

COUNTY OF ULSTER

300 Flatbush Avenue
P.O. Box 1800
Kingston, New York 12401

UC0005
Paul
Puk

HEALTH DEPARTMENT

Masood Ansari, M.D.
Commissioner of Health
Patricia J. Cicale, R.N., M.S.
Director of Patient Services
Dean N. Palen, P.E., M.B.A.
Director of Environmental Sanitation
Walter Dobushak, D.O.
Medical Examiner



(914) 338-8443
FAX (914) 338-8443 ext. 200

May 14, 1992

Dr. Alice Chandler, President
State University of New York
College at New Paltz
Route 32 South
New Paltz, NY 12561

Dear Dr. Chandler:

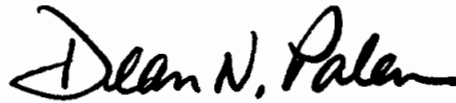
In consultation with the New York State Department of Health, I have reviewed the PCB wipe, Dioxin/Furan wipe and air sample results received from Clean Harbors Analytical Services, Inc., the Wadsworth Center for Laboratories and Research, ETC Laboratories, Ltd., C.T.M. Analytical Laboratories and Twin Cities Testing Corporation for Scudder Hall. In recognition of the latest wipe and air samples collected in Scudder Hall, the Department concludes that students and their families may safely enter the hallways, stairways, lobbies and student rooms in Scudder Hall to reclaim personal belongings.

The hallways and all of the student rooms meet the Health Department's PCB surface criterion. Several Dioxin/Furan surface wipe samples were collected and all were well below the cleanup criterion. Air samples collected since the cleaning are also all below the PCB air criterion.

No access will be allowed to bathrooms, the mechanical room, storage rooms 1 and 7, laundry room 1 and 2 and maintenance closets until additional remediation has been performed. The area immediately surrounding the transformer vault is also restricted and has been isolated.

If you have any questions regarding these recommendations,
please contact me.

Sincerely yours,

A handwritten signature in black ink that reads "Dean N. Palen". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Dean N. Palen, P.E., MBA
Director of Environmental
Sanitation Division
Ulster County Health Department

DNP/ds

Attachment

cc: Dr. Ansari, Ulster County Health Dept.
Mark Knudsen, NYS Department of Health
Kristine Edwards, NYS Office of General Services
Lindo Signorelli, SUNY Office for Capital Facilities
Paul Pukk, Clean Harbors



ENVIRONMENTAL SERVICES COMPANIES

24 HOUR SERVICE

P.O. BOX 1812

ALBANY, N.Y. 12201

(518) 434-0149

May 14, 1992

Mr. Dean N. Palen, P.E., MBA
Director of Environmental Sanitation Division
Ulster County Health Department
300 Flatbush Avenue
Kingston, New York 12401

Dear Mr. Palen:

Due to the recently received PCB wipe, Dioxin/Furan wipe and air sample results received from, Clean Harbors Analytical Services Inc., ETC. laboratories, the Wadsworth Center for Laboratories and Research, Twin City Testing Corp., and C.T. Male, and in consideration of the levels of contamination which are acceptable for occupancy, as developed by your Department, we feel that Scudder Hall fulfills the requirements.

Please find attached all the applicable sample results which include the PCB wipe samples (room by room), Dioxin/Furan samples, and air samples.

Access shall be restricted to the following areas until additional remediation has been performed and satisfactory results have been obtained:

o Public Access areas with ventilation systems, which have been sealed pending further remediation efforts, have been locked to prevent entry.

o The area immediately adjacent to the transformer vault has also been isolated.

Sincerely,

Paul Pukk
Senior Project Manager
Clean Harbors of Kingston, Inc.

cc: Kristine Edwards, NYS Office of General Services
Mark Knudsen, NYS Department of Health
Dr. Ansari, Ulster County Health Dept.



ENVIRONMENTAL SERVICES COMPANIES

24 HOUR SERVICE

P.O. BOX 1812

ALBANY, N.Y. 12201

(518) 434-0149

MEMORANDUM

To: Lindo Signorelli (SUNY)
Mike Singleton (OGS)
Fred Porcello (HVEC)

From: Thomas J. Kelley (Clean Harbors) *TK 9/4/92*

Date: September 4, 1992

RE: Weekly Status Report 8/26/92 to 9/01/92

Scheduled Work 8/26/92 to 9/01/92

<u>All Wash</u>	<u>Status</u>	<u>Reason not completed</u> (or date completed)
<u>HVEC</u>		
<u>Coykendall</u>		
Complete barricade and decon const.	Complete	9/02/92
Equipment removal	Ongoing	
Rooms 117C, 117B, 203C, 203D	Complete	9/01/92
Rooms 111 A,B,C	Complete	8/31/92
Rooms 202, 100A, 100	Complete	8/28/92
Rooms 105, 105B	Complete	8/27/92
Rooms 103A, 103B	Complete	8/26/92
Plug floor drains in basement	Hold	Crew allocation
Wipe down product on gear or panels	Hold	Crew allocation
Begin removal of elect gear	Hold	Crew allocation
Remove equip and debris from pit area	Hold	Crew allocation
Begin prep work for Penetone washing	Ongoing	Began 9/01/92
<u>Bliss Hall</u>		
Backfill excavated area outside vault	Complete	8/27/92
Complete construction of decons	Complete	9/01/92
Construct isolation measures in bsmt.	Began	9/02/92
Begin carpet removal on third floor	Began	9/02/92
Begin prep for penetone of vault	Canceled	See Note 1
Begin prep for penetone of elect. room	Hold	Crew allocation
<u>Drum Storage Area</u>		
Continue recirc high haz decon water	Complete	See Note 2
Complete drum storage building	Complete	8/31/92

Clean Harbors

Coykendall

Supervise on going activities	Ongoing
Coordinate equipment removal	Ongoing
Complete sampling as required	Ongoing

Gage Hall

Continue closure report	Ongoing
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Scudder Hall

Continue closure report	Ongoing
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Parker Theatre

Complete post-duct clean air samples	Ongoing
coordinate equipment retrievals	Scheduled for 9/4/92

Bliss Hall

Supervise ongoing activities	Ongoing
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Notes

1. Penetone of vault has been canceled. Wash with Capsur shall be completed in lieu of penetone cleaning for the primary vault. The Bliss primary vault was penetone cleaned previously.
2. The water re-treatment is complete; analytical results indicate levels of PCB contamination at 70 PPB. The acceptance criteria to make the waste non TSCA regulated is 3 PPB. The TSP or other contaminants may be interfering with the treatment process. One final treatment shall be attempted with three drums in line and a maximum flow rate of 4 gallon per minute.

