

# **PCB Management Plan**

Last Reviewed Date: 11/20/2018 Effective Date: 7/23/2018 Applies to: Faculty, Staff, Students, Others For More information Contact: UConn Department of Environmental Health and Safety (EHS) at 860-486-3613 or ehs@uconn.edu

#### I. Purpose

This plan has been developed to provide a framework for maintenance, renovation, and demolition work in University buildings that could impact certain building materials, such as caulks, glazing compounds, and other joint sealants, that contain or may contain polychlorinated biphenyls (PCBs).

#### II. Background

Certain building materials, such as caulk and glazing compound, manufactured from the 1950s through 1978 may contain PCBs, which improved resiliency and durability. These materials are primarily found in water- and weather-proofing applications associated with masonry expansion joints and door/window systems. The manufacture and use of PCBs, which are regulated by the U.S. Environmental Protection Agency (EPA) under the Toxic Substances Control Act (TSCA), were largely banned in the United States in 1978. Until very recently, the EPA's PCB regulations under TSCA essentially addressed only liquid PCB spills and building materials contaminated by such spills, and were silent on the issue of existing PCB-containing products left in place.

However, the EPA recently issued several guidance documents discussing the issue of PCBs in caulk and related materials, and recommending certain actions to protect the health and safety of trade workers, building occupants and the environment. The recommended actions are incorporated into this PCB Management Plan.

#### III. Scope

This plan applies to all faculty, staff, students, and all other University personnel working at the University of Connecticut (UConn) Storrs, regional campuses and the Law School. It pertains to maintenance, renovation and demolition activities impacting caulks, glazing compounds, and joint sealants in buildings constructed prior to 1980. <u>Appendix A</u> provides a list of buildings constructed after 1979 at the University. Because these buildings were constructed after PCBs were banned they are exempt from this PCB Management Plan.



#### IV. Policy Statement

As stated in the University's <u>Health and Safety Policy</u>, UConn is committed to providing a healthful and safe environment and complying with federal and state health and safety standards. As such, all maintenance, renovation, or demolition activities affecting potential PCB-containing materials at UConn must be in accordance with this PCB Management Plan.

#### V. Enforcement

Violations of this PCB Management Plan may result in appropriate disciplinary measures in accordance with University By-Laws, General Rules of Conduct for All University Employees, applicable collective bargaining agreements, and the University of Connecticut Student Code.

#### VI. Responsibilities

- A. Department of Environmental Health and Safety (EHS)
  - 1. Serves as University lead for conducting or overseeing regulated building material management.
  - 2. Works with appropriate staff to establish a project-specific or job-specific approach to regulated building material management.
  - 3. Maintains the UConn Contractor EHS Manual.
  - 4. Provides guidance on worker health and safety and public health issues related to PCBs.
  - 5. Provides training to affected employees in accordance with this PCB Management Plan.
  - 6. Ensures proper waste characterization has been completed.
  - 7. Signs off on all PCB and regulated building material hazardous waste manifests.
  - 8. Reviews intended disposal facilities for projects.
  - 9. Maintains the central repository for waste manifests.
  - 10. Maintains copies of all regulated building material sampling records and abatement documentation.
- **B.** Each department employing maintenance and custodial employees (i.e., Facilities Operations, Dining Services, Information Technology Services, etc.).
  - 1. Participates in regular regulated building materials awareness training.
  - 2. Consults with EHS <u>prior</u> to any proposed disturbance or sampling of caulk, glazing or sealant that could contain PCBs, except in emergency situations, in which case they will follow up with EHS as soon as practical.
  - 3. Utilizes the best management practices as identified in this PCB Management Plan when conducting maintenance activities and renovation and demolition projects.



- 4. Conducts appropriate monitoring on potential PCB-containing materials during maintenance and custodial activities.
- 5. Ensures that EHS is informed of the intended disposal facility to be utilized by the abatement company and receives waste profiles developed by the abatement contractors or consultants for EHS's review and signature prior to waste shipment off-site.
- 6. Contacts EHS when waste manifests have been prepared for waste shipments.
- 7. Ensures contractors utilize the best management practices and perform the work in accordance with the UConn <u>Contractor EHS Manual</u>, <u>Asbestos Management Plan</u> and this PCB Management Plan when conducting renovation and demolition projects.
- 8. Works with independent consultants/contractors in consultation with EHS in the identification and removal of regulated building materials.
- **C.** Each department securing services of contractors for renovation or demolition projects (i.e., University Planning, Design and Construction, Facilities Operations, Information Technology Services, etc.)
  - 1. Participates in regular regulated building materials awareness training conducted by EHS.
  - 2. Consults with EHS <u>prior</u> to any proposed disturbance or sampling of caulk, glazing or sealant that could contain PCBs.
  - 3. Ensures contractors utilize the best management practices and work in accordance with the UConn <u>Contractor EHS Manual</u>, <u>Asbestos Management Plan</u> and this PCB Management Plan when conducting renovation and demolition projects.
  - 4. Works with independent consultants/contractors in consultation with EHS in the identification and removal of regulated building materials.
  - 5. Ensures that EHS is informed of the intended disposal facility and that EHS receives waste profiles for review and signature prior to waste shipment off-site.
  - 6. Contacts EHS when waste manifests have been prepared for waste shipments.

