 0.1 km from a residential/commercial area are considered to be residential/commercial areas.

"PCBs" means polychlorinated biphenyls as defined under § 761.3. As specified under § 761.1(b), no requirements may be avoided through dilution of the PCB concentration.

"Requirements and standards" means:

(1) "Requirements" as used in this policy refers to both the procedural responses and numerical decontamination levels set forth in this policy as constituting adequate cleanup of PCBs.

(2) "Standards" refers to the numerical decontamination levels set forth in this policy.

"Residential/commercial areas" means those areas where people live or reside, or where people work in other than manufacturing or farming industries. Residential areas include housing and the property on which housing is located, as well as playgrounds, roadways, sidewalks, parks, and other similar areas within a residential community. Commercial areas are typically accessible to both members of the general public and employees and include public assembly properties, institutional properties, stores, office buildings, and transportation centers.

"Responsible party means the owner of the PCB equipment, facility, or other source of PCBs or his/her designated agent (e.g., a facility manager or foreman).

"Soil" means all vegetation, soils and other ground media, including but not limited to, sand, grass , gravel, and oyster shells. It does not include concrete and asphalt.

"Spill" means both intentional and unintentional spills, leaks, and other uncontrolled discharges where the release results in any quantity of PCBs running off or about to run off the external surface of the equipment or other PCB source, as well as the contamination resulting from those releases. This policy applies to spills of 50 ppm or greater PCBs. The concentration of PCBs spilled is determined by the PCB concentration in the material spilled as opposed to the concentration of PCBs in the material onto which the PCBs were spilled. Where a spill of untested mineral oil occurs, the oil is presumed to contain greater PCBs and is subject to the relevant requirements of this policy.

"Spill area" means the area of soil on which visible traces of the spill can be observed plus a buffer zone of 1 foot beyond the visible traces. Any surface or object (e.g., concrete sidewalk or automobile) within the visible traces area or on which visible traces of the spilled material are observed is included in the spill area. This area represents the minimum area assumed to be contaminated by PCBs in the absence of precleanup sampling data and is thus the minimum area which must be cleaned.

"Spill boundaries" means the actual area of contamination as determined by postcleanup verification sampling or by precleanup sampling to determine actual spill boundaries. EPA can require additional cleanup when necessary to decontaminate all areas within the spill boundaries to the levels required in this policy (e.g., additional cleanup will be required if postcleanup sampling indicates that the area decontaminated by the responsible party, such as the spill area as defined in this section, did not encompass the actual boundaries of PCB contamination).

"Standard wipe test" means, for spills of high-concentration PCBs on solid surfaces, a cleanup to numerical surface standards and sampling by a standard wipe test to verify that the numerical standards have been met. This definition constitutes the minimum requirements for an appropriate wipe testing protocol. A standard-size template (10 centimeters (cm) x 10 cm) will be used to delineate the area of cleanup; the wiping medium will be a gauze pad or glass wool of known size which has been saturated with hexane. It is important that the wipe be performed very quickly after the hexane is exposed to air. EPA strongly recommends that the gauze (or glass wool) be prepared with hexane in the laboratory and that the wiping medium be stored in sealed glass vials until it is used for the wipe test. Further, EPA requires the collection and testing of field blanks and replicates.

[52 FR 10705, Apr. 2, 1987; 52 FR 23397, June 19, 1987]

§ 761.125 Requirements for PCB spill cleanup.

(a) *General.* Unless expressly limited, the reporting, disposal, and precleanup sampling requirements in paragraphs (a) (1) through (3) of this section apply to all spills of PCBs at concentrations of 50 ppm or greater which are subject to decontamination requirements under TSCA, including those spills listed under § 761.120(b) which are excluded from the cleanup standards at paragraphs (b) and (c) of this section.

(1) *Reporting requirements.* The reporting in paragraph (a)(1) (i) through (iv) of this section is required in addition to applicable reporting requirements under the Clean Water Act (CWA) or the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA). For example, under the National Contingency Plan all spills involving 10 pounds or more of PCB material must currently be reported to the National Response Center (1-800-424-8802). The requirements in paragraphs (a)(1) (i) through (iv) of this section are designed to be consistent with existing reporting requirements to the extent possible so as to minimize reporting burdens on governments as well as the regulated community.

(i) Where a spill directly contaminates surface water, sewers, or drinking water supplies, as discussed under § 761.120(d), the responsible party shall notify the appropriate EPA regional office (the Office of Pesticides and Toxic Substances Branch) and obtain guidance for appropriate cleanup measures in the shortest possible time after discovery, but in no case later than 24 hours after discovery.

(ii) Where a spill directly contaminates grazing lands or vegetable gardens, as discussed under § 761.120(d), the responsible party shall notify the appropriate EPA regional office (the Office of Pesticides and Toxic Substances Branch) and proceed with the immediate requirements specified under paragraph (b) or (c) of this section, depending on the source of the spill, in the shortest possible time after discovery, but in no case later than 24 hours after discovery.

(iii) Where a spill exceeds 10 pounds of PCB material (generally 1 gallon of PCB dielectric fluid) and is not addressed in paragraph (a)(1) (i) or (ii) of this section, the responsible party will notify the appropriate EPA regional office and proceed to decontaminate the spill area in accordance with this TSCA policy in the shortest possible time after discovery, but in no case later than 24 hours after discovery. For purposes of the notification requirement, the 10 pounds are measured by the weight of the PCB-containing material spilled rather than by the weight of only the PCBs spilled.

(iv) Spills of 10 pounds or less, which are not addressed in paragraph (a)(1) (i) or (ii) of this section, must be cleaned up in accordance with this policy (in order to avoid EPA enforcement liability), but notification of EPA is not required.

(2) *Disposal of cleanup debris and materials.* All concentrated soils, solvents, rags, and other materials resulting from the cleanup of PCBs under this policy shall be properly stored, labeled, and disposed of in accordance with the provisions of § 761.60.

(3) *Determination of spill boundaries in the absence of visible traces.* For spills where there are insufficient visible traces yet there is evidence of a leak or spill, the boundaries of the spill are to be determined by using a statistically based sampling scheme.

(b) *Requirements for cleanup of low-concentration spills which involve less than 1 pound of PCBs by weight (less than 270 gallons of untested mineral oil)*—(1) *Decontamination requirements.* Spills of less than 270 gallons of untested mineral oil, low-concentration PCBs, as defined under § 761.123, which involve less than 1 pound of PCBs by weight (e.g., less than 270 gallons of untested mineral oil containing less than 500 ppm PCBs) shall be cleaned in the following manner:

(i) Solid surfaces must be double washed/rinsed (as defined under § 761.123); except that all indoor, residential surfaces other than vault areas must be cleaned to 10 micrograms per 100 square centimeters (10 μg/100 cm^2) by standard commercial wipe tests.

(ii) All soil within the spill area (i.e., visible traces of soil and a buffer of 1

lateral foot a[illegible] the visible traces) must be excavated, and the ground be restored to its original configuration by back-filling with clean soil (i.e., containing less than 1 ppm PCBs).

(iii) Requirements of paragraph (b)(1) (i) and (ii) of this section must be completed within 48 hours after the responsible party was notified or became aware of the spill.

(2) *Effect of emergency or adverse weather.* Completion of cleanup may be delayed beyond 48 hours in case of circumstances including but not limited to, civil emergency, adverse weather conditions, lack of access to the site, and emergency operating conditions. The occurrence of a spill on a weekend or overtime costs are not acceptable reasons to delay response. Completion of cleanup may be delayed only for the duration of the adverse conditions. If the adverse weather conditions, or time lapse due to other emergency, has left insufficient visible traces, the responsible party must use a statistically based sampling scheme to determine the spill boundaries as required under paragraph (a)(3) of this section.

(3) *Records and certification.* At the completion of cleanup, the responsible party shall document the cleanup with records and certification of decontamination. The records and certification must be maintained for a period of 5 years. The records and certification shall consist of the following:

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

(ii) Estimated or actual date and time of the spill occurrence.

(iii) 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).

(iv) A brief description of the spill location.

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

(vi) A brief description of the solid surfaces cleaned and of the double wash/rinse method used.

(vii) Approximate depth of soil excavation and the amount of soil removed.

(viii) A certification statement signed by the responsible party stating that the cleanup requirements have been met and that the information contained in the record is true to the best of his/her knowledge.

(ix) While not required for compliance with this policy, the following information would be useful if maintained in the records:

(A) Additional pre- or post-cleanup sampling.

(B) 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 pound 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 spills of materials other than low-concentration materials shall be considered complete if all of the immediate requirements, cleanup standards, sampling, and recordkeeping requirements of paragraphs (c) (1) through (5) of this section are met.

(1) *Immediate requirements.* The four actions in paragraphs (c)(1) (i) through (iv) of this section must be taken as quickly as possible and within no more than 24 hours (or within 48 hours for PCB Transformers) after the responsible party was notified or became aware of the spill, except that actions described in paragraphs (c)(1) (ii) through (iv) of this section can 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.

(i) The responsible party shall notify the EPA regional office and the NRC as required by § 761.125(a)(1) or by other applicable statutes.

(ii) The responsible party shall 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.

(iii) The responsible party shall 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.

(iv) The responsible party shall 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.

(v) If there has been a delay in reaching the site and there are insufficient visible traces of PCBs remaining at the spill site, the responsible party 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 responsible party must then utilize a statistically based sampling scheme to identify the boundaries of the spill area as soon as practicable.

(vi) Although this policy requires certain immediate actions, as described in paragraphs (c)(1)(i) through (iv) of this section, 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, EPA expects that decontamination will be achieved promptly in all cases and will consider promptness of completion in determining whether the 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 under § 761.123, shall be decontaminated in accordance with par[illegible]s (c)(2)(i), and (ii) of this secti[illegible]nformance to the cleanup stand[illegible]nder paragraphs (c)(2)(i) and (ii) of this section shall be verified by post-cleanup sampling as specified under § 761.130. At such times as outdoor electrical substations are converted to another use, the spill site shall be cleaned up to the nonrestricted access requirements under paragraph (c)(4) of this section.

(i) Contaminated solid surfaces (both impervious and non-impervious) shall be cleaned to a PCB concentration of 100 micrograms (μg)/100 square centimeters (cm^2) (as measured by standard wipe tests).

(ii) At the option of the responsible party, soil contaminated by the spill will be cleaned either to 25 ppm PCBs by weight, or 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 under § 761.123, shall be decontaminated in accordance with paragraph (c)(3)(i) through (v) of this section. Conformance to the cleanup standards in paragraph (c)(3)(i) through (v) of this section shall be verified by postcleanup sampling as specified under § 761.130. 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 of paragraph (c)(4) of this section.

(i) High-contact solid surfaces, as defined under § 761.163 shall be cleaned to 10 μg/100 cm^2 (as measured by standard wipe tests).

(ii) Low-contact, indoor, impervious solid surfaces will be decontaminated to 10 μg/100 cm^2.

(iii) At the o[illegible] of the responsible party, low-contact, indoor, nonimpervious surfaces will be cleaned either to 10 μg/100 cm² or to 100 μg/100 cm² 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.

(iv) Low-contact, outdoor surfaces (both impervious and nonimpervious) shall be cleaned to 100 μg/100 cm².