Projected Work 9/02/92 to 9/08/92

HWEC

Coykendall Science Building

Continue equipment removals
 Remove items from pit (place in vault)
 Continue removal of gear from primary vault
 Begin prep work for penetone of primary

Bliss Hall

Complete rug removal and isolation of third floor
 Complete rug removal and isolation of second floor
 Complete isolation of high contamination zone
 Complete capsur cleaning of primary vault
 Begin equipment removal of electrical room

Parker Theatre

Prep for transformer removal and transport to Coykendall

Clean Harbors

Coykendall Science Building

Supervise ongoing activities

Incorporate NYS comments in cleaning plan

Complete evaluation of ventilation system

Lab pack chemicals in clean rooms for transfer to college

Bliss Hall

Supervise ongoing activities

Gage Hall

Continue closure report

Scudder Hall

Continue closure report

Parker Theatre

Continue closure report

Supervise equipment release

Complete post duct cleaning air sampling

Issues and Highlights

1. The bid for the new waste contractor was extended until Friday September 4, 1992 because only two bidders responded.
2. There are still drums on site that have been here for more than 30 days; however since the drum storage building has been constructed and the EPA has been notified we are not in violation status.

Period Staffing
(8/26/92 - 9/01/92)

Clean Harbors (Day Shift).....	13
Clean Harbors (Night Shift).....	1
HWEC.....	4
All Wash (Day Shift).....	21
Total Staff	39

Projected Staffing Next Period
(9/02/92 - 9/08/92)

Clean Harbors (Day Shift).....	13
Clean Harbors (Night Shift).....	1
All Wash.....	24
HWEC.....	4
Total Staff	43

Estimated Costs for Period
(8/26/92 - 9/01/92)

Clean Harbors (Labor).....	\$ 33,630
Clean Harbors (Equipment & Other).....	\$ 5,000
Clean Harbors (Analytical).....	\$ 7,700
HWEC (Including subs).....	\$150,000
WTS Waste Disposal.....	\$ 9,625
Totals	\$205,955

Projected Costs Next Period
(9/02/92 - 9/08/92)

Clean Harbors (Labor).....	\$ 30,000
Clean Harbors (Equipment & Other).....	\$ 5,000
Clean Harbors (Analytical).....	\$ 5,000
HWEC (Including subs).....	\$150,000
WTS Trans & Disposal.....	\$ 9,625
Totals	\$199,625

Plan Status

Bliss Plan - CHI Complete on 6/11/92 issued to SUNY; Peter Betley has completed his review CHI to incorporate comments. OGS and UCDOH to follow. OGS comments have been forwarded for incorporation.

Scudder Plan - Complete; Post Cleaning Plan for sign off this week

Parker Plan - Complete

Coykendall Plan - SUNY comments have been incorporated and the revised plan was forwarded to UCDOH on 7/31/92. NYS forwarded comments this week that are being incorporated.

cc: A. Bernardini (SUNY)
D. Palen (Ulster County DOH)
A. Chandler (SUNY)
J. Weber (WTS)
P. Betley (SUNY)

*#2 ocean water 55 gal drums
treated by granular activated carbon to a reduced
Toxic Substance Control Act (TSCA) level.
DEC + EPA approved*



ENVIRONMENTAL SERVICES COMPANIES

24 HOUR SERVICE

P.O. BOX 1812

ALBANY, N.Y. 12201

(518) 434-0149

MEMORANDUM

TO: ALL THOSE CONCERNED

FROM: NICK NICOTRA (CHI)

DATE: SEPTEMBER 8, 1992

RE: SCUDDER ANALYSIS BOOK

PLEASE INSERT THE ATTACHED RESULT IN THE "OUTSIDE EXCAVATION"
SECTION OF THE SCUDDER ANALYSIS BOOK DATED FROM 5/92 TO 8/92.
SEE INDEX AT THE BEGINNING OF SECTION FOR LOCATION.

SINCERELY


NICK NICOTRA (CHI)

ANY QUESTIONS PLEASE CALL 257-3369

CC: DEAN PALEN (DOH)
MIKE SINGLETON (OGS)
FILE



Client: Clean Harbors of Kingston, Inc.
Sample I.D.: 208392-3 SCUDDER
Sample Type: Soil

CHAS Lab #: 9208015-01N
Date Received: 08/04/92

Polychlorinated Biphenyls (PCBs)
by EPA Method 3550/8080 (ref. c)

Extraction Date: 08/04/92
Analysis Date: 08/05/92

Parameter	MDL	Concentration	Units
PCB - Aroclor 1016	1.0	ND	mg/kg
PCB - Aroclor 1221	1.0	ND	mg/kg
PCB - Aroclor 1232	1.0	ND	mg/kg
PCB - Aroclor 1242	1.0	ND	mg/kg
PCB - Aroclor 1248	1.0	ND	mg/kg
PCB - Aroclor 1254	1.0	ND	mg/kg
PCB - Aroclor 1260	1.0	1.4	mg/kg

Notes: ND = Below minimum detectable level (MDL)
Soil/solid sample results based on sample dry weight

QA/QC

Surrogate Recovery

Acceptance Criteria

Hexabromobenzene: 114%

75-139%



✓ 8/04/92 J.D.