#### VII. General

- 1. Any sampling of building materials for PCBs shall only be performed if specifically authorized by the UConn Project Representative (project manager or departmental manager/supervisor), after consultation with EHS.
- 2. Any known or presumed PCB-containing materials shall not be disturbed unless specifically authorized by the UConn Project Representative, after consultation with EHS.
- 3. Structures built after 1979 can be assumed not to have any PCB-containing building materials and are exempt from this PCB Management Plan. A list of UConn buildings constructed after 1979 is included as <u>Appendix A</u>.



- 4. Caulks, glazing, or other sealants in buildings constructed before 1980 could contain PCBs and must be managed as suspect materials, unless it can be confirmed that the material was installed or applied before 1950.
- 5. Caulks, glazing, or other sealants that have or are assumed to have PCBs ≥50 ppm shall be considered as EPA-regulated and shall be disposed as PCB Bulk Product Waste.
- 6. Substrate that is in contact with caulk (or glazing or other sealant) known or presumed to contain PCBs ≥50 ppm may also be removed and disposed of as PCB Bulk Product Waste if it is disposed with the caulk. If such substrate remains in place and is disposed of at a later date, it must be managed as EPA-regulated PCB remediation waste (unless testing determines it to contain <1 ppm PCBs).</p>
- 7. Caulks, glazing, or other sealants that are found to have PCBs <50 ppm but >1 ppm are considered *PCB Excluded Products* and must be managed as CT Regulated Waste.
- 8. Substrate that is in contact with caulk (or glazing or other sealant) known to contain PCBs <50 ppm but >1 ppm may also be removed and disposed of as CT Regulated Waste if it is disposed with the caulk. If such substrate remains in place and is disposed of at a later date, it must be managed as CT Regulated Waste (unless testing determines it to contain <1 ppm PCBs).</p>
- 9. Soil that is visually impacted by caulk (or glazing or other sealant), which caulk is known to contain PCBs ≥1 ppm through testing, may need to be managed as regulated waste if removed. If such impacted soil is observed, immediately contact the UConn Project Representative (project manager or departmental manager/supervisor) who will consult with EHS. Do not sample the soil absent specific authorization from the UConn Project Representative, after consultation with EHS.
- 10. Any removal and handling of the PCB Bulk Product Waste or CT Regulated Waste by UConn personnel must be performed in accordance with this PCB Management Plan.
- 11. Any removal and handling of the PCB Bulk Product Waste or CT Regulated Waste by contractors must be performed in accordance with UConn's Contractor EHS Manual.
- 12. Any PCB-containing materials (confirmed or presumed) that will be abated, removed or disposed must be done in accordance with all applicable Federal and State statutes/regulations (e.g., EPA 40 CFR Part 761 and Connecticut General Statutes 22a-463 through 469) and any project specific specifications/remedial plans.
- 13. The management of PCB-containing building materials in maintenance, renovation and demolition work performed by contractors is covered in UConn's <u>Contractor EHS</u> <u>Manual</u>. UConn Project Representatives must notify contractors of their responsibility to comply with the Contractor EHS Manual and obtain the CONTRACTOR RECEIPT ACKNOWLEDGEMENT FORM from the contractor and its subcontractors prior to commencing work. All contractors must be in compliance with the Contractor EHS Manual. Contractors are not permitted to sample building materials for PCBs unless



specifically authorized to do so by the UConn Project Representative with approval from EHS.

#### VIII. Procedures for Activities Impacting Buildings Materials

#### A. In-house Maintenance Activities

In-house maintenance activities are defined as small-scale repairs, such as individual window/door repair or replacement, where it is believed that a limited amount of suspect material may be impacted. For these maintenance activities, unless already known, suspect materials will not be sampled. Caulks, glazing, and other joint sealants in a building constructed or renovated between 1950 and 1979 will be assumed to contain ≥50 ppm PCBs and will be handled and disposed of as PCB regulated waste according to state and federal regulations and the University's PCB Management Plan. <u>Appendix B</u> outlines the maintenance procedures to be used by appropriately trained in-house maintenance personnel when disturbing or removing presumed materials. Should asbestos also be present, work must be handled by an approved, licensed hazardous materials abatement company.

#### B. Renovation or Demolition Activities

Renovation or demolition activities are defined as larger-scale than maintenance activities and are performed or managed by University personnel. Generally, this pertains to work impacting more than one window or greater than 25 linear feet of building material. The University does not maintain an inventory of PCB-containing building materials. Accordingly, as renovation and demolition projects that may impact caulks, glazing, and other joint sealants in a building constructed or renovated between 1950 and 1979 are planned, sampling and abatement strategies will be based upon the types and quantities of impacted building materials, the age of the building or history of renovations, as well as scope and magnitude of the renovation or demolition. EHS must be consulted in connection with any such project prior to any proposed disturbance or sampling of caulk, glazing or sealant that could contain PCBs.