(v) Soil contaminated by the spill will be cleaned to 25 ppm PCBs by weight.

(4) *Requirements for decontaminating spills in nonrestricted access areas.* Spills which occur in nonrestricted access locations, as defined under § 761.123, shall be decontaminated in accordance with paragraphs (c)(4)(i) through (v) of this section. Conformance to the cleanup standards at paragraphs (c)(4)(i) through (v) of this section shall be verified by postcleanup sampling as specified under § 761.130.

(i) Furnishings, toys, and other easily replaceable household items shall be disposed of in accordance with the provisions of § 761.60 and replaced by the responsible party.

(ii) Indoor solid surfaces and high-contact outdoor solid surfaces, defined as high contact residential/commercial surfaces under § 761.123, shall be cleaned to 10 μg/100 cm² (as measured by standard wipe tests).

(iii) Indoor vault areas and low-contact, outdoor, impervious solid surfaces shall be decontaminated to 10 μg/100 cm².

(iv) At the option of the responsible party, low-contact, outdoor, nonimpervious solid surfaces shall be either cleaned to 10 μg/100 cm² or cleaned to 100 μg/100 cm² 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.

(v) 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 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:

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

(ii) Estimated or actual date and time of the spill occurrence.

(iii) 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).

(iv) 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.

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

(vi) A brief description of the solid surfaces cleaned.

(vii) Approximate depth of soil excavation and the amount of soil removed.

(viii) Postcleanup verification sampling data and, if not otherwise apparent from the documentation, a brief description of the sampling methodology and analytical technique used.

(ix) 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.

§ 761.130 Sampling requirements.

Postcleanup sampling is required to verify the level of cleanup under § 761.125(c) (2) through (4). The responsible party may use any statistically valid, reproducible, sampling scheme (either random samples or grid samples) provided that the requirements of paragraphs (a) and (b) of this section are satisfied.

(a) 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.

(b) The sampling scheme must ensure 95 percent confidence against false positives.

(c) 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.

(d) The sampling scheme must include calculation for expected variability due to analytical error.

(e) EPA recommends the use of a 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, Environmental Protection Agency, Rm. E-543, 401 M St. SW., Washington, DC 20460 (202-554-1404). 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.

(f) EPA may, at its discretion, 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 purp[illegible] numerical level of cleanup re[illegible] for spills cleaned in accor[illegible]ce with § 761.125(b) is deemed to be the equivalent of numerical cleanup requirements required for cleanups under § 761.125(c)(2) through (4). Using its best engineering judgment, EPA may sample 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.

§ 761.135 Effect of compliance with this policy and enforcement.

(a) 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 or EPA sampling following 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.

(b) 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

241 Continues, however most of this would be dictated by

transferring the right to conduct the chemical waste landfill operation. The transferor must also submit to EPA, at least 30 days before such transfer, a notarized affidavit signed by the transferee which states that the transferee will abide by the transferor's EPA chemical waste landfill approval. Within 30 days of receiving such notification and affidavit, EPA will issue an amended approval substituting the transferee's name for the transferor's name, or EPA may require the transferee to apply for a new chemical waste landfill approval. In the latter case, the transferee must abide by the transferor's EPA approval until EPA issues the new approval to the transferee.

(Sec. 6, Pub. L. 94-469, 90 Stat. 2020 (15 U.S.C. 2605))

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982, and amended at 48 FR 5730, Feb. 8, 1983; 49 FR 28191, July 1984]

§ 761.79 Decontamination.

(a) Any PCB Container to be decontaminated shall be decontaminated by flushing the internal surfaces of the container three times with a solvent containing less than 50 ppm PCB. The solubility of PCBs in the solvent must be five percent or more by weight. Each rinse shall use a volume of the normal diluent equal to approximately ten (10) percent of the PCB Container capacity. The solvent may be reused for decontamination until it contains 50 ppm PCB. The solvent shall then be disposed of as a PCB in accordance with § 761.60(a). Non-liquid PCBs resulting from the decontamination procedures shall be disposed of in accordance with the provisions of § 761.60(a)(4).

(b) Movable equipment used in storage areas shall be decontaminated by swabbing surfaces that have contacted PCBs with a solvent meeting the criteria of paragraph (a) of this section.

NOTE: Precautionary measures should be taken to ensure that the solvent meets safety and health standards as required by applicable Federal regulations.

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982]

Subpart E—Exemptions

§ 761.80 Manufacturing, processing, and distribution in commerce exemptions.

(a) Removed and Reserved

(b) Removed and Reserved.

ATTACHMENT 4

SPILL ALERT

If YOU are the first person to discover a spill or leak.....

* (During normal working hours) Immediately call the Transportation Radio Dispatcher Phone ext 3275..... or

**(During off-duty hours) Immediately call the Security Dispatcher @ AAC-540 or Phone ext. 3425 or 3555.....

BE READY TO ANSWER THESE FOLLOWING QUESTIONS:

1) who is calling? _____

2) what's your location? _____

Radio Unit # _____ &/or Phone # _____

3) what is the material spilled? _____

4) Is the spill contained? YES NO How much? _____

If NO, which way is it moving? _____

5) who else is on the scene? _____

ATTACHMENT 5

WEEKLY INSPECTION OF PCB STORAGE FACILITY, BLDG. 854

Date _____ Time _____

_____
Inspector's Name

	(Checked)	(Comment)
1. Doors		
A. Closed and locked	_____	_____
B. Proper signs/labels	_____	_____
2. Floors		
A. Free of dirt	_____	_____
B. Free of oil stains	_____	_____
C. Aisles clear	_____	_____
3. Bays		
A. Proper marking/signs	_____	_____
B. Untagged PCB items	_____	_____
4. Capacitors		
A. Stored in containment pans on pallets	_____	_____
B. Properly tagged/labeled	_____	_____
C. Leaking	_____	_____
D. Free-flowing fluid in pans or on floor	_____	_____
5. Transformers		
A. Properly tagged/labeled	_____	_____
B. Leaking	_____	_____
C. Stored on pallets	_____	_____
D. Stored in proper bays	_____	_____
E. Free-flowing fluid in pans or on floor	_____	_____

_____
Signature of Inspector

WEEKLY INVENTORY OF TOOLS & EQUIPMENT, BLDG. 854

	Required Quantity	Quantity on Hand	Discrepancy
Broom, 24" or larger, for floor sweeping	1 each	_____	_____
Shop brush	1 each	_____	_____
Dust pan	1 each	_____	_____
Shovel	1 each	_____	_____
Face shield	2 each	_____	_____
Plastic gloves, disposable, RAI #8415-00-03101	6 pair	_____	_____
Plastic coveralls, disposable, RAI #8415-00-03100	6 pair	_____	_____
Drum, 55 gallon, DOT 17E, tighthead, 20/18 ga. for PCB contaminated liquids only	3 each	_____	_____
Drum, 55 gallon, DOT 17H, removable head, 20/18 gauge, for PCB contaminated solid waste material only	2 each	_____	_____
10. Funnel, plastic or metal	1 each	_____	_____
Absorbent material (Zorball), RAI #7930-00-00030, 50 pound bags	3 bags	_____	_____
12. Tags, "In Storage for Reuse"	12 each	_____	_____
13. Tags, "In Storage for Disposal"	12 each	_____	_____
14. Labels, "Non PCB Certification Label"	12 each	_____	_____
15. Label, "M (sub L)"	12 each	_____	_____
16. Label, "PCB Contaminated - Do not remove from this building"	12 each	_____	_____
17. Copy of current PCB inventory	1 each	_____	_____
18. Copy of SP ME-4-0019, with attachments	1 each	_____	_____
19. Spill Alert Sheets	6 each	_____	_____
20. List of plant phone numbers for technical/ medical/emergency support assistance	1 each	_____	_____
21. Rags for cleanup	2 pounds	_____	_____

_____
Inspector's signature

Date _____ Time _____

MONTHLY MASTER INSPECTION FORM, BLDG. 854

PEP- TRANSFORMERS — BUILDING 854 — PLANNED PRODUCER: RVAAP —

ATE PLACED N STORAGE OR DISPOSAL	RVA NO.	ID NO.	TAG NO.	ITEM	LOCATION BLDG	LOCATION BAY	NO. OF PIECES TOTAL	BOXES	SKIDS	PALLET	OTHER	DATE INSP.	DEFICIENCY	DATE CORRECTED	TYPE STG.	REMARKS
	S/N	707040		TRANSFORMER	854	16						3-10-89	none		DRP	
	S/N	707042		"		16						3-10-89	None		DRP	
	S/N	707041		"		16						3-10-89	NONE		DRP	
	S/N	303761	POD-2656	"		//						3-10-89	Oil on Base,		DRP	ED-57324 PDO 2/28/89

MONTHLY MASTER INSPECTION FORM, BLDG. 854

PEP - TRANSFORMERS — BUILDING 854 — PLANNED PRODUCER: RVAAP —

DATE PLACED IN STORAGE FOR DISPOSAL	RVA NO.	ID NO.	TAG NO.	ITEM	LOCATION BLDG	LOCATION BAY	NO. OF PIECES TOTAL	BOXES	SKIDS	PALLET	OTHER	DATE INSP.	DEFICIENCY	DATE CORRECTED	TYPE STG.	REMARKS
	S/N	87NN243002		TRANSFORMER	854	8						3-10-89	NONE		DRE	
	S/N	87NN243001		"		8						3-10-89	NONE		DRE	
	S/N	296766	POD-2645	"		8						3-10-89	NONE		DRE	
			ROP-18435	"		8						3-10-89	NONE		DRE	
	S/N	293225	POD-2640	"		8						3-10-89	NONE		DRE	
	S/N	H697231Y68AA		"		8						3-10-89	NONE		DRE	
	S/N	293203	POD-2602	"		8						3-10-89	NONE		DRE	
	S/N	293214	POD-2601	"		8						3-10-89	NONE		DRE	
	S/N	12602		"		8						3-10-89	NONE		DRE	
	S/N	6741257		"		8						3-10-89	NONE		DRE	
	S/N	7006248		"		8						3-10-89	NONE		DRE	
	S/N	5367313	ROP-18284	"		12						3-10-89	NONE		DRE	
	S/N	6585803	ROP-18902	"		12						3-10-89	NONE		DRE	
	S/N	6586203	ROP-18901	"		12						3-10-89	NONE		DRE	
	S/N	6586146	ROP-18903	"		12						3-10-89	NONE		DRE	
	S/N	3691841	ROP-21253	"		11						3-10-89	NONE		DRE	ETO-57313 PDO 1/9/89
	S/N	291082	POD-2655	"		11						3-10-89	NONE		DRE	PDO 1/9/89 ETO-57313
	S/N	3916	POD-2639	"		11						3-10-89	NONE		DRE	" ETO-57313
	S/N	J553609Y70A		"		11						3-10-89	NONE		DRE	ETO-57313 PDO 1/9/89
	S/N	291355	ROP-18429	"		11						3-10	NONE			" "

