

### **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. Appendix A 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
  - 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 Contractor EHS Manual, Asbestos Management Plan 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 Appendix A.
- 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).
- 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).
- 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 <a href="Contractor EHS">Contractor EHS</a>
  <a href="Manual">Manual</a>. 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. Appendix B 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 PCB-containing materials shall be disturbed unless specifically authorized by the UConn Project Representative, in consultation with EHS.

- 1. 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 <a href="EHS website">EHS website</a>.

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 <a href="EHS website">EHS website</a>.

#### 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           |  |                           |                 |
| CAMPUS             | MARINE SCIENCE BUILDING                            | 1084 SHENNECOSSETT ROAD   | GROTON          |
| AVERY POINT        |  |                           |                 |
| REGIONAL<br>CAMPUS | DROJECT OCEANOLOGY DI DC                           | 1094 CHENNECOCCETT DO A D | CDOTON          |
| CAMPUS             | PROJECT OCEANOLOGY BLDG DEPOT- FUEL CELL INSTITUTE | 1084 SHENNECOSSETT ROAD   | GROTON          |
| DEPOT CAMPUS       | BUILDING   | 44 WEAVER ROAD            | DEPOT           |
| HARTFORD           | BOILDING   | 44 WEAVER ROAD            | DEFOT           |
| REGIONAL           | DOWNTOWN HARTFORD TIMES                            |                           |                 |
| CAMPUS             | BUILDING   | 10 PROSPECT ST            | HARTFORD        |
| HARTFORD           | Dembarte   | 1011100120101             | THE REST OF THE |
| 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          |
|                    |  | 91 NORTH EAGLEVILLE       |                 |
| STORRS CAMPUS      | BIOLOGY / PHYSICS                                  | ROAD                      | STORRS          |
|                    | BROWN HALL (C OAK-                                 |                           |                 |
| STORRS CAMPUS      | CONNECTICUT)                                       | 916D TOWER COURT          | STORRS          |
|                    | BURTON FOOTBALL COMPLEX &                          |                           |                 |
| STORRS CAMPUS      | SHENKMAN   | 502 STADIUM ROAD          | STORRS          |
| STORRS CAMPUS      | BUSBY SUITES (C OAK)                               | 917G TOWER COURT          | STORRS          |
|                    |  | 4030 HORSEBARN HILL       |                 |
| STORRS CAMPUS      | CATTLE RESOURCE UNIT                               | ROAD                      | STORRS          |