Prior to the initiation of these projects, the visual identification of impacted building materials and a hazardous materials assessment must be conducted. No sampling of any building materials for PCB content shall be performed unless specifically authorized in advance by the UConn Project Representative after receiving approval from EHS. No known or presumed PCBcontaining materials shall be disturbed unless specifically authorized by the UConn Project Representative, in consultation with EHS.



- If an on-call Consultant for Hazardous Materials Assessment, Remediation Design, Project Monitoring and Industrial Hygiene Services (hereafter, the Consultant) is utilized, they must conduct a visual survey and hazardous materials assessment, as arranged by the UConn Project Representative. The Consultant shall identify:
  - a. the materials to be disturbed and/or disposed;
  - b. the age when installed or applied;
  - c. the approximate quantities;
  - d. other potential regulated materials (lead, asbestos, etc.); and
  - e. A recommended approach, or alternative approaches, for handling the suspect materials.

The Consultant's recommendations for handling and disposal will be reviewed by the Project Representative and EHS.

- 2. If an on-call Consultant is **not** utilized, the UConn Project Representative (project manager or departmental manager/supervisor) will be responsible for conducting a visual survey and hazardous materials assessment by determining:
  - a. the presence of caulks, glazing, or other joint sealants that will be disturbed during the project;
  - b. the age of the caulks, glazing, or other joint sealants (when applied or installed);
  - c. approximate quantities of the affected materials; and
  - d. the asbestos content of affected materials.

Upon completion of this hazardous materials assessment, the UConn Project Representative will consult with EHS for a determination on how to handle the potential PCB containing materials. No known or presumed PCB-containing materials shall be disturbed unless specifically authorized by the UConn Project Representative, after receiving approval from EHS.

Whenever confirmed or presumed PCB-containing materials will be removed as part of a renovation or demolition activity, the material must be managed utilizing engineering controls and work practices which prevent contamination of surrounding materials/spaces. In addition, the disposal of any PCB-containing materials (confirmed or presumed) must be conducted in accordance with Federal and State statutes/regulations, as well as the PCB Management Plan. For renovations and demolitions, a hazardous materials abatement contractor will be utilized to conduct the removals. Work will proceed in accordance with the Consultant's recommendations as approved by the University, in consultation with EHS.

#### C. Custodial Activities

PCB-containing materials that are dry, brittle, hardened, or otherwise damaged can produce dust hazards to employees and building occupants. If caulk, glazing, or other joint sealants in a



building constructed before 1980 are found in this condition, custodians should notify their supervisor to arrange further assessment.

# D. PCB-containing Ballasts and Transformers

Fluorescent light ballasts that contain PCBs may be present in buildings constructed prior to 1980. Between July 1, 1979 and July 1, 1998, newly manufactured ballasts that did not contain PCBs were required to be labeled with the statement "NO PCBs". Therefore, any ballast in a building constructed prior to 1980 that is not identified as having no PCBs must be presumed to contain PCBs and be disposed of accordingly through EHS. Should asbestos also be present, for instance, in the wiring, the waste will be handled by the appropriate abatement contractor.

If ballasts have leaked, the following work practices shall be employed:

- 1. Isolate the affected area from central ventilation, and ventilate the area separately.
- 2. Utilize PPE –chemical resistant gloves, such as nitrile, and safety glasses when removing the affected ballast. If the space cannot be ventilated, consider a ½ face elastomeric respirator with a filter and organic vapor cartridge.
- 3. Wrap and seal in plastic sheeting or a heavy plastic bag and separate from non-leaking ballasts. Containerize used PPE for disposal as well. Submit a chemical waste pick-up request through the <u>EHS website</u>.

If the leak from the ballast has impacted other surfaces, or there is a leak from a transformer, leave the area and prevent others from entering. Contact EHS (860-486-3613) to report the incident and receive direction.

#### IX. Waste

#### A. In-house Maintenance or Custodial generated waste

Waste generated through in-house maintenance or custodial activities that impact known or suspected PCB-containing materials must be considered PCB-contaminated and disposed of through EHS. Such waste cannot be transported between campuses or locations not contiguous to the property where the waste is generated. Utilize the appropriate label to identify waste contents and location of generation. Submit a chemical waste pickup request through the <u>EHS</u> website.

#### B. Project or Contractor generated Waste

Waste generated in renovation or demolition projects or by contractor activities that impact known or suspected PCB-containing materials must be considered PCB-contaminated and disposed of through the appropriate hazardous material abatement contractor in coordination with EHS.



## Approval of Disposal Facility

The Abatement Contractor, or the Consultant if one has been identified, must provide to EHS the name and address of the intended disposal facility with copy to the UConn Project Representative (project manager or departmental manager/supervisor). UConn EHS shall review the disposal facility and advise the Abatement Contractor and UConn Project Representative if it is acceptable. The Abatement Contractor will coordinate with the disposal facility.