ATTACHMENT 1

MONTHLY MASTER INSPECTION FORM, BLDG. 854

MARCH 1989

PEP- TRANSFORMERS

BUILDING 854

PLANNED PRODUCER: RVAAP

DATE PLACED IN STORAGE FOR DISPOSAL	RVA NO.	ID NO.	TAG NO.	ITEM	LOCATION		NO. OF PIECES					DATE INSP.	DEFICIENCY	DATE CORRECTED	TYPE STG.	REMARKS
					BLDG	BAY	TOTAL	BOXES	SKIDS	PALLET	OTHER					
	S/N	B-314891		TRANSFORMER	854	4						3-10-89	NONE		DRE	
	S/N	94T103	ROP-11377	"		4						3-10-89	NONE		DRE	
	S/N	945500	ROP-11378	"		4						3-10-89	NONE		DRE	
			ROP-11379	"		4						3-10-89	NONE		DRE	
	S/N	947799	ROP-18360	"		4						3-10-89	NONE		DRE	
	S/N	21240	POD-2635	"		6						3-10-89	NONE		DRE	
	S/N	946820	ROP-18403	"		6						3-10-89	NONE		DRE	
	S/N	299779	POD-2662	"		4 6						3-10-89	NONE		DRE	
	S/N	3630-69		"		6						3-10-89	NONE		DRE	
	S/N	H-697230Y68AA		"		4 6						3-10-89	NONE		DRE	
	S/N	6550907		"		6						3-10-89	NONE		DRE	
	S/N	293874	POD-2631	"		6						3-10-89	NONE		DRE	
	S/N	521003	ROP-22098	"		6						3-10-89	NONE		DRE	
	S/N	8335571		"		6						3-10-89	NONE		DRE	
	S/N	293869	POD-2632	"		6						3-10-89	NONE		DRE	
	S/N	181606-4	APCO-8787	"		6						3-10-89	NONE		DRE	
	S/N	2983372	ROP-18535	"		6						3-10-89	NONE		DRE	
	S/N	293227	POD-2603	"		6						3-10-89	NONE		DRE	
	S/N	303726	POD-2625	"		6						3-10-89	NONE		DRE	
	S/N	87NN243003		"		8						3-10-89	NONE		DRE	

ATTACHMENT 9

TRAINING DOCUMENTATION

PRINTED NAME _____

DEPARTMENT _____

JOB TITLE _____

JOB CLASS _____

TRAINING (DESCRIPTION):	AMOUNT OF TIME

_____
SIGNATURE OF EMPLOYEE DATE

_____
SIGNATURE OF INSTRUCTOR DATE

ORIGINAL: SUPERVISOR'S FILE

CC: ENVIRONMENTAL ENGR.
INDUSTRIAL RELATIONS
SAFETY DEPT.
FILE-1035

ATTACHMENT 8

TRANSFER OF PCB & HAZARDOUS FLUIDS

DATE: _____

	FROM:	TO:
LOCATION	_____	_____
ITEM	_____	_____
	_____	_____
TAG NO.	_____	_____
MANUFACTURER	_____	_____
SERIAL NO.	_____	_____
QUANTITY	_____	_____
PCB CONTENT	_____	_____

_____

SIGNATURE

OILCB OIL CIRCUIT BREAKERS

MFG.	SERIAL NO.	VOLT	TYPE	AMPS	INT RATE	INVENTORY BREAKERS	FEEDER	GALS. OF OIL	LAST INSP DATE TEST PCB NT=NOT TESTED	REMARKS	INSP INIT
EAST SUB STATION											
WEST	148Y340/18330	24000	GO-1A	600	N/A	N.FALLS	TNK A	32	<50		
WEST	148Y340/18330	24000	GO-1A	600	N/A	N.FALLS	TNK B	32	<50		
WEST	148Y340/18330	24000	GO-1A	600	N/A	N.FALLS	TNK C	32	<50		
WEST	248Y340/18331	24000	GO-1A	600	N/A	G'VILLE	TNK A	32	<50		
WEST	248Y340/18331	24000	GO-1A	600	N/A	G'VILLE	TNK B	32	<50		
WEST	248Y340/18331	24000	GO-1A	600	N/A	G'VILLE	TNK C	32	<50		
WEST	48Y348	15000	F110	600	N/A	LIGHTS WEST	E-1	20	13		
WEST	48Y348	15000	F100	600	N/A	RAIL YARD	E-2	20	24		
WEST	48Y342	15000	F100	600	N/A	MISC POWER	E-3	20	14		
WEST	148Y340	25000	F100	600	N/A	# 1 TRANSFORMER		20	5		
WEST	48Y342	15000	F100	600	N/A	LL #4	E-4	20	4		
WEST	48Y342	15000	F100	600	N/A	LL #3	E-5	20	10		
WEST	48Y342	15000	F100	600	N/A	LL #2	E-6	20	29		
WEST	48Y342	15000	F100	600	N/A	LL #1	E-7	20	0		
WEST	148Y340/18330	25000	F100	600	N/A	#2 TRANSFORMER		20	3		
WEST	48Y342	15000	F100	600	N/A	SPARE		20	1		
WEST	49Y823	15000	F100	600	N/A	NE1		6	5		
WEST	49Y823	15000	F100	600	N/A	EE1		6	2		
WEST	49Y823	15000		600		EE2		6	<50		
WEST	49Y823	15000		600		NE2		6	<50		
WEST SUB STATION											
WEST	48Y348	15000	F100	600	N/A	TRANS NO 1 (G)	W1	20	9		
WEST	48Y348	15000	F100	600	N/A	BOOSTER	W2	20	13		
WEST	48Y348	15000	F100	600	N/A	FUSE LINE 2	W3	20	14		
WEST	48Y348	15000	F100	600	N/A	ADMINISTRATION	W4	20	3		
WEST	48Y348	15000	F100	600	N/A	ADMINISTRATION	W6	20	0		
WEST	48Y348	15000	F100	600	N/A	PERCUS ELEMENT	W7	20	2		
WEST	48Y348	15000	F100	600	N/A	TRANSFORMER	W8	20	12		
WEST	48Y348	15000	F100	600	N/A	SPARE		20	9		
WEST	48Y348	15000	F100	600	N/A			20	30		

OILCB OIL CIRCUIT BREAKERS

MFG.	SERIAL NO.	VOLT	TYPE	AMPS	INT RATE	INVENTORY BREAKERS	FEEDER	GALS. OF OIL	LAST INSP DATE TEST PCB NT=NOT TESTED	REMARKS	INSP INIT
# 3 SUB STATION											
WEST	250789/21159	24000	F122	600	N/A	N.FALLS TANK #A		32	35		
WEST	250789/21159	24000	G01A	600		N.FALLS TANK #B		32	30		
WEST	250789/21159	24000	G01A	600		N.FALLS TANK #C		32	28		
WEST	250799/21160	24000	G01A	600		G'VILLE TANK #A		32	35		
WEST	250799/21160	24000	G01A	600		G'VILLE TANK #B		32	18		
WEST	250799/21160	24000	G01A	600		G'VILLE TANK #C		32	24		
CHALMERS	250804		16B30	600		N.FALLS		20	<50		
CHALMERS	250805		16B30	600		N.FALLS		20	<50		
CHALMERS	250800		16B30	600		G'VILLE/F&B AREA		20	<50		
CHALMERS	250801		16B30	600		G'VILLE		20	<50		
CHALMERS	250802		16B30	600		G'VILLE		20	<50		
WEST	76Y202/21163	7500	FO22A	400		SWITCH GEAR		6	<50		
WEST	94506/21164	7500	FO22A	400		OIL SWITCH		17.5	<50		
DEPOT SUB											
WEST	945067/POD2831	7500	FO22A	600		OIL SWITCH		17.5	37	NOT IN USE	

LISTED ITEMS = 43
TOTAL GALLONAGE = 929
TOTAL WEIGHT KGS (LBS) = 3,381.6 (7,432)

RAVENNA ARSENAL, INC.

INTEROFFICE

FEBRUARY 28, 1989

TO: MEMO TO FILE **FROM:** J. D. MCGEE

SUBJECT: SP ME-4-0019 (STORAGE OF PCB CONTAMINATED ITEMS AT BUILDING 854)

A meeting was held on the above date to discuss subject SP. The following personnel were present: Jack Fultz, Ernie Rahne, Dan Dutton and Jim McGee.

Subject SP has been in effect for approximately three months. The purpose of the meeting was to insure that all facets of the SP are being complied with. The entire SP was covered, with particular attention to the following:

1. Documented visual inspections will be performed weekly. Complete documented inventories will be performed monthly.

2. Records of weekly inspection of PCB storage facility and weekly inventory of tools and equipment will be maintained in the office of the Maintenance Supervisor, Mechanical/ Electrical.

3. Transformers in storage pending results of analysis for PCB content will have "In Storage For Reuse" tag affixed, and be clearly marked "PENDING PCB CONTENT TEST RESULTS'.

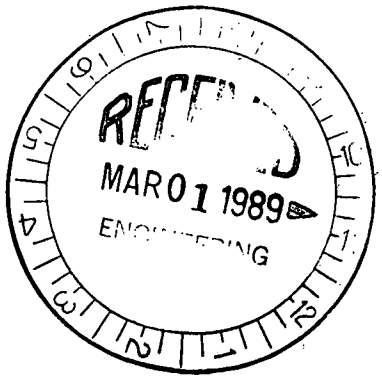
4. No deviation from the SP will be permitted or condoned. Any changes necessary will be made without delay.

5. It is the responsibility of all parties to have complete knowledge of and comply with subject SP.

J. D. McGee

JDM:cm

cc: T. M. Chanda
H. R. Cooper
D. D. Dutton
J. F. Fultz
J. D. McGee
E. E. Rahne



CAPACITORS EAST SUB STATION

CAPACITO

1989 PCB INVENTORY

NORMAL 2400 VOLTS

NORMAL 540 KVA

MAX SUSTAINED 2640 VOLT

LAST INSP DATE:

MAX SUSTAINED 715 KVA

60 CYCLE 3 PHASE

INSPECTED BY:

SERIAL NO. 5895260A

LIST OF INDIVIDUAL CAPACITORS	MFG.	KVA	PHASE	VOLT	CYCLE
	WESTINGHOUSE	15	1	2400	60

NUMBER	TEST SERIAL NO.	STYLE NO.	GAL. OF OIL
1	45A468JJ	1227265A	1.4
2	45C1173NN	1227265B	1.4
3	440942S	1227265A	1.4
4	45A449JJ	1227265A	1.4
5	44M3599Y	1227265A	1.4
6	45A608Z	1227265A	1.4
7	44D1228X	1227265A	1.4
8	44L2795JJ	1227265A	1.4
9	44E2083CC	1227265A	1.4
10	44D1175WW	1227265A	1.4
11	44J2957KK	1227265A	1.4
12	45A496KK	1227265A	1.4
13	45A23II	1227265A	1.4
14	45A433II	1227265A	1.4
15	44M2017SS	1227265A	1.4
16	45A425II	1227265A	1.4
17	44L200500	1227265A	1.4
18	45A503KK	1227265A	1.4
19	45A529LL	1227265A	1.4
20	45438II	1227265A	1.4
21	44M3612Y	1227265A	1.4

CAPACITORS EAST SUB STATION

NUMBER	TEST SERIAL NO.	STYLE NO.	GAL. OF OIL
22	45B863SS	1227265A	1.4
23	45A565Y	1227265A	1.4
24	45A437II	1227265A	1.4
25	44G1586UU	1227265A	1.4
26	44D1170WW	1227265A	1.4
27	44J2235GG	1227265A	1.4
28	44G1419JJ	1227265A	1.4
29	44D1206W	1227265A	1.4
30	45A504LL	1227265A	1.4
31	44M205SS	1227265A	1.4
32	44D1220X	1227265A	1.4
33	44M1938Y	1227265A	1.4
34	45A587Y	1227265A	1.4
35	44F1023	1227265A	1.4
36	UNKNOWN	NO TAG	1.4
37	OIL CIRCUIT BREAKER WESTINGHOUSE TYPE F-99 SERIAL NO. 300667		4

TOTAL GALLONS 54.4
TOTAL KGS 296.73

(GALS. X 12#/GAL.)