| SITE NAME                      | FACILITY NAME  | STREET ADDR                        | CITY             |
|--------------------------------|--|------------------------------------|------------------|
| STORRS CAMPUS                  | CENTRAL WAREHOUSE  | 3 DISCOVERY DRIVE                  | STORRS           |
|                                | CHARTER OAK COMMUNITY                                    |                                    |                  |
| STORRS CAMPUS                  | CENTER   | 916 TOWER COURT                    | STORRS           |
| STORRS CAMPUS                  | CHEMISTRY BUILDING                                       | 55 NORTH EAGLEVILLE<br>ROAD        | STORRS           |
|                                | COGENERATION - CHILLER                                   |                                    |                  |
| 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           |
| STORKS CAMPUS                  | DODD RESEARCH CENTER                                     | 93 AHERIN LAINE                    | STORRS           |
| STORRS CAMPUS                  | (THOMAS J)   | 405 BABBIDGE ROAD                  | STORRS           |
| GTODDG GAMDIIG                 | ENGINEERING AND SCIENCE                                  |                                    | аторра           |
| STORRS CAMPUS                  | BUILDING ENVIRONMENTAL HEALTH &                          |                                    | STORRS           |
| STORRS CAMPUS                  | 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<br>CENTER                       | 2095 HILLSIDE ROAD                 | STORRS           |
| STORRS CAMPUS                  | GANT PLAZA   | 97 NORTH EAGLEVILLE<br>ROAD        | STORRS           |
| STORRES CAUNT OS               | GARRIGUS SUITES (HILLTOP                                 | KOND                               | STORRS           |
| STORRS CAMPUS                  | SUITES)  | 2374 ALUMNI ROAD                   | STORRS           |
| STORRS CAMPUS                  | GELFENBIEN TOWERS DINING HALL                            | 3384 TOWERS LOOP ROAD              | STORRS           |
| amonna a                       |  |                                    | amonna           |
| STORRS CAMPUS                  | HAY STORAGE SHED   | 3200 HORSEBARN HILL                | STORRS           |
| STORRS CAMPUS                  | HI TECH POULTRY FACILITY                                 | ROAD                               | STORRS           |
| STORRS CAMPUS                  | HILLTOP 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 HILLTOP APT-COMMUNITY CENTER | 19 HUSKY CIRCLE                    | STORRS           |
| STORRS CAMPUS                  | 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<br>#20                      | 20 HUSKY CIRCLE                    | STORRS           |
| CTODDS CAMPUS                  | HILLTOP APT-M.M.BETHUNE                                  | 17 10014771148137437               | CTODDC           |
| STORRS CAMPUS<br>STORRS CAMPUS | BLDG#17 HILLTOP APT-M.R.BEARD BLDG#14                    | 17 JONATHAN WAY<br>14 HUSKY CIRCLE | STORRS<br>STORRS |
| STOKKS CAMPUS                  | HILLTOP APT-M.R.BEARD BLDG#14 HILLTOP APT-P.CRANDALL     | 14 HUSK I CIRCLE                   | STUKKS           |
| STORRS CAMPUS                  | BLDG#16  | 16 JONATHAN WAY                    | STORRS           |
| CTODDS CAMPLIS                 | HILLTOP APT-S.B.CRAWFORD                                 | 21 HIGEN CIPCLE                    | CTODDC           |
| STORRS CAMPUS                  | BLDG#21<br>HILLTOP APT-S.LA FLESCHE                      | 21 HUSKY CIRCLE                    | STORRS           |
| STORRS CAMPUS                  | BLDG#15  | 15 HUSKY CIRCLE                    | STORRS           |
| STORRS CAMPUS                  | HOISINGTON HALL (C OAK NEW HAMP.)                        | 916B TOWER COURT                   | STORRS           |