### Waste Profiles

The Abatement Contractor, or the Consultant, must prepare the draft waste profile(s) and send the profile(s) to EHS with a copy to the UConn Project Representative. EHS will review and comment on the waste profile(s) prior to waste shipment off-site. EHS will provide the appropriate generator ID #, if needed. EHS will sign and return the final profile(s) to the Abatement Contractor with copy to the UConn Project Representative.

### Waste Manifests

The Abatement Contractor prepares a waste manifest for each shipment. The Abatement Contractor or the UConn Project Representative will coordinate a scheduled waste pick up with EHS. At the time of the waste pick up, EHS reviews and signs the waste manifest(s). No manifests will be signed without a corresponding profile. EHS may make initialed modifications to the waste manifest(s).

# X. Training

EHS will provide training to affected employees in accordance with this PCB Management Plan. Training will be required for UConn maintenance and custodial employees that have duties that could potentially expose them to PCB-containing materials. The goal of training is to minimize contact and exposure to employees, as well as building occupants.

Training components will include:

- 1. The history and use of PCBs, particularly in building materials
- 2. Exposure routes and potential health effects
- 3. Regulations that apply to PCBs
- 4. Work activities that could lead to exposure
- 5. Proper work practices for maintenance and custodial activities
- 6. The purpose and selection of personal protective equipment
- 7. The essential elements of this PCB Management Plan
- 8. Waste handling



9. Additional information, such as inspection frequencies and protocols, as required by EPA in Monitoring and Maintenance Plans for renovated buildings with remaining encapsulated PCB materials.

# Appendix A

# List of University Buildings Constructed after 1979

SITE NAME	FACILITY NAME	STREET ADDR	CITY
AVERY POINT			
REGIONAL			
CAMPUS	CENTRAL UTILITY PLANT	1084 SHENNECOSSETT ROAD	GROTON
AVERY POINT			
REGIONAL			CROTON
CAMPUS	MARINE SCIENCE BUILDING	1084 SHENNECOSSETT ROAD	GROTON
AVERY POINT			
REGIONAL	DROJECT OCEANOLOCY DI DC	1094 SHENNECOSSETT DOAD	CROTON
CAMPUS	DEDOT ELEL CELL INSTITUTE	1084 SHEINIECOSSETT KOAD	UKUTUN
DEPOT CAMPUS	BUILDING	14 WEAVER ROAD	DEPOT
HARTEORD	Delebito	H WEAVER ROAD	DLIOI
REGIONAL	DOWNTOWN HARTFORD TIMES		
CAMPUS	BUILDING	10 PROSPECT ST	HARTFORD
HARTFORD	DUBBING	To TRODI DET DI	
REGIONAL	GHC-COMPUTER CTR &		WEST
CAMPUS	CLASSROOM BLDG	1796 ASYLUM AVE	HARTFORD
HARTFORD			
REGIONAL	GHC-FAC/LANDSCAPE GARAGE		WEST
CAMPUS	ADD WH		HARTFORD
HARTFORD			
REGIONAL			WEST
CAMPUS	GHC-FACILITIES GARAGE - W HTFD	85 LAWLER ROAD	HARTFORD
HARTFORD			
REGIONAL			
CAMPUS	MBA PROGRAM	100 CONSTITUTION PLAZA	HARTFORD
LAW SCHOOL	HTFD LAW SCHOOL-LAW LIBRARY	39 ELIZABETH STREET	HARTFORD
LAW SCHOOL	HTFD LAW SCHOOL-STARR HALL	45 ELIZABETH STREET	HARTFORD
		3099 HORSEBARN HILL	
STORRS CAMPUS	A.L.LORENTZEN CONNECTOR	ROAD	STORRS
		3099 HORSEBARN HILL	
STORRS CAMPUS	A.L.LORENTZEN STABLE	ROAD	STORRS
	ADVANCED TECHNOLOGY		
STORRS CAMPUS	LABORATORY	1392 STORRS ROAD	STORRS
STORRS CAMPUS	AG BIOTECH LAB ANNEX	HORSEBARN HILL ROAD	STORRS
STORRS CAMPUS	AG BIO-TECHNOLOGY (ABL)	1390 STORRS ROAD	STORRS
STORRS CAMPUS	AG-BIO GREENHOUSE	1392 STORRS ROAD	STORRS
STORRS CAMPUS	ALUMNI CENTER	2384 ALUMNI DRIVE	STORRS
STORRS CAMPUS	ASC WAREHOUSE ADDITION	GURLEYVILLE ROAD	STORRS
STORRS CAMPUS	ATHLETIC EQUIPMENT STORAGE		STORRS
STORRS CAMPUS	AVIAN RESEARCH BUILDING	HORSEBARN HILL ROAD	STORRS
STORRS CAMPUS	BATTING & PITCHING FACILITY	512 STADIUM ROAD	STORRS
		3107 HORSEBARN HILL	
STORRS CAMPUS	BIOBEHAVIORAL 4 ANNEX	ROAD	STORRS
GTODDA C LL CIT		91 NORTH EAGLEVILLE	GTORRE
STORKS CAMPUS	BIOLOGY / PHYSICS	ROAD	STORRS
GTODDG CANDUG	BROWN HALL (C OAK-	ALCO TOWER COURT	GTODDG
STORKS CAMPUS	UNNEUTICUT)	916D TOWER COURT	STURKS
STODDS CAMPLIC	BUKTON FOOTBALL COMPLEX &		STODDS
STORKS CAMPUS			STUKKS
STORRS CAMPUS	BUSBY SUITES (C OAK)	917G TOWER COURT	STORRS
GTODDG C LL GUIS		4030 HORSEBARN HILL	GTORDS
STORKS CAMPUS	CATTLE RESOURCE UNIT	KOAD	STORRS