2.2#/KG

TOTAL NO. CAPACITORS	36
TOTAL NO. OIL OCB	1
TOTAL GALLONS OF OIL	50.4
TOTAL	50.4

RAVENNA ARSENAL, INC.
RAVENNA ARMY AMMUNITION PLANT

STANDARD PRACTICE

SP NO. ME-4-0019
EFFECTIVE: 12-88
REVISED:
REVIEW: 12-89

SUBJECT: Storage of Polychlorinated Biphenyl (PCB) Contaminated Items at Building 854

PREPARED BY: Engineering Maintenance Department

I. PURPOSE

To outline the procedures to be followed in connection with the storage and handling of PCB contaminated items at RVAAP.

II. POLICY

A. Basic Policy

It is the policy of RAI to store all PCB contaminated items in building 854, and to comply with all local, state and federal laws regulating their storage.

1. All PCB items, i.e., transformers, capacitors, contaminated oil, hydraulic equipment containing contaminated oil, or any item suspected of being contaminated with PCBs, will be stored in building 854 IAW this Standard Practice (SP) and all other applicable regulations.

B. Responsibilities

1. The Manager, Maintenance and Installation, has the overall responsibility for the establishment of this SP and compliance with all applicable regulations covering storage of PCBs.

2. The Mechanical Maintenance Supervisor is responsible to:

   a. Insure that all employees who are assigned to handle PCBs are adequately trained, and that they strictly adhere to all applicable regulations and this SP.

   b. Supervise the overall PCB storage operation and notify the Manager, Maintenance and Installation, immediately of any violation or suspected violation of applicable regulations or this SP.

3. The Environmental Engineer is responsible to:

   a. Recommend changes to this procedure to conform with current PCB regulations, both Federal and State.

   b. Monitor PCB operations and records to verify compliance with applicable regulations and procedures.

III. PROCEDURES

A. All PCB contaminated items will be stored for disposal or reuse in the east end of building 854. Access to this storage facility will be to authorized personnel only. The entrance doors and storage bays shall be marked with an M (sub L) label (attachment 1).

B. All transformers that have not already been tested will be tested to determine PCB contamination immediately after being placed in storage. Any item placed in storage will be immediately tagged. (See attachment 2.)

1. The results of the PCB contamination tests will be marked on the appropriate tag indicating the exact amount of contamination. The terms less than or greater than are not acceptable.

a. The front of the tag used shall read:

(1) In Storage for Reuse; Date Placed in Storage_____; Property No._____; Turn-In No._____; (or)

(2) In Storage for Disposal; Date Placed in Storage _____; Property No._____; Turn-In No._____.

b. The back of the tag shall read (same back on both tags):

(1) PCB Test Results; Test Date_____; PPM_____; Property No._____; Lab I.D._____; Sample No. _____.

2. Any transformer placed in storage will have a copy of the historical record placed in a transparent record protector and affixed to the transformer to provide easy access to all pertinent historical information, and the transformer inventory will be immediately updated by calling the work order clerk, extension 3235.

3. Any item placed in storage which contains 50 ppm or more PCB shall have an M (sub L) label attached (see attachment 1).

4. Any item placed in storage which contains less than 50 ppm PCB shall have a Non PCB Certification Label attached (see attachment 1).

C. If an item is placed in storage for reuse and is later identified for disposal, the tag shall be immediately changed. The new tag will have the date it was identified for disposal, not the date it originally went into storage.

D. Any PCB contaminated electrical equipment or container containing 50 parts per million (ppm) or greater brought into storage for disposal or transferred from reuse to disposal will immediately have a turn-in (DD Form 543) prepared and the PCB inventory will

that includes untested TX

be updated.

E. Storage areas, or bays, will be separate, and marked as follows:

a. Electrical equipment containing less than 50 ppm or which contained between 50 and 500 ppm PCB fluid and which have been drained of all free flowing fluid.

b. Electrical equipment containing 50 ppm PCB or greater.

F. Items in storage for reuse and items in storage for disposal will be stored in separate bays.

G. All PCB items and PCB containers in storage for disposal will be stored in containment pans, on pallets.

H. Non-leaking and structurally undamaged PCB large, high voltage capacitors and PCB contaminated (less than 500 ppm) electrical equipment in storage for reuse are not required to be in pans; however, pans equal in volume to 10% of the total volume of the articles outside the pans, or 200% of the internal volume of the largest article, whichever is greater, will be available for immediate use. If pans are not used, the articles will be placed on pallets and will be inspected for leaks weekly. If pans are available all articles containing 50 ppm PCB or greater will be stored in pans.

1. Containment pans must have minimum six inch (6") high sides and be placed on pallets providing uniform support. They must contain at least two times the internal volume of the largest article to be contained or 25% of the total internal volume of all of the articles to be contained in the pan. Pans will be steel or aluminum. All containment pans shall be determined leakproof prior to use by being able to hold a volume of water for no less than 24 hours without any failure.

I. Any PCB item or container found to be leaking will be emptied of all free-flowing fluid, into a DOT 17E tight-head 20/18 gauge 55-gallon drum. See Section III, R, of this SP, for cleanup procedures regarding spilled PCB material within containment pans.

J. Removal of contaminated oil from transformers will be accomplished in the following manner to avoid spilling and contaminated oil on floor or personnel.

1. Draining:

a. All draining will be done with the use of a forklift over a large containment pan, (4'W x 8'L x 1'6" H) into a DOT 17E approved tighthead container (See M, 9, below). See item 2, below, for transference of PCB liquids.

b. Personnel involved in the draining process will wear

plastic gloves, coveralls, and face shield (See M, 3, 6, and 7, below.)

c. Absorbent material will be placed in bottom of all drained transformers to eliminate all free-flowing fluid. Absorbent material will be removed to proper containers and replaced if it becomes saturated.

d. All draining or pumping operations will be done with adequate ventilation, i.e., doors open.

e. Do not allow oil to contact skin. If it does, wash affected area thoroughly at once and then report to the plant nurse.

f. Any PCB liquids that are 500 ppm or greater shall not be mixed with fluids less than 500 ppm, or stored in the same bay.

2. Pumping

a. All contaminated oil will be pumped into a DOT 17E approved tighthead container.

b. Pump will be fitted with transparent tubing.

c. Pump will be rinsed with 140 degree flash point solvent or kerosene after each use and placed in a covered containment pan for storage when not in use.

d. Personnel involved in the pumping process or handling pump or related parts will wear plastic gloves, coveralls and face shield (See M, below).

e. Absorbent material will be placed in bottom of all pumped transformers to eliminate all free flowing fluid. Absorbent material will be removed to proper containers and replaced if it becomes saturated.

K. DOT 17E approved tighthead containers will be kept on hand at the storage facility (building 854) for transfer of fluid from a leaking transformer or other PCB container.

L. An adequate supply of the following items will be stored in a cabinet in building 854 near the PCB storage bays for easy access:

1. Tags (In Storage for Reuse/Disposal) (See number III, C, 1, 2, and 3, above) (attachment 2.)

2. Labels (See attachment 1).

3. Copies of current PCB inventory, this SP, and 40 CFR 761.79, 761.120, 761.123, 761.125, 761.130, and 761.135 (See attachment 3).

4. Spill alert sheets (attachment 4).

5. Labels "PCB contaminated -- Do not remove from this building" (attachment 5)

6. A list of plant phone numbers of personnel available for technical, medical, or emergency support assistance

M. The following tools and equipment will be neatly stored for easy access in building 854, tagged or labeled "PCB Contaminated -- Do Not Remove From This Building" (attachment 5), and will be inventoried as part of weekly inspection (see attachment 6):

1.	Broom, 24" or larger for floor sweeping	1 each
2.	Shop brush	1 each
3.	Dust pan	1 each
4.	Shovel	1 each
5.	Face shield	2 each
6.	Plastic gloves, disposable, RAI #8415-00-03101	6 pair
7.	Plastic coveralls, disposable, RAI #8415-00-03100	6 pair
8.	Drum, 55 gallon, (DOT 17E) tight-head, 20/18 gauge (for PCB contaminated liquids only)	3 each
9.	Drum, 55 gallon, (DOT 17H) Removable head, 20/18 ga. (for PCB contaminated solid waste material only)	2 each
10.	Large funnel, plastic or metal	1 each
11.	Absorbent material (Zorball) RAI #7930-00-00030 50 pound bags.	3 each
12.	Tags, "In Storage for Reuse/Disposal"	12 each
13.	Labels, "Non PCB Certification Label"	12 each
14.	Labels, "M (sub L)"	12 each
15.	Labels, "PCB Contaminated - Do not remove from this building"	12 each
16.	Copy of current PCB inventory	1 each
17.	Copy of SP ME-4-0019, with attachments	1 each
18.	Spill Alert Sheets	6 each
19.	List of plant phone numbers for technical, medical, or emergency support assistance personnel	1 each

N. All contaminated disposable items, i.e., rags, floor sweepings, wood scraps, plastic gloves and coveralls, etc., will be disposed of in a DOT approved container, (DOT 17H) removable head, 20/18 gauge, 55 gallon drum, marked "PCB Contaminated Trash", and kept near the PCB storage bays in building 854. The container will be stored on a pallet with removable head fastened at all times.

O. Any movable equipment or tools which come in direct contact with PCBs must be decontaminated IAW 40 CFR 761.79 (attachment 3) before removal from building 854.

P. The handling and movement of PCB contaminated items will be as follows:

1. Do not handle any PCB items without protective clothing, as listed in M, above:

a. Plastic gloves
b. Plastic coveralls
c. Face shield.

2. Do not move any PCB items or containers without first checking to make sure that all lids, plugs, caps, etc., are secured to a leakproof condition.

3. Move PCB items and containers in a manner that is safe from tipping over or falling while in transit. Secure to forklift with chain if required.

Q. Accidental spills or leaks will be handled in the following manner: (This includes leaks from items with less than 50 ppm.)

1. Minor spills/leaks up to one gallon: Immediately apply the absorbent material (Zorball) onto the spill or leaking fluid. Allow time for all liquid to be absorbed.

a. Collect the contaminated material with provided broom and dust pan and place into the provided, properly labeled, DOT approved container marked "PCB Contaminated Trash".

b. Do not leave removable head or lid off contaminated trash container.

2. Major spills/leaks, one gallon or greater: immediately follow directions for reporting, on spill alert sheet (attachment 4).

a. Contain the leak/spill with absorbent material forming a dike around the fluid.

b. Remove diked fluid from floor to approved container, then follow steps Q, 1, a and b, above).