SENT BY:CH Analyst Serv/Wood Rd; 9-8-92 11:19AM

6178481955-

60590;# 3

[illegible]

CTM ANALYTICAL LABS, LTD
Laboratory Analysis Report
13 JUL 1992

PAGE 1

CLEAN HARBORS

CTM PROJECT #: 92.03020

32 BASK RD.

GLENNFONT

NY 12077

CTM Task #: 920625E

Attention: ALLISON SMITH

Purchase Order Number:

CTM Sample No: 920625E 01

Date Sampled: 06/24/92 Time: 00:00

Date Received: 06/25/92

Sampled By: COLLETTE

Collection Method: COMPOSITE

Sample Id: GAGE 2162492

Matrix: AIR

Location: NEW PALTZ

Parameters and Standard Methodology Used

Results

PQL

Unit

Analyst Reference

PCB-1016	NYS DOH 311-1	ND	0.5	MCG/M3	6C3D 134 7/6/92
PCB-1221	NYS DOH 311-1	ND	0.5	MCG/M3	6C3D 134 7/6/92
PCB-1232	NYS DOH 311-1	ND	0.5	MCG/M3	6C3D 134 7/6/92
PCB-1242	NYS DOH 311-1	29	2.5	MCG/M3	6C3D 134 7/6/92
PCB-1248	NYS DOH 311-1	ND	0.5	MCG/M3	6C3D 134 7/6/92
PCB-1254	NYS DOH 311-1	ND	0.5	MCG/M3	6C3D 134 7/6/92
PCB-1260	NYS DOH 311-1	2.9	0.5	MCG/M3	6C3D 134 7/6/92
EXTRACTION FOR PCBs	NYS DOH 311-1	EXTRACTED			DO 6/25/92
TOTAL VOLUME		1.0		M3	

REMARKS:

AUTHORIZED FOR RELEASE:

Tom Mink

LEGEND: MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM

COUNTY OF ULSTER

300 Flatbush Avenue
P.O. Box 1800
Kingston, New York 12401

x.c. 14
BA 701
KB

HEALTH DEPARTMENT

Masood Ansari, M.D.
Commissioner of Health
Patricia J. Cicale, R.N., M.S.
Director of Patient Services
Dean N. Palen, P.E., M.B.A.
Director of Environmental Sanitation
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Medical Examiner



(914) 338-8443
FAX (914) 338-8443 ext. 200

August 21, 1992

Dr. Alice Chandler, President
State University of New York
College at New Paltz
Route 32 South
New Paltz, NY 12561

Dear Dr. Chandler:

In consultation with the New York State Department of Health, I have reviewed the recently received PCB wipe, Dioxin/Furan wipe and air sample results from Clean Harbors Analytical Services, Inc., ETC. Laboratories, Ltd., the Wadsworth Center for Laboratories and Research, Twin City Testing Corp. and C.T.M Analytical Labs. for Scudder Hall.

In recognition of the sample results being below the clean up level, the department recommends that Scudder Hall, Building #20, can be reopened for general admission with the exception of the isolated area surrounding the former vault.

If you have any questions regarding this recommendation, please contact me.

Sincerely yours,

A handwritten signature in black ink that reads "Dean N. Palen".

Dean N. Palen, P.E., MBA
Director of Environmental
Sanitation Division
Ulster County Health Department

DNP/ds
Attachment

cc: Dr. Ansari, Ulster County Health Dept.
Mark Knudsen, NYS Department of Health
Kristine Edwards, NYS Office of General Services
Lindo Signorelli, SUNY Office for Capital Facilities
Paul Pukk, Clean Harbors



ENVIRONMENTAL SERVICES COMPANIES

24 HOUR SERVICE

32 BASK ROAD
GLENMONT, NY 12077
(518) 434-0149
(518) 434-9118 (FAX)

Aug. 21, 1992

Mr. Dean N. Palen, P.E., MBA
Director of Environmental Sanitation Division
Ulster County Health Department
300 Flatbush Avenue
Kingston, New York 12401

Dear Mr. Palen:

Due to the recently received PCB wipe, Dioxin/Furan wipe and air sample results received from, Clean Harbors Analytical Services Inc., ETC. laboratories, the Wadsworth Center for Laboratories and Research, Twin City Testing Corp., and C.T. Male, and in consideration of the levels of contamination which are acceptable for occupancy, as developed by your Department, we feel that Scudder Hall, except the immediate former vault area, fulfills the requirements.

Access shall be restricted to the isolated area surrounding the former vault until additional evaluation has been performed.

If you have any questions about these buildings or any other items pertaining to this job please do not hesitate to contact us.

Sincerely,

Paul Pukk
Senior Project Manager
Clean Harbors of Kingston, Inc.

cc: Kristine Edwards, NYS Office of General Services
Mark Knudsen, NYS Department of Health
Dr. Ansari, Ulster County Health Dept.



ENVIRONMENTAL SERVICES COMPANIES

24 HOUR SERVICE

P.O. BOX 1812

ALBANY, N.Y. 12201

(518) 434-0149

February 26, 1992

Mr. Dean N. Palen, P.E., MBA
Director of Environmental Sanitation Division
Ulster County Health Department
300 Flatbush Ave.
Kingston, New York 12401

Please find attached the plans for cleaning and opening the following buildings on the State University of New York campus in New Paltz:


Building: Scudder Hall


Revision 3.2

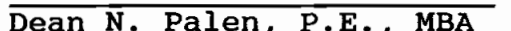
I have received, reviewed and approved this plan.

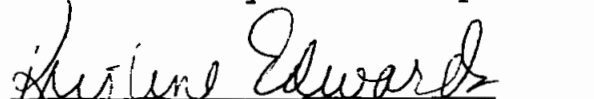

Paul Pukk
Clean Harbors of Kingston

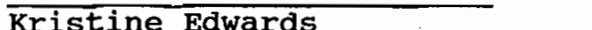
I have inspected the completed work and it meets my approval.



Paul Pukk
Clean Harbors of Kingston



Dean N. Palen, P.E., MBA
Ulster County Health Dept.

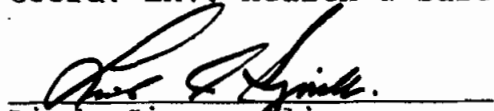

Dean N. Palen, P.E., MBA
Ulster County Health Dept.



Kristine Edwards
NYS Office of General Services


Kristine Edwards
NYS Office of General Services


Peter Betley
SUNY New Paltz
Coord. Env. Health & Safety


Peter Betley
SUNY New Paltz
Coord. Env. Health & Safety


Lindo Signorelli
SUNY
Facilities Mgt. & Support


Lindo Signorelli
SUNY
Facilities Mgt. & Support

SUNY

Page 1.0 Rev. 3.2

Scudder Cleanup Plan

02/26/92

One hundred percent of the student rooms were PCB wipe sampled. Additional Dioxin / Furan samples were also taken. In light of the data from these samples the clean up plan for Scudder Hall shall be broken up into two components; 1. the basement level and 2. the rest of the building.