SITE NAME	FACILITY NAME	STREET ADDR	CITY
STORRS CAMPUS	CENTRAL WAREHOUSE	3 DISCOVERY DRIVE	STORRS
STORRS CAMPUS	CHARTER OAK COMMUNITY CENTER	916 TOWER COURT	STORRS
		55 NORTH EAGLEVILLE	
STORRS CAMPUS	CHEMISTRY BUILDING COGENERATION - CHILLER	ROAD	STORRS
STORRS CAMPUS	FACILITY	244 GLENBROOK ROAD	STORRS
STORRS CAMPUS	COMPOST FACILITY	OFF ROUTE 32	STORRS
STORRS CAMPUS	DAILY CAMPUS BUILDING	11 DOG LANE	STORRS
STORRS CAMPUS	DEPOT- CHAPLIN COTTAGE	69 AHERN LANE	STORRS
STORRS CAMPUS	DEPOT- COLCHESTER COTTAGE	79 AHERN LANE	STORRS
STORRS CAMPUS	DEPOT- HAMPTON COTTAGE	105 AHERN LANE	STORRS
STORRS CAMPUS	DEPOT- LEBANON COTTAGE	95 AHERN LANE	STORRS
	DODD RESEARCH CENTER		
STORRS CAMPUS	(THOMAS J)	405 BABBIDGE ROAD	STORRS
STORRS CAMPUS	ENGINEERING AND SCIENCE BUILDING		STORRS
STORRS CAMPUS	ENVIRONMENTAL HEALTH & SAFETY	HORSEBARN HILL ROAD	STORRS
STORRS CAMPUS	FACILITIES OPERATIONS BUILDING	25 LEDOYT ROAD	STORRS
STORRS CAMPUS	FOSTER HALL (C OAK-VERMONT)	916A TOWER COURT	STORRS
STORRS CAMPUS	FREITAS ICE FORUM	509 STADIUM ROAD	STORRS
STORRS CAMPUS	GAMPEL PAVILION / SPORTS CENTER	2095 HILLSIDE ROAD	STORRS
		97 NORTH EAGLEVILLE	STORRS
STORKS CAMPUS	GANT PLAZA GARRIGUS SUITES (HILLTOP	ROAD	STORKS
STORRS CAMPUS	SUITES)	2374 ALUMNI ROAD	STORRS
STORRS CAMPUS	GELFENBIEN TOWERS DINING HALL	3384 TOWERS LOOP ROAD	STORRS
STORRS CAMPUS	HAY STORAGE SHED		STORRS
STORRS CAMPUS	HI TECH POLII TRY FACILITY	3200 HORSEBARN HILL ROAD	STORRS
STORRS CAMPUS	HILL TOP APT-A NOVELLO BLDG#12	12 HUSKY CIRCLE	STORRS
STORRS CAMPUS	HILLTOP APT-A P.MERRITT BLDG#18	18 JONATHAN WAY	STORRS
	HILLTOP APT-CH.G.WOODHOUSE		
STORRS CAMPUS	BLDG#22	22 HUSKY CIRCLE	STORRS
STORRS CAMPUS	HILLTOP APT-CHSH.WU BLDG#19	19 HUSKY CIRCLE	STORRS
STORRS CAMPUS	HILLTOP APT-COMMUNITY CENTER BLDG#3	30 JONATHAN WAY	STORRS
STORRS CAMPUS	HILLTOP APT-E.GRASSO BLDG#10	10 HUSKY CIRCLE	STORRS
STORRS CAMPUS	HILLTOP APT-H.B.STOWE BLDG#11	11 HUSKY CIRCLE	STORRS
STORRS CAMPUS	HILLTOP APT-M.FRENCH BLDG#13	13 HUSKY CIRCLE	STORRS
STORRS CAMPUS	HILLTOP APT-M.K.WHEELER BLDG #20	20 HUSKY CIRCLE	STORRS
STORRS CAMPUS	HILLTOP APT-M.M.BETHUNE BLDG#17	17 JONATHAN WAY	STORRS
STORRS CAMPUS	HILLTOP APT-M.R.BEARD BLDG#14	14 HUSKY CIRCLE	STORRS
STORRS CAMPUS	HILLTOP APT-P.CRANDALL BLDG#16	16 JONATHAN WAY	STORRS
	HILLTOP APT-S.B.CRAWFORD		
STORRS CAMPUS	BLDG#21	21 HUSKY CIRCLE	STORRS
STORRS CAMPUS	HILLTOP APT-S.LA FLESCHE BLDG#15	15 HUSKY CIRCLE	STORRS
STORRS CAMPUS	HOISINGTON HALL (C OAK NEW HAMP.)	916B TOWER COURT	STORRS