3. Concrete floor surface shall be cleaned/decontaminated (after spilled oil has been properly containerized) in the following manner:

a. Use 140 degree flash point solvent and rags to thoroughly cleanse affected area, insuring that no oil stain remains when floor is dry.

b. Dispose of rags in DOT 17H removable head drum.

c. Affected area of concrete floor must be sampled and tested for presence of PCB contamination IAW contracted laboratory's procedures and CFR 761.130 (attachment 3) after cleanup is completed.

R. **Spills or leaks or freeflowing liquid in containment pans must be removed immediately, as follows:**

1. Immediately apply the absorbent material (Zorball) onto the spill or leaking fluid. Allow time for all liquid to be absorbed.

   a. Collect the contaminated material and place into the provided, properly labeled, DOT approved container marked "PCB Contaminated Trash", and replace lid onto container.

S. Reporting of spills -- Spill Contingency Plan use applies to spills both within the containment pans as well as outside the containment pans.

T. Weekly inspections shall be made of building 854 and the PCB contaminated items stored there. Inspection report forms (attachment 6) must be signed and dated by inspector.

ATTACHMENTS:

1. Labels [PCB Certification and M (sub L)]
2. Tags (In Storage for Reuse/Disposal)
3. 40 CFR 761.120, 761.123, 761.125, 761.130, 761.135, 761.79
4. Spill Alert Sheet
5. Label (PCB Contaminated -- Do Not Remove from this Building)
6. Inspection Report Forms

DISTRIBUTION: Plant Engineer
Mgr., Maintenance & Installation
Maintenance File
Maintenance Supervisors (4)

APPROVAL:

H. R. Cooper, Plant Engineer — Date: 12-30-88

G. L. Wolfgang, Sr. Safety Engineer — Date: 12-30-88

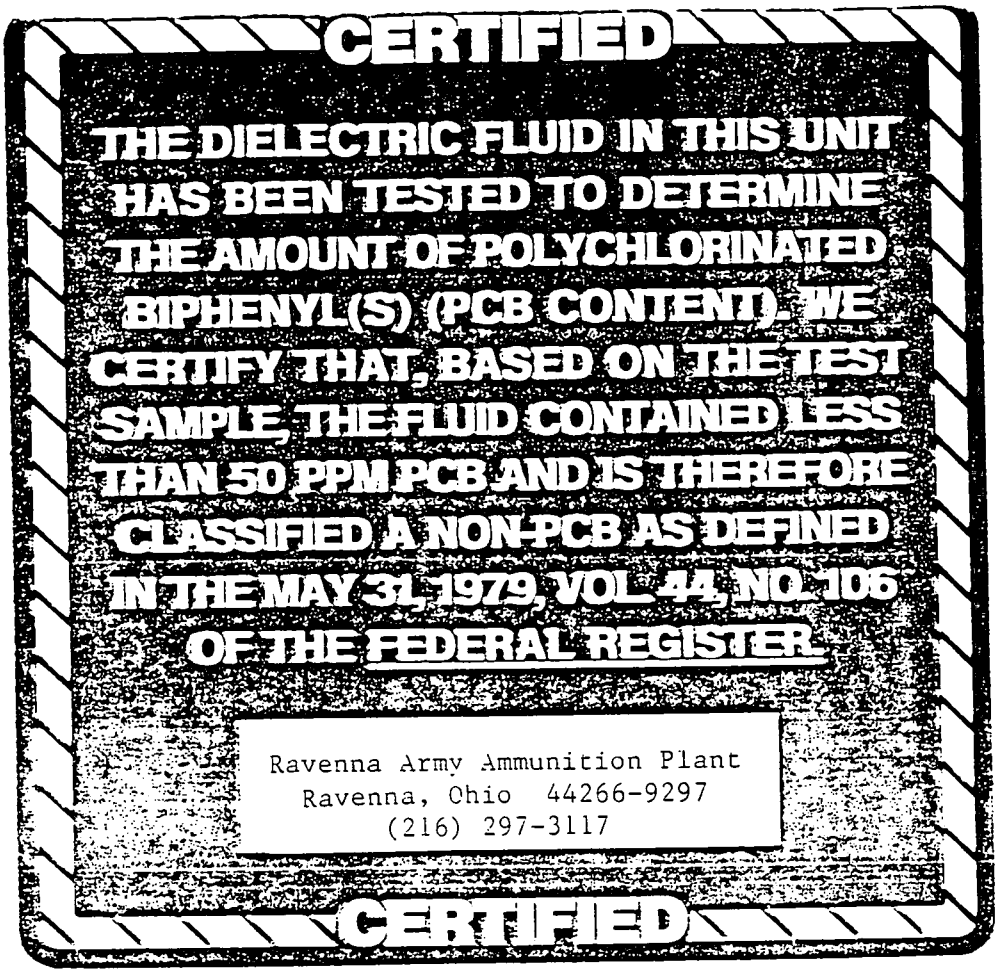
T. M. Chanda, Environmental Engineer — Date: 12-28-88

J. D. McGee, Mgr., Maint. & Installation — Date: 12-28-88

ATTACHMENT 1

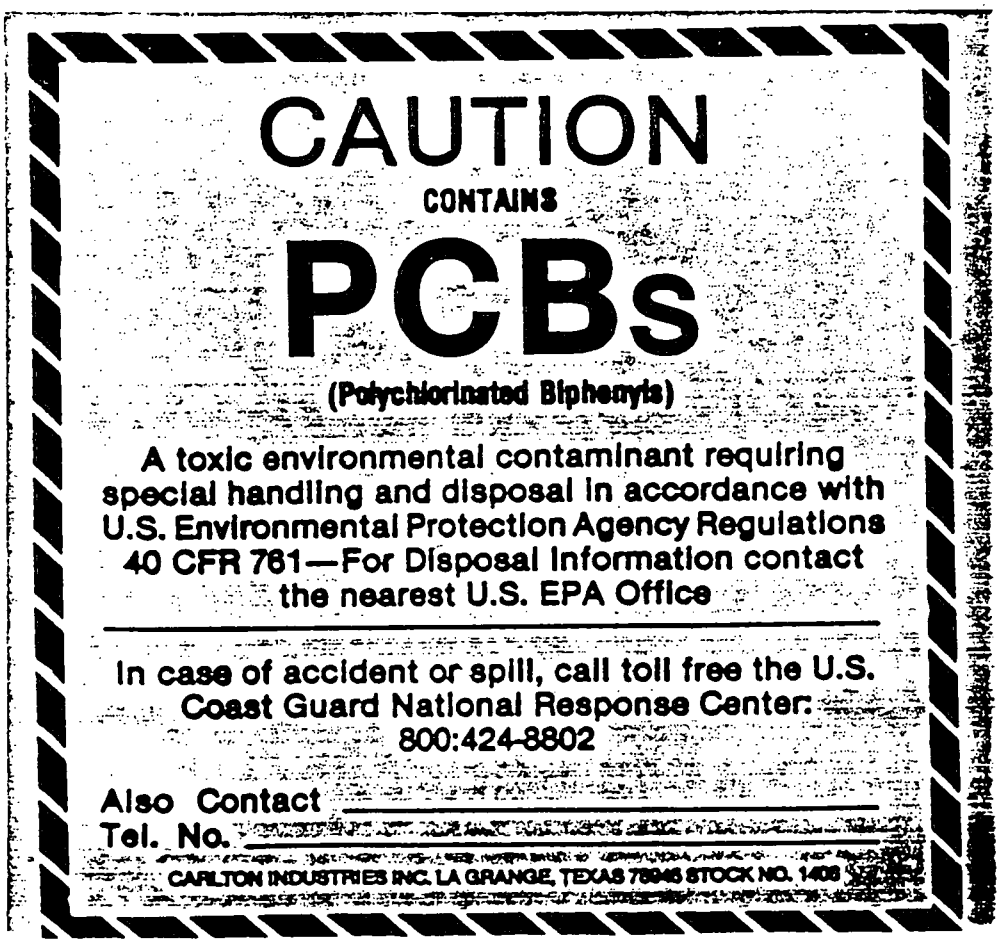
NON PCB
CERTIFICATION
LABEL

LESS THAN
50 PPM



ub L)

ER THAN
M



FRONT,
REUSE
TAG

IN STORAGE FOR REUSE

DATE PLACED IN STORAGE _____

PROPERTY NO. _____

TURN·IN NO. _____

FRONT,
DISPOSAL
TAG

IN STORAGE FOR DISPOSAL

DATE PLACED IN STORAGE _____

PROPERTY NO. _____

TURN·IN NO. _____

BACK,
BOTH
TAGS

PCB TEST RESULTS

TEST DATE _____ PPM _____

PROPERTY No. _____

LAB I.D. _____

SAMPLE No. _____

(q) Removed and Reserved.

(r) Removed and Reserved

(Sec. 6, Pub. L. 94-469, 90 Stat. 2020 (15 U.S.C. 2605))

49 FR 28171, July 10, 1984, as amended at 51 FR 28569, Aug. 8, 1986]

Subpart F—[Reserved]

Subpart G—PCB Spill Cleanup Policy

SOURCE: 52 FR 10705, Apr. 2, 1987, unless otherwise noted.

§ 761.120 Scope.

(a) *General.* This policy establishes criteria EPA will use to determine the adequacy of the cleanup of spills resulting from the release of materials containing PCBs at concentrations of 50 ppm or greater. The policy applies to spills which occur after May 4, 1987.

(1) Existing spills (spills which occurred prior to May 4, 1987, are excluded from the scope of this policy for two reasons:

(i) For old spills which have already been discovered, this policy is not intended to require additional cleanup where a party has already cleaned a spill in accordance with requirements imposed by EPA through its regional offices, nor is this policy intended to interfere with ongoing litigation of enforcement actions which bring into issue PCB spills cleanup.

(ii) EPA recognizes that old spills which are discovered after the effective date of this policy will require site-by-site evaluation because of the likelihood that the site involves more pervasive PCB contamination than fresh spills and because old spills are generally more difficult to clean up than fresh spills (particularly on porous surfaces such as concrete). Therefore, spills which occurred before the effective date of this policy are to be decontaminated to requirements established at the discretion of EPA, usually through its regional offices.

(2) EPA expects most PCB spills subject to the TSCA PCB regulations to conform to the typical spill situation considered in developing this policy. This policy does, however, exclude from application of the final numerical cleanup standards certain spill situations from its scope: Spills directly into surface waters, drinking water

ewers, grazing lands, and vegetable gardens. These types of spills are subject to final cleanup standards to be established at the discretion of the regional office. These spills are, however, subject to the immediate notification requirements and measures to minimize further environmental contamination.

(3) For all other spills, EPA generally expects the decontamination standards of this policy to apply. Occasionally, some small percentage of spills covered by this policy may warrant more stringent cleanup requirements because of additional routes of exposure or significantly greater exposures than those assumed in developing the final cleanup standards of this policy. While the EPA regional offices have the authority to require additional cleanup in these circumstances, the Regional Administrator must first make a finding based on the specific facts of a spill that additional cleanup must occur to prevent unreasonable risk. In addition, before a final decision is made to require additional cleanup, the Regional Administrator must notify the Director, Office of Toxic Substances at Headquarters of his/her finding and the basis for the finding.