Carpeting in all public areas shall be removed, bagged and disposed. Special care shall be taken to apply the removal force in a horizontal direction to minimize disruption to the sub-surface. All student rooms in the immediate area of carpet removal must be appropriately sealed to prevent inadvertent fugitive contamination migration. Areas where carpet removal is to be performed shall be segregated prior to removal of any carpets.

Basement Level Clean Up Plan

Emptying - Student Rooms B1, B6, B7, and B8 of the basement level of Scudder shall be emptied. All structurally nonessential items (excluding doors, plumbing fixtures and other large costly non-porous items that are easily cleaned and sampled) shall be removed and disposed of. All rugs shall be removed and disposed of. These items are SUNY property. The disposal decision for these items is based on economics. The cleaning, sampling and documentation process to verify maintaining these items would cost more than their worth. All student belongings within these rooms shall be removed and stored in a secure clean area restricted from public access. All other student rooms will remain locked until the cleaning is complete and approvals have been issued by appropriate authorities. These rooms shall be appropriately sealed prior to initiating basement level cleaning activities.

Double Wash & Rinse - High pressure steam units shall be used in public areas (halls, bath rooms, janitors closets, maintenance room, laundry rooms) and rooms B1, B6, B7, and B8 of the basement of Scudder. Floors, walls and high contact surfaces shall be cleaned within student rooms (B1, B6, B7, & B8) and all public areas within the basement. Floors, walls, ceilings and high contact surfaces shall be cleaned within the vault. All rinse waters and cleaning solutions shall be captured for off site disposal. Dikes made of wood sealed with with silicone beads shall be utilized to control the migration of rinse waters. Polyethylene curtains will prevent over spray and recontamination of previously cleaned areas.

A performance based cleaning standard will be used to assure that the production rate does not increase to a point where cleaning effort becomes ineffective. The performance standard will be a maximum of 2000 square feet of surface area per hour per three man team. The three man team consists of one person using a steam / water / detergent high pressure cleaning unit with the second person using a squeegee to corral the solution and a third person using a high volume high capacity dry/wet vacuum to contain the waters. Washing will begin in the student rooms to be cleaned and extend to the hallways.

A complete PCB type cleanup of the transformer vault and immediate area shall be performed. This cleanup will include the isolation of that area, double wash/double rinse, and post sampling of this level. Additional cleaning of areas that do not test clean may be required. Secondary cleaning of the vault and areas where PCB oil may have puddled shall include Penetone cleaning (Penetone Cleaning Procedure is included herein.) Additional work may include demolition of some areas in the immediate area of the transformer vault.

Testing - Post Cleaning Sampling of all rooms that are cleaned in the basement shall take place. Samples will be taken from horizontal or high contact surfaces. Sample sizes will be a total of 900 square centimeters per room. Three composite samples each of 300 square centimeters shall be taken. This will allow for three separate areas to be sampled. The area near the vault which exhibited dioxin presence prior to cleaning shall be tested for dioxins post cleaning (one composite wipe sample). Prior to re-occupancy one high volume air sample shall be taken from each level and analyzed for PCB / Dioxin / Furan.

Recleaning or Surface removal - Areas which exhibit PCB concentrations above the criteria set by the State Department of Health shall be recleaned or further remediated. Scarification, jackhammering and / or demolition may be included within this phase. Care must be taken to control migration of air borne contamination.

Retesting - Areas which require recleaning or surface removal shall be re-tested.

Basement Electrical Room

Initial results of the electrical room indicate levels below the occupancy criteria. Additional wipe sampling of the electrical room shall be performed to ensure that the initial result is indicative of the general area. Prior to opening Scudder Hall a high volume air sample will be taken within the energized Electrical Room and analyzed for PCB's.

First Second & Third Floors

On the first, second, and third floor an Industrial Cleaning of all Public access areas will be performed. This includes lounges, janitor's closets, and bathrooms. Because past experience has shown that janitor's closets exhibit contamination, cleaning of janitors closets and bathrooms will be performed prior to sampling these areas. All chemicals and materials located within the janitors closets shall be appropriately lab packed and disposed of prior to cleaning.

Confirmation sampling will be provided in areas that were cleaned.

All mats in the public areas on all floors will be removed and disposed of.

Items encountered in rooms that are to be cleaned on levels other than the basement will be handled according to the procedure for dealing with items in cleaned rooms (attached).

Analytical results of a sample taken in the Directors Office indicate the presence of PCB contamination. This area shall be emptied & cleaned in accordance with the cleaning procedures for basement rooms B1, B6, B7 & B8 mentioned above.

Additional Sampling

Rooms 231, 201, 307, 316, 317, 320, 321 & 322 had hits above .2 micrograms per 100 square centimeters. Because the protocol utilized a composite sample from 4 surfaces then there is a potential that one of these surfaces tested may have exceeded the established occupancy criteria of 1 microgram per 100 centimeters squared. To confirm that the highest existing concentration is the occupancy criterion, four additional samples shall be taken in each of these rooms. Each wipe sample shall include an area of 900 centimeters squared, and shall be from a high contact horizontal surface which has not been wiped in a previous sampling.

Rooms B1, B6, B7 & B8 shall be sampled with the protocol mentioned above prior to moving any of the contents or initiation of cleaning activities in these rooms. Analytical results of these samples will verify the original sampling results for these rooms.

Documentation of Items Disposed

The Clean Harbors on site representative will document State property that is disposed of (i.e. rugs, tools, maintenance supplies). All personal possessions will be bagged and stored in a clean secure location restricted from public access.

Related Procedures Included With This Plan

1. Industrial Washing Procedure
2. Procedure for Pressure Washing Vault With Penetone
3. Procedure for Dealing With Items in Cleaned Rooms

Attachments

- A. Scudder Wipe Sample Map
- B. Carpeted / Tile Floors (Level of Protection)

PROCEDURES - PCB CLEANUP
REVISION 2.0
JANUARY 27, 1992
PAGE 1

INDUSTRIAL WASHING - To be used in areas that are to be occupied

Using a solution of water, trisodium phosphate, and a commercially available detergent (which has good surfactant characteristics) prepare to enter the work zone under the proper level of protection. Additional materials and equipment include spray units (such as those used to apply chemicals to gardens), sponge mops, long handled brushes (with relatively stiff bristles), 3 five gallon buckets (or equivalent), 17C drums for storage of wash and rinse water, 17H drums for storage of used brushes and mops.