SITE NAME	FACILITY NAME	STREET ADDR	СІТҮ
		4034 HORSEBARN HILL	
STORRS CAMPUS	HORSEBARN HILL ARENA	ROAD	STORRS
STORRS CAMPUS	MASSACHUSETTS)	916F TOWER COURT	STORRS
STORRS CAMPUS	HUBBARD HALL (C OAK - RHODE ISLAND)	916E TOWER COURT	STORRS
STORRS CAMPUS	HUSKY VILLAGE / GREEK - BLDG A1, A2	10 AND 15 LAUREL WAY	STORRS
STORRS CAMPUS	HUSKY VILLAGE / GREEK - BLDG B1, B2	20 AND 25 LAUREL WAY	STORRS
STORRS CAMPUS	HUSKY VILLAGE / GREEK - BLDG	30 AND 35 I AUREL WAY	STORRS
STORRS CAMPUS	HUSKY VILLAGE / GREEK - BLDG	50 AND 55 LAUREL WAY	STORRS
STORKS CAWI US	HUSKY VILLAGE / GREEK - BLDG F1.	JUAND JJ LAUKEL WAT	510KK5
STORRS CAMPUS	F2 HUSKY VII LAGE / CREEK RLDC D1	60 AND 65 LAUREL WAY	STORRS
STORRS CAMPUS	D2	40 AND 45 LAUREL WAY	STORRS
STORRS CAMPUS	DIRECTORS HSE B	70 LAUREL WAY	STORRS
STORRS CAMPUS	INFORMATION TECHNOLOGY BUILDING	371 FAIRFIELD ROAD	STORRS
	INNOVATION PARTNERSHIP		(TODD)
STORRS CAMPUS	BUILDING	159 DISCOVERY DRIVE	STORRS
STORRS CAMPUS	KELLOGG DAIRY CENTER	ROAD E	STORRS
STORRS CAMPUS	LAUREL HALL	372 FAIRFIELD WAY	STORRS
STORRS CAMPUS	LODEWICK RESIDENCE	88 GURLEYVILLE RD.	STORRS
STORRS CAMPUS	MAIN ACCUMULATION BUILDING		STORRS
STORRS CAMPUS	MOBILE COMMAND CENTER GARAGE	126 NORTH EAGLEVILLE ROAD	STORRS
STORRS CAMPUS	MODULAR WASTE STORAGE		STORRS
STORRS CAMPUS	MUSIC LIBRARY	1295 STORRS ROAD	STORRS
STORRS CAMPUS	NAFE KATTER THEATRE	802 BOLTON ROAD	STORRS
STORRS CAMPUS	NATHAN HALE HOTEL	2131 HILLSIDE ROAD	STORRS
STORRS CAMPUS	NEXT GENERATION CONNECTICUT RESIDENCE HALL		STORRS
		103 NO EAGLEVILLE ROAD	
STORRS CAMPUS	NORTH PARKING GARAGE	UNIT 32	STORRS
STORRS CAMPUS	NORTH WEST DINING HALL - NW QD 7	110 NORTH EAGLEVILLE ROAD	STORRS
STORRS CAMPUS	OAK HALL	365 FAIRWAY WAY	STORRS
STORRS CAMPUS	OBSERVATORY - SPRING HILL		STORRS
STORRS CAMPUS	PFIZER MODULAR A	SPRING HILL	STORRS
STORRS CAMPUS	PFIZER MODULAR B	SPRING HILL	STORRS
STORRS CAMPUS	PHARMACY/BIOLOGY BUILDING	69 NORTH FAGLEVILLE RD	STORRS
STORRS CAMPUS	PLANT SCIENCE BURR NURSERY	AGRONOMY ROAD	STORRS
	PLANT SCIENCE RES/FARM	Monoral Rond	brondes
STORRS CAMPUS	GREENHOUSE #	AGRONOMY RD 126 NORTH EAGLEVILLE	STORRS
STORRS CAMPUS	POLICE & FIRE COMPLEX	ROAD	STORRS
STORRS CAMPUS	ROME HALL (SOUTH CAMPUS BLDG D)	626D GILBERT ROAD EXT.	STORRS
STORRS CAMPUS	ROSEBROOKS HALL (SO CAMPUS BLDG B)	626B GILBERT ROAD EXT.	STORRS
STORRS CAMPUS	SCHOOL OF BUSINESS	2100 HILLSIDE ROAD	STORRS
GTODD C C			(TODD )
STORRS CAMPUS	SCHOOL OF FINE ARTS - ART	875 COVENTRY ROAD	STORRS