(4) There may also be exceptional spill situations that requires less stringent cleanup or a different approach to cleanup because of factors associated with the particular spill. These factors may mitigate expected exposures and risks or make cleanup to these requirements impracticable.

(b) *Spills that may require more stringent cleanup levels.* For spills within the scope of this policy, EPA generally retains, under § 761.135, the authority to require additional cleanup upon finding that, despite good faith efforts by the responsible party, the numerical decontamination levels in the policy have not been met. In addition, EPA foresees the possibility of exceptional spill situations in which site-specific risk factors may warrant additional cleanup to more stringent numerical decontamination levels than are required by the policy. In these situations, the Regional Administrator has the authority to require cleanup to levels lower than those included in this policy upon finding that further cleanup must occur to prevent unreasonable risk. The Regional Administrator will consult with the Director, Office of Toxic Substances, prior to making such a finding.

(1) For example, site-specific characteristics, such as short depth to ground water, type of soil, or the presence of a shallow well, may pose exceptionally high potential for ground water contamination by PCBs remaining after cleanup to the standards specified in this policy. Spills that pose such a high degree of potential for ground water contamination have not been excluded from the policy under paragraph (d) of this section because the presence of such potential may not be readily apparent. EPA feels that automatically excluding such spills from the scope of the policy could result in the delay of cleanup—a particularly undesirable outcome if potential ground water contamination is, in fact, a significant concern.

(2) In those situations, the Regional Administrator may require cleanup in addition to that required under § 761.125 (b) and (c). However, the Regional Administrator must first make a finding, based on the specific facts of a spill, that additional cleanup is necessary to prevent unreasonable risk. In addition, before making a final decision on additional cleanup, the Regional Administrator must notify the Director of the Office of Toxic Substances of his finding and the basis for the finding.

(c) *Flexibility to allow less stringent or alternative requirements.* EPA retains the flexibility to allow less stringent or alternative decontamination measures based upon site-specific considerations. EPA will exercise this flexibility if the responsible party demonstrates that cleanup to the numerical decontamination levels is clearly unwarranted because of risk-mitigating factors, that compliance with the procedural requirements or numerical standards in the policy is impracticable at a particular [illegible] that site-specific characteristics make the costs of cleanup prohibitive. The Regional Administrator will notify the Director of OTS of any decision and

the basis for the decision to allow less stringent cleanup. The purpose of this notification is to enable the Director of OTS to ensure consistency of spill cleanup standards under special circumstances across the regions.

(d) *Excluded spills.* (1) Although the spill situations in paragraphs (d)(2) (i) through (vi) of this section are excluded from the automatic application of final decontamination standards under § 761.125 (b) and (c), the general requirements under § 761.125(a) do apply to these spills. In addition, all of these excluded situations require practicable, immediate actions to contain the area of contamination. While these situations may not always require more stringent cleanup measures, the Agency is excluding these scenarios because they will always involve significant factors that may not be adequately addressed by cleanup standards based upon typical spill characteristics.

(2) For the spill situations in paragraphs (d)(2)(i) through (vi) of this section, the responsible party shall decontaminate the spill in accordance with site-specific requirements established by the EPA regional offices.

(i) Spills that result in the direct contamination of surface waters (surface waters include, but are not limited to, "waters of the United States" as defined in Part 122 of this chapter, ponds, lagoons, wetlands, and storage reservoirs).

(ii) Spills that result in the direct contamination of sewers or sewage treatment systems.

(iii) Spills that result in the direct contamination of any private or public drinking water sources or distribution systems.

(iv) Spills which migrate to and contaminate surface waters, sewers, or drinking water supplies before cleanup has been completed in accordance with this policy.

(v) Spills that contaminate animal grazing lands.

(vi) Spills that contaminate vegetable gradens.

(e) *Relationship of policy to other statutes.* (1) This policy does not affect cleanup standards or requirements for the reporting of spills imposed, or to

tory authorities, including but not limited to, the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA). Where more than one requirement applies, the stricter standard must be met.

(2) The Agency recognizes that the existence of this policy will inevitably result in attempts to apply the standards to situations within the scope of other statutory authorities. However, other statutes require the Agency to consider different or alternative factors in determining appropriate corrective actions. In addition, the types and magnitudes of exposures associated with sites requiring corrective action under other statutes often involve important differences from those expected of the typical, electrical equipment-type spills considered in developing this policy. Thus, cleanups under other statutes, such as RCRA corrective actions or remedial and response actions under SARA may result in different outcomes.

§ 761.123 Definitions.

For purposes of this policy, certain words and phrases are used to denote specific materials, procedures, or circumstances. The following definitions are provided for purposes of clarity and are not to be taken as exhaustive lists of situations and materials covered by the policy.

"Double wash/rinse" means a minimum requirement to cleanse solid surfaces (both impervious and nonimpervious) two times with an appropriate solvent or other material in which PCBs are at least 5 percent soluble (by weight). A volume of PCB-free fluid sufficient to cover the contaminated surface completely must be used in each wash/rinse. The wash/rinse requirement does not mean the mere spreading of solvent or other fluid over the surface, nor does the requirement mean a once-over wipe with a soaked cloth. Precautions must be taken to contain any runoff resulting from the cleansing and to dispose

properly of wastes generated during the cleansing.

"High-concentration PCBs" means PCBs that contain 500 ppm or greater PCBs, or those materials which EPA requires to be assumed to contain 500 ppm or greater PCBs in the absence of testing.

"High-contact industrial surface" means a surface in an industrial setting which is repeatedly touched, often for relatively long periods of time. Manned machinery and control panels are examples of high-contact industrial surfaces. High-contact industrial surfaces are generally of impervious solid material. Examples of low-contact industrial surfaces include ceilings, walls, floors, roofs, roadways and sidewalks in the industrial area, utility poles, unmanned machinery, concrete pads beneath electrical equipment, curbing, exterior structural building components, indoor vaults, and pipes.

"High-contact residential/commercial surface" means a surface in a residential/commercial area which is repeatedly touched, often for relatively long periods of time. Doors, wall areas below 6 feet in height, uncovered flooring, windowsills, fencing, bannisters, stairs, automobiles, and children's play areas such as outdoor patios and sidewalks are examples of high-contact residential/commercial surfaces. Examples of low-contact residential/commercial surfaces include interior ceilings, interior wall areas above 6 feet in height, roofs, asphalt roadways, concrete roadways, wooden utility poles, unmanned machinery, concrete pads beneath electrical equipment, curbing, exterior structural building components (e.g., aluminum/vinyl siding, cinder block, asphalt tiles), and pipes.

"Impervious solid surfaces" means solid surfaces which are nonporous and thus unlikely to absorb spilled PCBs within the short period of time required for cleanup of spills under this policy. Impervious solid surfaces include, but are not limited to, metals, glass, aluminum siding, and enameled or laminated surfaces.

"Low-concentration PCBs" means PCBs that are tested and found to contain less than 500 ppm PCBs, or those PCB-containing materials which EPA requires to be assumed to be at concentrations below 500 ppm (i.e., untested mineral oil dielectric fluid).

"Nonimpervious solid surfaces" means solid surfaces which are porous and are more likely to absorb spilled PCBs prior to completion of the cleanup requirements prescribed in this policy. Nonimpervious solid surfaces include, but are not limited to, wood, concrete, asphalt, and plasterboard.

"Nonrestricted access areas" means any area other than restricted access, outdoor electrical substations, and other restricted access locations, as defined in this section. In addition to residential/commercial areas, these areas include unrestricted access rural areas (areas of low density development and population where access is uncontrolled by either man-made barriers or naturally occurring barriers, such as rough terrain, mountains, or cliffs).

"Other restricted access (nonsubstation) locations" means areas other than electrical substations that are at least 0.1 kilometer (km) from a residential/commercial area and limited by man-made barriers (e.g., fences and walls) to substantially limited by naturally occurring barriers such as mountains, cliffs, or rough terrain. These areas generally include industrial facilities and extremely remote rural locations. (Areas where access is restricted but are less than 0.1 km from a residential/commercial area are considered to be residential/commercial areas.)

"Outdoor electrical substations" means outdoor, fenced-off, and restricted access areas used in the transmission and/or distribution of electrical power Outdoor electrical substations restrict public access by being fenced or walled off as defined under § 761.30(l)(1)(ii). For purposes of this TSCA policy, outdoor electrical substations are defined as being located at least 0.1 km from a residential/commercial area. Outdoor fenced-off and restricted access areas used in the transmission and/or distribution of electrical power which are located less than 0.1 km from a residential/commercial area are considered to be residential/commercial areas.

"PCBs" means polychlorinated biphenyls as defined under § 761.3. As specified under § 761.1(b), no requirements may be avoided through dilution of the PCB concentration.

"Requirements and standards" means:

(1) "Requirements" as used in this policy refers to both the procedural responses and numerical decontamination levels set forth in this policy as constituting adequate cleanup of PCBs.

(2) "Standards" refers to the numerical decontamination levels set forth in this policy.

"Residential/commercial areas" means those areas where people live or reside, or where people work in other than manufacturing or farming industries. Residential areas include housing and the property on which housing is located, as well as playgrounds, roadways, sidewalks, parks, and other similar areas within a residential community. Commercial areas are typically accessible to both members of the general public and employees and include public assembly properties, institutional properties, stores, office buildings, and transportation centers.

"Responsible party means the owner of the PCB equipment, facility, or other source of PCBs or his/her designated agent (e.g., a facility manager or foreman).

"Soil" means all vegetation, soils and other ground media, including but not limited to, sand, grass , gravel, and oyster shells. It does not include concrete and asphalt.

"Spill" means both intentional and unintentional spills, leaks, and other uncontrolled discharges where the release results in any quantity of PCBs running off or about to run off the external surface of the equipment or other PCB source, as well as the contamination resulting from those releases. This policy applies to spills of 50 ppm or greater PCBs. The concentration of PCBs spilled is determined by the PCB concentration in the material spilled as opposed to the concentration of PCBs in the material onto which the PCBs were spilled. Where a spill of untested mineral oil occurs, PCBs and is subject to the relevant requirements of this policy.

"Spill area" means the area of soil on which visible traces of the spill can be observed plus a buffer zone of 1 foot beyond the visible traces. Any surface or object (e.g., concrete sidewalk or automobile) within the visible traces area or on which visible traces of the spilled material are observed is included in the spill area. This area represents the minimum area assumed to be contaminated by PCBs in the absence of precleanup sampling data and is thus the minimum area which must be cleaned.

"Spill boundaries" means the actual area of contamination as determined by postcleanup verification sampling or by precleanup sampling to determine actual spill boundaries. EPA can require additional cleanup when necessary to decontaminate all areas within the spill boundaries to the levels required in this policy (e.g., additional cleanup will be required if postcleanup sampling indicates that the area decontaminated by the responsible party, such as the spill area as defined in this section, did not encompass the actual boundaries of PCB contamination).