Step 1. Remove all articles from the work area. Mats, clothing, towels etc. located on the floor should be containerized for disposal while larger items such as furniture should be relocated onto polyethylene sheeting for later evaluation. Inventory all discarded materials and provide a written report with any and all serial numbers to the OGS office.

Step 2. Apply cleaning solution to surface to be cleaned with either a sponge mop or brush. Do not use excessive wash solution but make sure the area is thoroughly wetted and the solution thoroughly worked into the surface. If additional solution is required on the sponge or brush it must be dipped into a rinse bucket of water before it is dipped into the wash solution bucket to avoid contamination of the wash solution. The rinse solution bucket and wash solution bucket contents should be changed frequently to avoid the spread of the contaminant. The mop or brush should be discarded on a regular basis and replaced with a new unit frequently to avoid cross contamination. All work should progress from the upper levels of the building to the lower levels or the lowest contamination level to the highest. Deviations from this plan will be made on a case by case basis. Avoid traffic in washed areas.

Step 3. Rinse the solution with a bucket of water and mop. The mop should not have been used in the washing step. The water and mop should be discarded and replaced frequently to avoid cross contamination. Avoid traffic in these areas until dry and samples have been obtained, if necessary.

STATE UNIVERSITY OF NEW YORK
NEW PALTZ
PRESSURE WASHING VAULTS WITH PENETONE 2389
PAGE 1.0 REV. 1.0
2/13/92

PURPOSE: To perform secondary washings on transformer vaults to remove surface PCB and dioxin/furan contamination.

APPLICATION: To apply the Penetone 2389 to the transformer vault surfaces use a high pressure steam washing unit (about 2000 psi at nozzle with 30 degree fan holding less than 6 inches from surface) with a solvent injection fixture. Since this unit produces carbon monoxide, as well as other noxious vapors, it will be operated outside the building but within 200 feet of the vault. The Penetone 2389 should be applied using the solvent injection fixture. If the rate of addition is adjustable it should be adjusted to between 1 part Penetone to 5 to 10 parts of water/steam. It should be noted that at this concentration the mixture is extremely corrosive and will produce a slippery feeling when applied to unprotected skin. Contact with skin should be avoided at all costs and overspray into unaffected areas avoided as well. Collection of all wash solutions as well as rinse solutions should be immediate, since this is a very good solvent which will make the PCB mobile and therefore if not properly handled will spread the PCBs as well as it removes it from surfaces. To collect the wash and rinse water the remainder of the wash and rinse crew should consist of two additional individuals. The first crew member will apply the solutions to the contaminated surfaces, the second member will herd the solutions on the floor to the third individual whom equipped with a vacuum system will immediately collect the wash and rinse solutions. The collected wash and rinse solutions should be stored in suitable containers for PCB liquid transportation and disposal.

After application of the initial solution the first rinse may be applied with either cold or steam pressure. The rinse will be immediately collected.

The second wash solution should be a dilution of 1 part Penetone to over 20 parts water.

The last rinse should be cold water with a large quantity of water to reduce the corrosive aftereffects of the wash solution.

After the last rinse a pH should be taken to assure that the surfaces of the vault do not present a physical contact hazard. If the pH is under 3 additional water and/or a solution of bicarbonate of soda and water should be added to lessen the hazard.

Sampling will be conducted after the last rinse to determine the effectiveness of the solvent washing.

CLEANING PROCEDURE**ALL BUILDINGS****PROCEDURE FOR DEALING WITH ITEMS IN CLEANED ROOMS.**

NOTE: Rooms that are found open, can be locked, and were not scheduled for cleaning will be locked. A note to that effect entered in the appropriate log book.

Rooms in the Public areas that are scheduled for cleaning which contain personal items will be cleaned. To assure that the cleaning can be documented to a satisfactory degree and that the items do not impair the progress of the cleaning the items will have to be either relocated or removed and disposed of. The general rules will be:

1. Low value, porous, high contact items: such as magazines, paper towels, toilet paper, fabric towels, etc.
2. High value, porous, high contact items: such as fabric covered sofas and chairs, mattresses, protective athletic clothing, etc.
3. High value, impervious items: such as plastic furniture, bicycles, wooden furniture with a good intact finish, etc.
4. Low value, impervious items: such as food associated items, plastic crates, and children's' play things, pens, etc.

Items in categories 1, 2, and 4 will be removed, in a fashion that will not release or spread any contaminants, and stored as if they were PCB contaminated materials. Final disposal will be dependent on testing.

Items in category 3 will be placed on polyethylene sheeting in a previously cleaned area after Industrial Cleaning of all surfaces that can be considered high contact (see examples below). If there is any likelihood that a surface is or may become a high contact surface, it will be cleaned following the Industrial Cleaning procedures.

Examples of High Contact Surfaces to be Cleaned for Category 3 Items:

Plastic Furniture: Chairs - seat, back of chair, arm rests
Bicycles - seat and handle bars
Tables - top, edges

Scudder Hall Clean Up Plan
Addendum # 1 Revision 2.0
4/15/92

Scope: Various items were encountered during the clean up of the basement of Scudder Hall. Detailed plans for each area of concern are as included herein. The specific items to be addressed are as follows:

1. Demolition of the Scudder Vault
2. Clean Up Plan for Room B1
3. Floor Surfaces of Rooms Not Previously Cleaned
4. Clean Up Plan for Room Fur. S1
5. Clean Up Plan for Storage Room 1
6. Limited Vent Sampling Plan
7. Clean Up Plan for Luggage Rooms 1 & 2
8. Cleaning of Scudder Hall electrical room
9. Vent Cleaning Plan

1.0 Demolition of Scudder Vault

Analytical results from the first round of sampling post penetone washing in Scudder Hall have returned. The results have been quite encouraging.

		Vault Results
Location	PCB Conc.	Description
Floor	150 ug/100cm ²	Concrete Surface
Ceiling	220 ug/100cm ²	Concrete covered with asbestos
North Wall	210 ug/100cm ²	Double Brick Wall (common with Elec. Room)
South Wall	4300 ug/100cm ²	CMU / Brick Wall (exterior wall, stairs)
East Wall	210 ug/100cm ²	CMU / Brick Wall (Wall with cut out)
West Wall	420 ug/100cm ²	Brick / CMU wall (common to hall)

The two highest results were in the path that the PCB oil followed during the event. All the vault walls are double walls. The surface on the vault side is listed first with the outside or adjacent wall material listed second. Because there is potential that PCB's may have become trapped in the space between the two walls demolition will be required.