| SITE NAME         | FACILITY NAME                                      | STREET ADDR                  | CITY    |
|-------------------|--|------------------------------|---------|
| CTODDC CAMPLIC    | HODGED ADMITH LABENTA                              | 4034 HORSEBARN HILL          | CTORRE  |
| STORRS CAMPUS     | HORSEBARN HILL ARENA<br>HOUGH HALL (C OAK          | ROAD                         | STORRS  |
| STORRS CAMPUS     | MASSACHUSETTS)                                     | 916F TOWER COURT             | STORRS  |
|                   | HUBBARD HALL (C OAK - RHODE                        |                              |         |
| STORRS CAMPUS     | ISLAND)  | 916E TOWER COURT             | STORRS  |
| STORRS CAMPUS     | HUSKY VILLAGE / GREEK - BLDG<br>A1, A2             | 10 AND 15 LAUREL WAY         | STORRS  |
| STORKS CAWI US    | HUSKY VILLAGE / GREEK - BLDG                       | 10 AND 13 LAUREL WAT         | STORRS  |
| STORRS CAMPUS     | B1, B2   | 20 AND 25 LAUREL WAY         | STORRS  |
| amonna a 1 1 mila | HUSKY VILLAGE / GREEK - BLDG                       |                              | amonna. |
| STORRS CAMPUS     | C1, C2<br>HUSKY VILLAGE / GREEK - BLDG             | 30 AND 35 LAUREL WAY         | STORRS  |
| STORRS CAMPUS     | E1, E2   | 50 AND 55 LAUREL WAY         | STORRS  |
|                   | HUSKY VILLAGE / GREEK - BLDG F1,                   |                              |         |
| STORRS CAMPUS     | F2   | 60 AND 65 LAUREL WAY         | STORRS  |
| GTODDG CAMPIIG    | HUSKY VILLAGE /GREEK - BLDG D1,                    | 40 AND 45 I AUDEL WAY        | CTODDC  |
| STORRS CAMPUS     | D2<br>HUSKY VILLAGE/GREEK                          | 40 AND 45 LAUREL WAY         | STORRS  |
| STORRS CAMPUS     | DIRECTORS HSE B                                    | 70 LAUREL WAY                | STORRS  |
|                   | INFORMATION TECHNOLOGY                             |                              |         |
| STORRS CAMPUS     | BUILDING   | 371 FAIRFIELD ROAD           | STORRS  |
| STORRS CAMPUS     | INNOVATION PARTNERSHIP<br>BUILDING                 | 159 DISCOVERY DRIVE          | STORRS  |
| STORRIS CHIMI CS  | BOLLDING   | 3218 HORSEBARN HILL          | 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<br>ROAD | STORRS  |
| STORRS CAMPUS     | MODULAR WASTE STORAGE                              | KOND                         | 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  |
| STORKS CAMPUS     | NEXT GENERATION CONNECTICUT                        | 2131 HILLSIDE KOAD           | STORRS  |
| STORRS CAMPUS     | RESIDENCE HALL                                     |                              | STORRS  |
|                   |  | 103 NO EAGLEVILLE ROAD       |         |
| STORRS CAMPUS     | NORTH PARKING GARAGE                               | UNIT 32                      | STORRS  |
| STORRS CAMPUS     | NORTH WEST DINING HALL - NW<br>QD 7                | 110 NORTH EAGLEVILLE<br>ROAD | STORRS  |
|                   | OAK HALL   | 365 FAIRWAY WAY              | STORRS  |
| STORRS CAMPUS     | OAK HALL   | 303 FAIRWAT WAT              | 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 EAGLEVILLE RD       | STORRS  |
| STORRS CAMPUS     | PLANT SCIENCE BURR NURSERY                         | AGRONOMY ROAD                | STORRS  |
|                   | PLANT SCIENCE RES/FARM                             |                              |         |
| STORRS CAMPUS     | GREENHOUSE #                                       | AGRONOMY RD                  | STORRS  |
| CTODDC CAMPLIC    | DOLICE & FIDE COMPLEY                              | 126 NORTH EAGLEVILLE         | CTODDC  |
| STORRS CAMPUS     | POLICE & FIRE COMPLEX ROME HALL (SOUTH CAMPUS BLDG | ROAD                         | STORRS  |
| STORRS CAMPUS     | D)   | 626D GILBERT ROAD EXT.       | STORRS  |
|                   | ROSEBROOKS HALL (SO CAMPUS                         |                              |         |
| STORRS CAMPUS     | BLDG B)  | 626B GILBERT ROAD EXT.       | STORRS  |
| STORRS CAMPUS     | SCHOOL OF BUSINESS                                 | 2100 HILLSIDE ROAD           | STORRS  |
| CTODDC CAMPITO    | SCHOOL OF FINE ARTS. ART                           | 975 COVENTRY DO AD           | CTODDC  |
| 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<br>ROAD | STORRS    |
| STORRS CAMPUS                   | WATER RECLAMATION FACILITY                  | 48 LEDOYT ROAD EXT           | STORRS    |
| STORRS CAMPUS                   | WERTH FAMILY BASKETBALL<br>CHAMPIONS CENTER | 506 STADIUM ROAD             | STORRS    |
| STORRS CAMPUS                   | WILSON HALL (SOUTH CAMPUS<br>BLDG A)        | 626A GILBERT ROAD EXT.       | STORRS    |
| WATERBURY<br>REGIONAL<br>CAMPUS | DOWNTOWN CAMPUS                             | 99 EAST MAIN STREET          | WATERBURY |
| WATERBURY<br>REGIONAL<br>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 Respirator Program.
  - 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:

- 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 <a href="EHS">EHS</a> 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.