"Standard wipe test" means, for spills of high-concentration PCBs on solid surfaces, a cleanup to numerical surface standards and sampling by a standard wipe test to verify that the numerical standards have been met. This definition constitutes the minimum requirements for an appropriate wipe testing protocol. A standard-size template (10 centimeters (cm) x 10 cm) will be used to delineate the area of cleanup; the wiping medium will be a gauze pad or glass wool of known size which has been saturated with hexane. It is important that the wipe be performed very quickly after the hexane is exposed to air. EPA strongly recommends that the gauze (or glass wool) be prepared with hexane in the laboratory and that the wiping medium be stored in sealed glass vials until it is used for the wipe test. Further, EPA requires the collection and testing of field blanks and replicates.

[52 FR 10705, Apr. 2, 1987; 52 FR 23397, June 19, 1987]

§ 761.125 Requirements for PCB spill cleanup.

(a) *General.* Unless expressly limited, the reporting, disposal, and precleanup sampling requirements in paragraphs (a) (1) through (3) of this section apply to all spills of PCBs at concentrations of 50 ppm or greater which are subject to decontamination requirements under TSCA, including those spills listed under § 761.120(b) which are excluded from the cleanup standards at paragraphs (b) and (c) of this section.

(1) *Reporting requirements.* The reporting in paragraph (a)(1) (i) through (iv) of this section is required in addition to applicable reporting requirements under the Clean Water Act (CWA) or the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA). For example, under the National Contingency Plan all spills involving 10 pounds or more of PCB material must currently be reported to the National Response Center (1-800-424-8802). The requirements in paragraphs (a)(1) (i) through (iv) of this section are designed to be consistent with existing reporting requirements to the extent possible so as to minimize reporting burdens on governments as well as the regulated community.

(i) Where a spill directly contaminates surface water, sewers, or drinking water supplies, as discussed under § 761.120(d), the responsible party shall notify the appropriate EPA regional office (the Office of Pesticides and Toxic Substances Branch) and obtain guidance for appropriate cleanup measures in the shortest possible time after discovery, but in no case later than 24 hours after discovery.

(ii) Where a spill directly contaminates grazing lands or vegetable gardens, as discussed under § 761.120(d), the responsible party shall notify the appropriate EPA regional office (the Office of Pesticides and Toxic Substances Branch) and proceed with the immediate requirements specified under paragraph (b) or (c) of this section, depending on the source of the spill, in the shortest possible time after discovery, but in no case later

(iii) Where a spill exceeds 10 pounds of PCB material (generally 1 gallon of PCB dielectric fluid) and is not addressed in paragraph (a)(1) (i) or (ii) of this section, the responsible party will notify the appropriate EPA regional office and proceed to decontaminate the spill area in accordance with this TSCA policy in the shortest possible time after discovery, but in no case later than 24 hours after discovery. For purposes of the notification requirement, the 10 pounds are measured by the weight of the PCB-containing material spilled rather than by the weight of only the PCBs spilled.

(iv) Spills of 10 pounds or less, which are not addressed in paragraph (a)(1) (i) or (ii) of this section, must be cleaned up in accordance with this policy (in order to avoid EPA enforcement liability), but notification of EPA is not required.

(2) *Disposal of cleanup debris and materials.* All concentrated soils, solvents, rags, and other materials resulting from the cleanup of PCBs under this policy shall be properly stored, labeled, and disposed of in accordance with the provisions of § 761.60.

(3) *Determination of spill boundaries in the absence of visible traces.* For spills where there are insufficient visible traces yet there is evidence of a leak or spill, the boundaries of the spill are to be determined by using a statistically based sampling scheme.

(b) *Requirements for cleanup of low-concentration spills which involve less than 1 pound of PCBs by weight (less than 270 gallons of untested mineral oil)*—(1) *Decontamination requirements.* Spills of less than 270 gallons of untested mineral oil, low-concentration PCBs, as defined under § 761.123, which involve less than 1 pound of PCBs by weight (e.g., less than 270 gallons of untested mineral oil containing less than 500 ppm PCBs) shall be cleaned in the following manner:

(i) Solid surfaces must be double washed/rinsed (as defined under § 761.123); except that all indoor, residential surfaces other than vault areas must be cleaned to 10 micrograms per 100 square centimeters (10 $\mu g/100\ cm^2$) by standard commercial wipe tests.

(ii) All soil within the spill area (i.e., visible traces of soil and a buffer of 1

ateral foot around the visible traces) nust be excavated, and the ground be estored to its original configuration y back-filling with clean soil (i.e., containing less than 1 ppm PCBs).

(iii) Requirements of paragraph b)(1) (i) and (ii) of this section must e completed within 48 hours after the esponsible party was notified or ecame aware of the spill.

(2) *Effect of emergency or adverse eather.* Completion of cleanup may e delayed beyond 48 hours in case of ircumstances including but not limited to, civil emergency, adverse weather onditions, lack of access to the site, nd emergency operating conditions. he occurrence of a spill on a weekend r overtime costs are not acceptable easons to delay response. Completion f cleanup may be delayed only for he duration of the adverse conditions. f the adverse weather conditions, or ime lapse due to other emergency, as left insufficient visible traces, the esponsible party must use a statistically based sampling scheme to determine the spill boundaries as required nder paragraph (a)(3) of this section.

(3) *Records and certification.* At the ompletion of cleanup, the responsible arty shall document the cleanup with ecords and certification of decontamination. The records and certification nust be maintained for a period of 5 ears. The records and certification hall consist of the following:

(i) Identification of the source of the pill (e.g., type of equipment).

(ii) Estimated or actual date and ime of the spill occurrence.

(iii) The date and time cleanup was ompleted or terminated (if cleanup as delayed by emergency or adverse eather: the nature and duration of he delay).

(iv) A brief description of the spill ocation.

(v) Precleanup sampling data used to stablish the spill boundaries if required because of insufficient visible races, and a brief description of the ampling methodology used to establish the spill boundaries.

(vi) A brief description of the solid urfaces cleaned and of the double vash/rinse method used.

(vii) Approximate depth of soil excavation and the amount of soil removed.

(viii) A certification statement signed by the responsible party stating that the cleanup requirements have been met and that the information contained in the record is true to the best of his/her knowledge.

(ix) While not required for compliance with this policy, the following information would be useful if maintained in the records:

(A) Additional pre- or post-cleanup sampling.

(B) 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 pound 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 spills of materials other than low-concentration materials shall be considered complete if all of the immediate requirements, cleanup standards, sampling, and recordkeeping requirements of paragraphs (c) (1) through (5) of this section are met.

(1) *Immediate requirements.* The four actions in paragraphs (c)(1) (i) through (iv) of this section must be taken as quickly as possible and within no more than 24 hours (or within 48 hours for PCB Transformers) after the responsible party was notified or became aware of the spill, except that actions described in paragraphs (c)(1) (ii) through (iv) of this section can 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.

(i) The responsible party shall notify the EPA regional office and the NRC

.s required by §761.125(a)(1) or by other applicable statutes.

(ii) The responsible party shall 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.

(iii) The responsible party shall 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.

(iv) The responsible party shall 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.

(v) If there has been a delay in reaching the site and there are insufficient visible traces of PCBs remaining at the spill site, the responsible party 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 responsible party must then utilize a statistically based sampling scheme to identify the boundaries of the spill area as soon as practicable.

(vi) Although this policy requires certain immediate actions, as described in paragraphs (c)(1)(i) through (iv) of this section, 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, EPA expects that decontamination will be achieved promptly in all cases and will consider promptness of completion in determining whether the 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 under §761.123, shall be decontaminated in accordance with paragraph (c)(2)(i) and (ii) of this section. Conformance to the cleanup standards under paragraphs (c)(2)(i) and (ii) of this section shall be verified by post-cleanup sampling as specified under §761.130. At such times as outdoor electrical substations are converted to another use, the spill site shall be cleaned up to the nonrestricted access requirements under paragraph (c)(4) of this section.

(i) Contaminated solid surfaces (both impervious and non-impervious) shall be cleaned to a PCB concentration of 100 micrograms (μg)/100 square centimeters (cm^2) (as measured by standard wipe tests).

(ii) At the option of the responsible party, soil contaminated by the spill will be cleaned either to 25 ppm PCBs by weight, or 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 under §761.123, shall be decontaminated in accordance with paragraph (c)(3)(i) through (v) of this section. Conformance to the cleanup standards in paragraph (c)(3)(i) through (v) of this section shall be verified by postcleanup sampling as specified under §761.130. 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 of paragraph (c)(4) of this section.

(i) High-contact solid surfaces, as defined under §761.163 shall be cleaned to 10 μg/100 cm^2 (as measured by standard wipe tests).

(ii) Low-contact, indoor, impervious solid surfaces will be decontaminated to 10 μg/100 cm^2.

(iii) At the option of the responsible arty, low-contact, indoor, nonimpervous surfaces will be cleaned either to) μg/100 cm² or to 100 μg/100 cm² nd encapsulated. The Regional Adinistrator, however, retains the auhority to disallow the encapsulation ption for a particular spill situation pon finding that the uncertainties asociated with that option pose special oncerns at that site. That is, the Re ional Administrator would not permit ncapsulation if he/she determined hat if the encapsulation failed the ailure would create an imminent azard at the site.

(iv) Low-contact, outdoor surfaces both impervious and nonimpervious) nall be cleaned to 100 μg/100 cm².

(v) Soil contaminated by the spill ill be cleaned to 25 ppm PCBs by eight.

(4) *Requirements for decontaminating spills in nonrestricted access reas.* Spills which occur in nonrestricted access locations, as defined nder §761.123, shall be decontamiated in accordance with paragraphs c)(4)(i) through (v) of this section. Conformance to the cleanup standards t paragraphs (c)(4)(i) through (v) of his section shall be verified by postleanup sampling as specified under 761.130.

(i) Furnishings, toys, and other asily replaceable household items hall be disposed of in accordance with he provisions of §761.60 and replaced y the responsible party.

(ii) Indoor solid surfaces and highontact outdoor solid surfaces, defined s high contact residential/commerial surfaces under §761.123, shall be leaned to 10 μg/100 cm² (as measured y standard wipe tests).

(iii) Indoor vault areas and low-contact, outdoor, impervious solid surfaces shall be decontaminated to 10 μg/100 cm².

(iv) At the option of the responsible party, low-contact, outdoor, nonimpervious solid surfaces shall be either cleaned to 10 μg/100 cm² or cleaned to 100 μg/100 cm² 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.

(v) 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 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:

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

(ii) Estimated or actual date and time of the spill occurrence.

(iii) 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).

(iv) 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.

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

(vi) A brief description of the solid surfaces cleaned.

(vii) Approximate depth of soil excavation and the amount of soil removed.

(viii) Postcleanup verification sampling data and, if not otherwise apparent from the documentation, a brief description of the sampling methodology and analytical technique used.

(ix) 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.

§761.130 Sampling requirements.

Postcleanup sampling is required to verify the level of cleanup under §761.125(c)(2) through (4). The responsible party may use any statistically valid, reproducible, sampling scheme (either random samples or grid samples) provided that the requirements of paragraphs (a) and (b) of this section are satisfied.

(a) 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.

(b) The sampling scheme must ensure 95 percent confidence against false positives.

(c) 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.

(d) The sampling scheme must include calculation for expected variability due to analytical error.

(e) EPA recommends the use of a 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, Environmental Protection Agency, Rm. E-543, 401 M St. SW., Washington, DC 20460 (202-554-1404). 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.