1.1 Ceiling Asbestos Removal

The ceiling of the vault is covered with an asbestos insulating material. This material shall be removed in accordance with regulations for asbestos removal. The asbestos debris shall be disposed of as high level PCB waste. Care shall be taken to ensure that no release to the environment occurs during the handling of the debris.

1.2 Wall Demolition

NOTE: PRIOR TO PERFORMING DEMOLITION ACTIVITIES WRITTEN APPROVAL IS REQUIRED FROM THE OGS SENIOR BUILDING CONSTRUCTION ENGINEER.

Each wall of the vault is a double wall (see the chart in section 1.0 for materials of construction). The exterior walls can not free stand with the interior walls removed. Prior to removing the interior walls an isolation wall shall be constructed on the outside face of the

exterior walls. This wall shall include a poly sheeting barrier to prevent the mitigation of dust into the environment during demolition activities

All electrical equipment in the electrical room shall be properly protected from dust and debris damage prior to initiating demolition of the vault wall adjacent to the electrical room.

The floor and ceiling surface shall be covered with poly sheeting prior to initiating any demolition activities. Because demolition activities tend to generate dust, the entire room shall be put under negative pressure and ventilated outside through carbon impregnated HEPA filters. Once demolition of a wall surface is complete the remaining inside wall (if remaining) shall be covered with poly sheeting to prevent contamination during demolition of adjacent walls. All four interior walls of the vault shall be removed. Jackhammers, chipping guns and hand tools shall be utilized to demolish the existing walls. Care shall be taken to avoid disturbing the secondary wall surface. The two walls may be interlocked. If the inner wall cannot be removed without destroying the outer wall then cease all work activities and contact Clean Harbors. Debris generated during this activity shall be considered PCB waste and stored in the high level roll-off containers. Care shall be taken to ensure that no release to the environment occurs during the handling of the debris.

1.3 Floor Surface Removal

To expedite cleaning of the vault floor 1/8" of floor surface shall be removed. Chipping, Jackhammering or other suitable means shall be utilized to facilitate this removal. Debris generated during this procedure shall be handled in accordance with the procedure for handling PCB waste. A water spray shall be applied to the removal device during surface removal to decrease the generation of dust. The room shall be put under negative pressure with discharge air being filtered through a carbon impregnated HEPA filter. Care shall be taken to ensure that no release to the environment occurs during handling of the debris. The floor shall be water washed immediately post cleaning to remove any loose debris.

1.4 Post Demolition Cleaning

Once all demolition activities are complete, the entire vault shall be double washed and rinsed with a high pressure steam washing unit. A water, trisodium phosphate, and commercially available detergent (which has good surfactant characteristics) shall be utilized for this cleaning activity. Care shall be taken to corral and capture all rinse waters as soon as they are distributed onto the surface to be cleaned. No free liquid shall be left on the floor or wall surfaces. Generated liquids shall be stored in containers suitable for PCB liquid disposal. NOTE: PENETONE SHALL NOT BE UTILIZED FOR THIS CLEANING PROCESS.

1.5 Post Sampling

Once all cleaning activities have been completed the floor, ceiling and all remaining wall surfaces shall be sampled in accordance with the

procedure for "Sampling Effected Building Vaults". The results shall be reviewed by the Clean Harbors and the UCDOH to determine if additional action is required.

2.0 Clean Up Plan for Room B1

There were 6 samples taken in room B1, the results are as included in the table below:

Sample Location	Type	Date	Result
Floor	900 cm2	1/1/92	4.2ug/100cm2
Various locations	4x225 cm2	2/11/92	N/D
Left desk	900 cm2	2/28/92	.1ug/100cm2
Fridge left	900 cm2	2/28/92	N/D
Desk	900 cm2	2/28/92	N/D
Dresser on right	900 cm2	2/28/92	N/D

Based on these results and the fact that the 4.2 result was taken from the floor the cleaning plan for room B1 shall be downgraded. It is possible that the floor result may have been a product of tracking from the "emergency response" phase of the project. Therefore room B1 shall be sealed during public access area cleaning of the basement level. With the completion of Public Access area cleaning in the basement room B1 shall be cleaned in accordance with section 3.0 of this document.

3.0 Floor Surfaces of Rooms Not Previously Cleaned

Through out the cleaning process access was restricted from non public access areas within the buildings. When access to non public rooms was required double booting and double gloving was performed prior to entering. This process minimizes the likelihood of tracking contamination into the "Clean Rooms". Prior to cleaning, contamination levels above the re-occupancy criterion existed in all floors of Scudder Hall. Due to the spread of contamination in public areas it is recommended that all floor surfaces within Scudder Hall be industrial cleaned prior to re-occupancy.

3.1 Procedure

Once all areas that require cleaning are cleaned and post sampling is complete, isolation measures of rooms not requiring cleaning shall be removed. The area which was covered by the isolation measure shall be industrial cleaned. Floor surfaces in every room which did not require cleaning shall be industrial cleaned. Care shall be taken to minimize the generation of water during this operation. Any throw rugs or other floor coverings shall be disposed of as industrial waste. Doorknobs shall also be cleaned during this cleaning activity. This activity shall be performed in modified level "D".

3.2 Post Cleaning Sampling

Since analytical results of wipe samples taken from high contact horizontal surfaces indicate that the individual rooms meet the established re-occupancy criteria no post cleaning sampling is required.

4.0 Clean Up Plan for Room Fur. S1.

This room is adjacent to the electrical room and vault. The door on this room which faces the vault has louvers. Because of the contamination levels in that area, this room shall be cleaned in accordance with the cleanup plan for the "immediate area of the vault". One four part composite wipe sample shall be taken within this room to verify the success of cleaning activities.

5.0 Clean Up Plan for Storage Room 1 (in basement)

In the original version of the clean up plan this room was considered public access. In actuality this room has the same segregation from public access areas as student rooms (locked door). The result from a four part composite sample taken in this room was .1 ug/100cm². The room was isolated from the public access areas during cleaning of these areas. This room shall be cleaned in accordance with section 3.0 of this addendum.