SITE NAME	FACILITY NAME	STREET ADDR	CITY
STORRS CAMPUS	SNOW HALL (SO CAMPUS BLDG C)	626C GILBERT ROAD EXT.	STORRS
STORRS CAMPUS	SOCCER PRESS BOX	507 STADIUM ROAD	STORRS
STORRS CAMPUS	SOUTH CAMPUS CHILLER	860 BOLTON ROAD	STORRS
STORRS CAMPUS	SOUTH PARKING GARAGE	487 STADIUM ROAD	STORRS
STORRS CAMPUS	SPRING MANOR CHEMICAL HOUSE		STORRS
STORRS CAMPUS	TASKER ADMISSIONS	2131 HILLSIDE ROAD	STORRS
STORRS CAMPUS	THOMPSON HALL (C OAK-MAINE)	916C TOWER COURT	STORRS
STORRS CAMPUS	TOWERS LOOP PUMP STATION	TOWERS LOOP ROAD	STORRS
STORRS CAMPUS	UCONN BOOKSTORE	2075 HILLSIDE ROAD	STORRS
STORRS CAMPUS	UCONN FOUNDATION		STORRS
STORRS CAMPUS	UNITED TECHNOLOGIES ENG BLDG	191 AUDITORIUM ROAD	STORRS
STORRS CAMPUS	UNIVERSITY PLANNING DESIGN & CONSTRUCTION	31 LEDOYT ROAD	STORRS
STORRS CAMPUS	VISITORS CENTER / LODEWICK	115 NORTH EAGLEVILLE ROAD	STORRS
STORRS CAMPUS	WATER RECLAMATION FACILITY	48 LEDOYT ROAD EXT	STORRS
STORRS CAMPUS	WERTH FAMILY BASKETBALL CHAMPIONS CENTER	506 STADIUM ROAD	STORRS
STORRS CAMPUS	WILSON HALL (SOUTH CAMPUS BLDG A)	626A GILBERT ROAD EXT.	STORRS
WATERBURY			
CAMPUS	DOWNTOWN CAMPUS	99 EAST MAIN STREET	WATERBURY
WATERBURY REGIONAL			
CAMPUS	WATERBURY PARKING GARAGE	99 EAST MAIN ST	WATERBURY

# Appendix B

# In-house Maintenance Procedures

Since the assumption is that all caulking, glazing and joint sealants installed between 1950 and 1979 contain PCBs, these procedures have been developed to protect employees and affected building occupants. They apply to small-scale repairs, such as individual window/door repair or replacement, where it is believed that a limited amount of suspect material may be impacted.

# 1. General protective measures

- a. All University maintenance employees that may disturb PCB-containing materials must attend PCB awareness training through EHS.
- b. Prior to commencing activity, the supervisor must consult with EHS on the maintenance to be conducted. In the event of an emergency situation (i.e., broken window at night), supervisor must report activities to EHS on the next business day.
- c. All affected building materials must be assessed for asbestos first. If asbestos is found or presumed in the caulks, glazing or sealants to be removed, the Facilities Asbestos Coordinator must be contacted to arrange for an asbestos abatement contractor to complete the removal.
- d. Eating, drinking and smoking are prohibited during the handling of PCB materials and are not permitted until decontamination has been completed.
- e. Personal protective equipment must be utilized based upon the hazard. General PPE recommendations include:
  - a. disposable Tyvek suits
  - b. chemical resistant gloves
  - c. safety glasses
  - d. respiratory protection filtering facepiece respirator for limited dust generation, ½ face elastomeric respirators with P100/HEPA and organic vapor protection if dealing with solvents or electromechanical methods that generate more dust and heat. Use of any respirator must be in compliance with the University's <u>Respirator Program</u>.
  - e. Disposable PPE must be considered PCB waste.
- f. When dealing with caulk, unless conditions prohibit, all work shall be performed from exterior locations. For work on windows, the interior side of the window shall be sealed with polyethylene (plastic) sheeting prior to working on the window from the exterior location.
- g. All efforts to minimize contact with suspect PCB-containing materials shall be utilized.
- h. Minimize the amount of dust and debris generated wet methods and HEPA vacuum-shrouded power tools must be used.
- i. All waste must be promptly bagged in 6-mil polyethylene bags or lined containers.
- j. Containing the work environment will protect other occupants, prevent contamination and help with final cleaning of the site.
- k. Dust and debris must not be dry swept. Wet methods and industrial HEPA vacuums must be utilized.
- I. Cleaning frequently throughout the maintenance activity will reduce contamination and aid in final cleaning.
- m. Once caulk or other joint sealants are removed, substrate surface must be confirmed as visually clean. If not, utilize a stiff brush or scrub pad as appropriate.
- n. Final cleaning of the project area must then be completed.