(f) EPA may, at its discretion, 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, numerical level of cleanup required for spills cleaned in accordance with §761.125(b) is deemed to be the equivalent of numerical cleanup requirements required for cleanups under §761.125(c)(2) through (4). Using its best engineering judgment, EPA may sample 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.

§761.135 Effect of compliance with this policy and enforcement.

(a) 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 or EPA sampling following 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.

(b) 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

241 Continues, however most of this would be directed by [illegible]

transferring the right to conduct the chemical waste landfill operation. The transferor must also submit to EPA, at least 30 days before such transfer, a notarized affidavit signed by the transferee which states that the transferee will abide by the transferor's EPA chemical waste landfill approval. Within 30 days of receiving such notification and affidavit, EPA will issue an amended approval substituting the transferee's name for the transferor's name, or EPA may require the transferee to apply for a new chemical waste landfill approval. In the latter case, the transferee must abide by the transferor's EPA approval until EPA issues the new approval to the transferee.

(Sec. 6, Pub. L. 94-469, 90 Stat. 2020 (15 U.S.C. 2605)

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982, and amended at 8 FR 5730, Feb. 8, 1983; 49 FR 28191, July 10, 1984]

§ 761.79 Decontamination.

(a) Any PCB Container to be decontaminated shall be decontaminated by flushing the internal surfaces of the container three times with a solvent containing less than 50 ppm PCB. The solubility of PCBs in the solvent must be five percent or more by weight. Each rinse shall use a volume of the normal diluent equal to approximately ten (10) percent of the PCB Container capacity. The solvent may be reused for decontamination until it contains 50 ppm PCB. The solvent shall then be disposed of as a PCB in accordance with § 761.60(a). Non-liquid PCBs resulting from the decontamination procedures shall be disposed of in accordance with the provisions of § 761.60(a)(4).

(b) Movable equipment used in storage areas shall be decontaminated by swabbing surfaces that have contacted PCBs with a solvent meeting the criteria of paragraph (a) of this section.

NOTE: Precautionary measures should be taken to ensure that the solvent meets safety and health standards as required by applicable Federal regulations.

[44 FR 31542, May 31, 1979. Redesignated at 47 FR 19527, May 6, 1982]

Subpart E—Exemptions

§ 761.80 Manufacturing, processing, and distribution in commerce exemptions.

(a) **Removed and Reserved**

(b) **Removed and Reserved.**

ATTACHMENT 4

SPILL ALERT

If YOU are the first person to discover a spill or leak.....

* (During normal working hours) Immediately call the Transportation Radio Dispatcher Phone ext 3275..... or

**(During off-duty hours) Immediately call the Security Dispatcher @ AAC-540 or Phone ext. 3425 or 3555.....

BE READY TO ANSWER THESE FOLLOWING QUESTIONS:

1) who is calling? _____

2) what's your location? _____

Radio Unit * _____ &/or Phone * _____

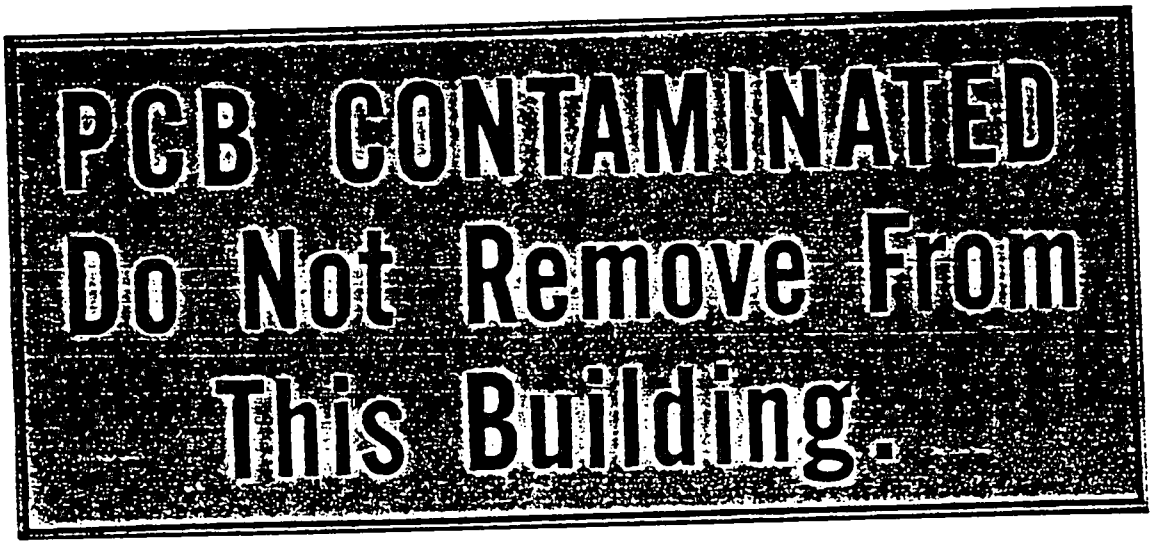
3) what is the material spilled? _____

4) Is the spill contained? YES NO How much? _____

If NO, which way is it moving? _____

5) who else is on the scene? _____

ATTACHMENT 5



WEEKLY INSPECTION OF PCB STORAGE FACILITY, BLDG. 854

Date _____ Time _____

_____
Inspector's Name

	(Checked)	(Comment)
1. Doors		
A. Closed and locked	_____	_____
B. Proper signs/labels	_____	_____
2. Floors		
A. Free of dirt	_____	_____
B. Free of oil stains	_____	_____
C. Aisles clear	_____	_____
3. Bays		
A. Proper marking/signs	_____	_____
B. Untagged PCB items	_____	_____
4. Capacitors		
A. Stored in containment pans on pallets	_____	_____
B. Properly tagged/labeled	_____	_____
C. Leaking	_____	_____
D. Free-flowing fluid in pans or on floor	_____	_____
5. Transformers		
A. Properly tagged/labeled	_____	_____
B. Leaking	_____	_____
C. Stored on pallets	_____	_____
D. Stored in proper bays	_____	_____
E. Free-flowing fluid in pans or on floor	_____	_____

_____
Signature of Inspector

WEEKLY INVENTORY OF TOOLS & EQUIPMENT, BLDG. 854

		Required Quantity	Quantity on Hand	Discrepancy
1.	Broom, 24" or larger, for floor sweeping	1 each	_____	_____
2.	Shop brush	1 each	_____	_____
3.	Dust pan	1 each	_____	_____
4.	Shovel	1 each	_____	_____
5.	Face shield	2 each	_____	_____
6.	Plastic gloves, disposable, RAI #8415-00-03101	6 pair	_____	_____
7.	Plastic coveralls, disposable, RAI #8415-00-03100	6 pair	_____	_____
8.	Drum, 55 gallon, DOT 17E, tighthead, 20/18 gauge, for PCB contaminated liquids only	3 each	_____	_____
	Drum, 55 gallon, DOT 17H, removable head, 20/18 gauge, for PCB contaminated solid waste material only	2 each	_____	_____
10.	Large funnel, plastic or metal	1 each	_____	_____
11.	Absorbent material (Zorball), RAI #7930-00-00030, 50 pound bags	3 bags	_____	_____
12.	Tags, "In Storage for Reuse/Disposal"	12 each	_____	_____
13.	Labels, "Non PCB Certification Label"	12 each	_____	_____
14.	Label, "M (sub L)"	12 each	_____	_____
15.	Label, "PCB Contaminated - Do not remove from this building"	12 each	_____	_____
16.	Copy of current PCB inventory	1 each	_____	_____
17.	Copy of SP ME-4-0019, with attachments	1 each	_____	_____
18.	Spill Alert Sheets	6 each	_____	_____
19.	List of plant phone numbers for technical/ medical/emergency support assistance	1 each	_____	_____

_____

Inspector's signature

RAVENNA ARSENAL, INC

INTEROFFICE
November 21, 1988

TO: Jim McGee FROM: H. R. Cooper

SUBJECT: PCB STORAGE FACILITY REF:

Please institute the following measures at the Building 854 PCB Storage Facility.

1. Prepare two tags and apply to each capacitor or transformer as applicable. The first will read "In Storage for Reuse", "Date Placed in Storage _____" and "Identification No.".

The second tag will read "In Storage for Disposal", "Date Placed in Storage _____ " and Identification No.".

Any item brought in for storage will immediately have the appropriate tag applied with the date entered and the PCB Inventory will be updated.

All items brought in for storage will be marked with the appropriate PCB warning label for the PCB concentration of the fluid. If the PCB concentration of a transformer is not known, a sample will be drawn and tested and an interim warning label will be applied. The interim label will be removed and replaced with the permanent label as soon as the analytical results are available. The transformer will be stored and treated as containing up to 499 ppm PCB until the analytical results are known and the markings changed.

Large high voltage capacitors will not be tested since they contain PCB's exceeding ppm and are sealed. They will be handled and marked as equipment containing PCB concentrations in excess of 500 ppm.

If an item is tagged for reuse and is later identified for disposal, the tag shall immediately be changed. The new tag will have the date it was identified for disposal not the date it originally went into storage.

Any PCB contaminated electrical equipment or container containing 50 ppm or greater PCB material brought into storage for disposal or transferred from reuse to disposal will immediately have a turn-in prepared and the PCB inventory will be updated.

2. Establish and mark separate areas for storage of articles for Reuse and for disposal. These areas will each be divided into two sections. The first section will be marked for electrical equipment containing less than 50 ppm or which contained between 50 and 500 ppm PCB fluid and which has been drained of all free flowing fluid.

The second section of each area will be marked for electrical equipment containing 50 ppm PCB or greater.

3. Non leaking and structurally undamaged PCB and large capacitors and PCB contaminated (less than 500 ppm) electrical equipment in storage for reuse are not required to be in pans; however, pans equal in volume to 10% of the total volume of all of the articles outside the pans and 200% of the internal volume of the largest articles outside the pans must be available for immediate use. If pans are not used, the articles must be placed on pallets and must be inspected for leaks weekly. If pans are available all articles containing 50 ppm PCB or greater will be stored in pans.

4. All containers containing PCB contaminated (50 ppm or greater) materials will be stored in containment pans.

5. Containment pans must have minimum six inch (6") high sides and be placed on pallets providing uniform support. They must contain at least two times the internal volume of the largest article to be contained or 25% of the total internal volume of all of the articles to be contained in the pan. Pans may be any type steel or aluminum.

6. All PCB articles and PCB containers in storage for disposal will be stored in containment pans on pallets.

7. Approved containers will be kept on hand at the building for transfer of fluid from a leaking transformer. All necessary safety equipment and other materials will be available.

8. Any PCB article or container found to be leaking will be emptied or over-packed into approved containers.

9. Any moveable equipment which comes in direct contact with PCB's must be decontaminated in accordance with 40CFR 761.79 before removing from the building. I suggest a decal reading "PCB Contaminated-Decontaminate before moving" to be placed on any pans which contain or contained oil as well as other equipment which becomes contaminated.

I agree with and encourage your suggestion to institute this information in the form of a Standard Procedure.

H.R. Cooper

H. R. Cooper

HRC/jb

cc T. Chanda
PCB File