6.0 Limited Vent Sampling Plan

Janitors closets, bathrooms and laundry rooms are vented to the roof. The vents on the basement level closest to the vault area have been PCB wipe sampled. Vents in the following basement rooms have been sampled: room F Help, Laundry Room, Lin Sr and Bath SRN01. Results are as indicated below:

<u>Room Name</u>	<u>Result (ug/100cm²)</u>
F Help	3.4
Laundry Room	0.3
Lin Sr	5.6
Bath Srn01	0.7

Because the results for rooms F Help and Lin Sr are above the established re-occupancy criteria cleaning shall be required. The extent of the cleaning effort shall be defined through additional sampling. All roof stacks shall be sampled (one 900 cm² sample per stack). Room F Help and Lin Sr are attached to the same ventilation system. This system shall be cleaned in accordance with section 9.0 of this document.

7.0 Clean Up Plan for Luggage Rooms 1 & 2 (Basement Level)

Four part composite samples were taken from Luggage Rooms 1 & 2 in the basement of Scudder Hall. Analytical results of the samples indicate levels of .2 mg/100cm² and N/D for the two rooms. Prior to cleaning of adjacent public access areas these rooms shall be sealed. Once all public access areas have been cleaned and sampled these rooms shall be cleaned in accordance with section 3.0 of this document

8.0 Electrical Room Cleaning Plan

The electrical room in Scudder Hall is directly adjacent to the vault. There are conduits that penetrate the wall between the two rooms. These conduits and penetrations were a direct path for PCB's during the incident. This plan shall address the disposition of equipment within this room and cleaning of this room.

8.1 Pre-Work Sampling

9.0 Vent Cleaning Plan

Effectuated vent systems in Scudder Hall shall be cleaned in accordance with this plan. All vent systems in Scudder hall are exhaust type vents (no supply).

First review the diagrams to locate the beginning, all legs and termination point of all vent systems. At the termination point of each vent place a 55 gallon drum, so that any fluids which exit the system will be contained. During cleaning of a venting system one person shall be stationed at each system termination point. Cleaning will start at the roof exit points and continue down through the building to each source. Cleaning will be accomplished using a 5% solution of Penetone and water which will be applied with a snake, which is commonly used to clean out drains, which will have an absorbent material attached to the cleaning end, such as cotton or 3M absorbent pads. This solution application device will be introduced into the duct system on the roof and extended in a way that all branches are contacted. The absorbent material will be replaced at the end of each cleaning and disposed of, as high contact material. After each cleaning new absorbent material will be used to clean out the duct system with water, to remove any residue. Any liquids collected in the drums can be consolidated into a single container, marked with a description of the contents and disposed of as the concentration of the samples from the ductwork indicate.

9.1 Post Cleaning Sampling

After cleaning a draft will be induced by placing a fan on the roof exit of the duct work system and the exhaust from that fan be monitored for a full 8 hrs. One high volume air sample shall be taken during this period and analyzed for PCB concentrations.



SUNY

Scudder Special Items for Consideration

03/04/92

Page 1.0 Rev 1.0

Document # 3049205

Scope: There are special items that need to be considered for cleaning, temporary staging, or disposal in Scudder Hall. This document is to address these items.

Water Coolers - These water coolers are built into the walls with the compressors built into a space in the walls. These compressors will be removed for disposal while the stainless steel water distribution devices will be disposed of.

Vents in bathrooms and Janitor's closets - One sample consisting of 100 square centimeters each will be taken from each vent. Every 9 samples will be composited with the composites and locations of each sample recorded.

Chemicals and materials in Janitor's closets - Will be removed and placed into compatible groups inside 17H drums with no packing materials and only the bottom 1/3 of the drum shall be packed. The drums will be transported to a central labpacking area by the CONTRACTOR. Clean harbors will perform the initial segregation and assist in the final labpacking. The Janitor's closets can then be cleaned. Post cleaning sampling will be performed.

Fire Extinguishers - These have cabinets that are built into the walls. The worst case example will have the inside of the cabinet wiped. The wipe area will be 900 square centimeters. The area wiped will not include the space that was covered by the extinguisher. The worst case extinguisher will have the highest wipe sample reading in the immediate area. If the worst case is not the case that is ajar with the broken glass, that extinguisher will be disposed of and the case cleaned. The result will/may dictate the fate of the other extinguishers.

Vending Machines - will be surface washed and all the items in that machine removed. The machine will then be returned to the vending company. If the vending company does not want the machine returned it will be disposed of.

Unit Kitchen - These are valued over \$ 2000.00 and therefore will be considered for cleaning. All surfaces will be cleaned with first a strong commercial cleaner. The inside of the stove will be cleaned with a strong oven cleaner with a base of strong alkaline. One of these areas will be segregated from the rest of the building. All the available

units will be activated. The units do not have to run at full potential, but rather a reasonable ordinary operating temperature. A high volume area sample will be collected for 8 consecutive hours. The acceptable air loading will be determined at the time the results are evaluated. A one part 900 square centimeter sample will be taken from a high contact surface. The first unit that has an air and wipe sample taken will possibly serve as a model for the remaining units.

Postal Boxes - Will have only the outside surface cleaned as if it were a wall surface. In addition, the inside surfaces of the letter boxes will be cleaned since envelopes are handled and sometimes retained. The paper from which most envelopes are constructed are very porous.



Scudder Hall Clean Up Plan
Addendum # 1 Revision 2.0
4/15/92

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The two highest results were in the path that the PCB oil followed during the event. All the vault walls are double walls. The surface on the vault side is listed first with the outside or adjacent wall material listed second. Because there is potential that PCB's may have become trapped in the space between the two walls demolition will be required.

1.1 Ceiling Asbestos Removal

The ceiling of the vault is covered with an asbestos insulating material. This material shall be removed in accordance with regulations for asbestos removal. The asbestos debris shall be disposed of as high level PCB waste. Care shall be taken to ensure that no release to the environment occurs during the handling of the debris.



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NOTE: PRIOR TO PERFORMING DEMOLITION ACTIVITIES WRITTEN APPROVAL IS REQUIRED FROM THE OGS SENIOR BUILDING CONSTRUCTION ENGINEER. Each wall of the vault is a double wall (see the chart in section 1.0 for materials of construction). The exterior walls can not free stand with the interior walls removed. Prior to removing the interior walls an isolation wall shall be constructed on the outside face of the exterior walls. This wall shall include a poly sheeting barrier to prevent the migration of dust into the environment during demolition activities.