## 2. Consider condition of material – selection of appropriate tools

The condition of the material greatly determines tool selection and set-up and clean-up methods.

- a. Soft, flexible caulk manual tools are recommended. No dust or heat is generated, though the process is more labor intensive and slow, and additional cleaning may be needed on the substrate.
- b. Hardened/brittle caulk electric tools may be necessary. This however increases dust and heat generation, increasing exposure to maintenance employee and potential for contamination. Also, the substrate could be damaged, increasing exposure. Shrouded tools with HEPA vacuum systems must be utilized. Containments with ventilation may also be necessary. See Section 9, Prohibited Activities.

#### 3. Notification of occupants

As per all maintenance and renovation activities, building occupants must be notified of the work. Utilize the <u>BECList</u> to notify occupants of the work. In addition, the work area must be demarcated with appropriate signage or Do Not Enter tape, to prevent unauthorized access to the work area.

### 4. Interior area protection

When work needs to be conducted inside, the following steps must be taken to protect the work area:

- a. Set up a regulated area prevent unauthorized people from entering the area with the use of signs and/or tape.
- b. Remove all moveable objects from the work area.
- c. Cover the work area with plastic sheeting extend edges 5 feet horizontally beyond work area to manage migration of dust.
- d. Cover stationary objects with plastic sheeting.
- e. Close and seal vents in the work area; turn off forced hot air and air conditioning as necessary.
- f. If solvents will be utilized, appropriate ventilation must be used. Solvent use in occupied areas is discouraged when odors and vapors can affect occupants; Engineering and work practice controls, such as ventilation, or off-hours work must be employed. Additional respiratory protection may be necessary.
- g. Clean as work progresses, don't leave cleaning for end of project. Wet methods and industrial HEPA vacuums must be utilized.

# 5. Exterior Area Protection

- a. Cover the work area with plastic sheeting extend edges 10 feet horizontally beyond work area to manage the migration of dust. Cover all ground covers and plantings in the work area.
- b. Erect "Do Not Enter" tape and other signage as necessary to prevent access by unauthorized personnel.
- c. If scaffolding will be utilized, enclose the scaffolding with plastic sheeting.
- d. Ensure that all windows and doors in the work area are sealed with plastic and doors and windows adjacent to the work area are closed.
- e. Be cautious of work near air intakes. If intakes are in work area or immediately adjacent to the work area, lockout out air intake and seal with plastic sheeting.
- f. If solvents will be utilized, appropriate ventilation must be used. Solvent use is discouraged when odors or vapors can affect occupants. Engineering and work practice controls, such as

ventilation, or off-hours work must be employed. Additional respiratory protection may be necessary.

g. Clean as work progresses, don't leave cleaning for end of project. Wet methods and industrial HEPA vacuums must be utilized.

### 6. Final Cleaning

- a. Tools must be decontaminated with detergent and water or a degreaser, followed by a clean rinse; or dispose after each job as PCB waste.
- b. Wrap waste building components (windows, doors, etc.) in plastic and tape shut.
- c. HEPA vacuum any debris remaining on the plastic sheeting.
- d. Lightly mist all plastic sheeting and fold inward to prevent release of any debris; tape shut
- e. HEPA vacuum all horizontal and vertical surfaces in the work area, regardless of whether they have been impacted by the removal.
- f. Use a general surface cleaner to wet wipe all horizontal and vertical surfaces in the work area. Follow with a clean water rinse.
- g. All waste, including plastic sheeting, waste rags, disposable PPE and filters, spent water or solvent must be collected and containerized for proper disposal.
- h. If any debris is seen after final cleaning, repeat process.

### 7. Waste

- a. All waste must be collected and containerized, to include: bulk debris, plastic sheeting, wrapped building component(s), disposable PPE, waste rags, spent water or solvents.
- b. HEPA vacuums, when used to clean potential PCB-containing debris, must only be opened and cleaned by the on-call hazardous materials abatement company. Once the vacuum is full, submit a work order to have the unit picked up by an abatement contractor, emptied and cleaned, and returned for use.
- c. All waste generated from these activities must be disposed of through EHS. Waste cannot be transported between campuses. Label the waste as "PCB Assumed Material" along with the building where it was generated. Submit a chemical waste pick-up request through the <u>EHS</u> website.

#### 8. Personal Hygiene

- a. PPE used during maintenance activities involving known or suspected PCB-containing materials will be removed and disposed of properly, as discussed during training.
- b. After removal, wash hands, face and any other exposed skin with soap and water
- c. If utilizing ½ face elastomeric respirators, clean in accordance with the University's <u>Respirator</u> <u>Program</u> and Respiratory Protection Training.

#### 9. Prohibited Activities

- a. Dry sweeping or use of a vacuum without a HEPA filter.
- b. Activities involving mechanical removal that do not utilize engineering controls at the point of generation (unshrouded equipment without HEPA vacuum technology).
- c. Disposal of PCB materials in the trash or as construction debris.