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1.4 Post Demolition Cleaning

Once all demolition activities are complete, the entire vault shall be double washed and rinsed with a high pressure steam washing unit. A water, trisodium phosphate, and commercially available detergent (which has good surfactant characteristics) shall be utilized for this cleaning activity. Care shall be taken to corral and capture all rinse waters as soon as they are distributed onto the surface to be cleaned. No free liquid shall be left on the floor or wall surfaces. Generated liquids shall be stored in containers suitable for PCB liquid disposal. NOTE: PENETONE SHALL NOT BE UTILIZED FOR THIS CLEANING PROCESS.

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Based on these results and the fact that the 4.2 result was taken from the floor the cleaning plan for room B1 shall be downgraded. It is possible that the floor result may have been a product of tracking from the "emergency response" phase of the project. Therefore room B1 shall be sealed during public access area cleaning of the basement level. With the completion of Public Access area cleaning in the basement room B1 shall be cleaned in accordance with section 3.0 of this document.

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3.1 Procedure

Once all areas that require cleaning are cleaned and post sampling is complete, isolation measures of rooms not requiring cleaning shall be removed. The area which was covered by the isolation measure shall be industrial cleaned. Floor surfaces in every room which did not require cleaning shall be industrial cleaned. Care shall be taken to minimize the generation of water during this operation. Any throw rugs or other floor coverings shall be disposed of as industrial waste. Doorknobs shall also be cleaned during this cleaning activity. This activity shall be performed in modified level "D".

3.2 Post Cleaning Sampling

Since analytical results of wipe samples taken from high contact horizontal surfaces indicate that the individual rooms meet the established re-occupancy criteria no post cleaning sampling is required.

4.0 Clean Up Plan for Room Fur. S1.

This room is adjacent to the electrical room and vault. The door on this room which faces the vault has louvers. Because of the contamination levels in that area, this room shall be cleaned in accordance with the cleanup plan for the "immediate area of the vault". One four part composite wipe sample shall be taken within this room to verify the success of cleaning activities.

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Because the results for rooms F Help and Lin Sr are above the established re-occupancy criteria cleaning shall be required. The extent of the cleaning effort shall be defined through additional sampling. All roof stacks shall be sampled (one 900 cm² sample per stack). Room F Help and Lin Sr are attached to the same ventilation system. This system shall be cleaned in accordance with section 9.0 of this document.

7.0 Clean Up Plan for Luggage Rooms 1 & 2 (Basement Level)

Four part composite samples were taken from Luggage Rooms 1 & 2 in the basement of Scudder Hall. Analytical results of the samples indicate levels of .2 mg/100cm² and N/D for the two rooms. Prior to cleaning of adjacent public access areas these rooms shall be sealed. Once all public access areas have been cleaned and sampled these rooms shall be cleaned in accordance with section 3.0 of this document

8.0 Electrical Room Cleaning Plan

The electrical room in Scudder Hall is directly adjacent to the vault. There are conduits that penetrate the wall between the two rooms. These conduits and penetrations were a direct path for PCB's during the incident. This plan shall address the disposition of equipment within this room and cleaning of this room.

9.0 Vent Cleaning Plan

Effected vent systems in Scudder Hall shall be cleaned in accordance with this plan. All vent systems in Scudder hall are exhaust type vents (no supply).

First review the diagrams to locate the beginning, all legs and termination point of all vent systems. At the termination point of each vent place a 55 gallon drum, so that any fluids which exit the system will be contained. During cleaning of a venting system one person shall be stationed at each system termination point. Cleaning will start at the roof exit points and continue down through the building to each source. Cleaning will be accomplished using a 5% solution of Penetone and water which will be applied with a snake, which is commonly used to clean out drains. The snake will have an absorbent material attached to the cleaning end, such as cotton or 3M absorbent pads. This solution application device will be introduced into the duct system on the roof and extended in a way that all branches are contacted. The absorbent material will be replaced at the end of each cleaning and disposed of as high contact material. After each cleaning, new absorbent material will be used with water to clean out the duct system and remove any residue. Any liquids collected in the drums can be consolidated into a single container, marked with a description of the contents and disposed of as the concentration of the samples from the ductwork indicate.



9.1 Post Cleaning Sampling

After cleaning a draft will be induced by placing a fan on the roof exit of the duct work system and the exhaust from that fan be monitored for a full 8 hrs. One high volume air sample shall be taken during this period and analyzed for PCB concentrations.



SUNY
06/26/92
SCUDDER ADDENDUM #1
Page 1.0 Rev. 1.0
Document # 6269201

Scope: To define extra work efforts involved in the remediation of Scudder Hall beyond those initially outlined in the cleanup plan.

Transformer Vault Subsurface- During decontamination of the transformer vault area it became apparent that some contamination had penetrated the concrete slab. To assess the extent of contamination an EPA approved grid was established on the soil remaining after removal of the obviously contaminated soils to 16 inches below grade. See document # 6059203 "Subsurface Investigation", see document 5269201 "Scudder vault Sampling".

A series of samples and excavation then occurred until it was determined that the contamination had been removed. See Document 6099205 "Scudder Vault Results" and 6179201 "Scudder Vault Results".

Lateral migration of PCBs through the backfill under the transformer slab, adjacent rooms and along pipes became a concern. A sampling plan was developed and implemented to determine the extent, if any, of horizontal contamination migration. See document # 6179202 "Scudder Vault Perimeter". This defined the extent of contamination which was then remediated.

External Migration- Though it is unlikely that any contamination has migrated outside the building it is prudent to confirm this. A procedure was developed to assess this possibility for all the effected buildings. See document # 6189201 "PCB Environmental Migration Evaluation".

Columns and Beams- Some of the columns and beams that were necessary for the structural support of the vault area did not conform to the cleanup goals after initial cleaning efforts. Additional cleaning using an aggressive chlorinated solvent based cleaner was used to remove this stubborn residue.



SUNY
06/26/92
Scudder Addendum #1
Page 2.0 Rev 1.0
Document # 6269201

Electrical Conduits- Sampling results from some buildings indicated that 220 volt and in some cases 110 volt electrical conduit may have been a partial route for contamination transmission. A representative amount of these were sampled in the most likely to be effected areas with negative results. See Results, attached.

Vents- It has been determined that the vents were a route of contamination migration. See pre-cleaning sample results, attached. A method for cleaning was developed and implemented. See Document # 4229202 "Vent Cleaning". The method was successful and the post cleaning results are enclosed.