| Subject: | Effective Date: | Initiated by: |
|---|---|---|
| Asbestos Management Services | October 8, 2003 | Head, ER/WM |
| | Supersedes: 4/14/00 EWM-005 Rev. 0 | Approved: Director |

## Applicability

This procedure applies to all renovations, remodeling, demolitions and installations at PPPL which involve known or suspect asbestos and asbestos-containing materials. This includes such things as thermal insulation, transite wall and pipe materials, and vinyl asbestos tile.

## Introduction

Asbestos containing material (ACM) is strictly regulated by multiple authorities, including OSHA, DOE, EPA and NJDEP, because airborne asbestos fibers present a significant health risk. This procedure has been implemented to protect the health of PPPL personnel and to comply with the various state and federal regulations. *It should be noted that asbestos-containing materials (ACM) can be found anywhere in the facility* (the locations of known ACM are listed in Attachment 1). The primary methods of asbestos control are isolation of the installation, protective clothing and breathing protection for asbestos handlers, and care taken with asbestos containing materials so that they will not be damaged and release fibers into the air.

In order to minimize risk to PPPL employees and the environment, the Waste Management Branch of the Environmental Restoration and Waste Management (ER/WM) Division has been designated the single point of contact for all activities involving ACM. The responsibilities of ER/WM include the inspection, coordination and supervision of all asbestos activities, and notification to the appropriate state and federal authorities that such activities are to take place. ER/WM has been so designated for the purposes of protecting the health and safety of PPPL personnel and the environment, ensuring compliance with asbestos regulations, reducing PPPL liability, and to simplify reporting and record keeping.

An asbestos survey is required prior to scheduling all building construction activities in areas where the presence of ACM is known or suspected. In addition, this procedure will apply to any activity during which ACM is discovered. When ACM is present, ER/WM will coordinate all phases of asbestos removal. According to federal law, notifications and inspections must be made prior to the start of any activity involving asbestos. In the cases where ACM is unexpectedly discovered after commencement of an activity, the activity will be interrupted until an ER/WM representative can evaluate the situation. Under no circumstance will building construction activity in an area where the presence of ACM is known or suspected commence prior to consultation with ER/WM. Emergency renovations are *not excluded* from this procedure.

## Reference Documents

Code of Federal Regulations, Title 40, Part 61 Subpart M, Sections 140 through 157, EPA Asbestos Standards (40 CFR 61.140-157)

Federal Register, Vol. 55, No. 224, Tuesday, Nov. 20, 1990, EPA 40 CFR Part 61 [AD-FRL-3814-7] RIN 2060 AC57, National Emission Standards for Hazardous Air Pollutants; Asbestos NESHAP Revision, Final Rule

Code of Federal Regulations, Title 29, Part 1910, Section 1001, and OSHA Asbestos Standard (29 CFR 1910.1001)

Code of Federal Regulations Title 29, Part 1926, Section 58, OSHA Asbestos Standard for Construction (29 CFR 1926.058)

## Definitions

*Asbestos-Containing Material (ACM)* and *Asbestos-Containing Waste Material*: Any material or waste which contains asbestos as defined in 40 CFR 61.141, including Categories I and II non-friable ACM (see below).

*Asbestos Removal Subcontractor*: An asbestos removal firm licensed by the New Jersey Department of Labor to remove regulated ACM (RACM).

*Building Construction Activities:* Activities that can potentially disturb any asbestos present in a building or location including, but not limited to, construction, renovation, demolition, and maintenance.

*Category I Non-friable Asbestos-Containing Material (ACM)*: Asbestos containing packing, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR part 763, Section 1, Polarized Light Microscopy.

*Category II Non-friable ACM*: Any material, excluding Category I non-friable ACM containing more than one percent (1%) asbestos as determined using the methods specified in appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

*Cognizant Individual*: Individual responsible for renovation, demolition or building construction project, or for the repair or any other activity where ACM is present, suspected or unexpectedly discovered

*Emergency Conditions*: Disturbance of ACM that was not planned, resulting in a sudden, unexpected release of asbestos fibers, which, if not immediately attended to, presents a safety and public health hazard.

## Precautions and Limitations

There are both known and suspected hazards from exposure to asbestos and asbestos- containing materials. Employees who work with asbestos must be knowledgeable of these hazards and employ controls (e.g., engineering, administrative, personal protective equipment) to minimize exposure.

## Procedure

| Responsibility | Action |
|---|---|
| Cognizant Individual | 1. Determines the prevailing conditions of a renovation, demolition, building construction or repair project:<br><br>i) If a planned project is being conducted in an area where the presence of ACM is known or suspected, Normal Conditions, apply. Continues with **Section *A. Normal Conditions***.<br><br>ii) If ACM has been disturbed and asbestos fibers have been released, an immediate response is required. Implements **Section *B. Emergency Conditions.***<br><br>iii) If the project is underway and known or suspect ACM is discovered where it was not expected, and the ACM has not been disturbed, Unexpected ACM conditions apply. Continues with **Section *C. Unexpected ACM.*** |

### *A. Normal Conditions*

| | |
|---|---|
| Cognizant Individual | 1. Identifies renovation, demolition, and building construction or repair project where the presence of ACM is known or suspected.<br><br>2. Requests asbestos survey from ER/WM.<br><br>**Note: Whenever the presence of ACM is suspected or known, under no circumstance will any building construction activity begin prior to an asbestos survey.** |

| Responsibility | Action |
|---|---|
| **ER/WM Waste Management Engineer or designee** | 3. Reviews asbestos surveys and determines if further evaluation or sampling is required. |
| | 4. If ACM is not present, notifies Cognizant Individual that no ACM is present. |
| | 5. If ACM is present and removal is not necessary, takes action to prevent ACM from being damaged and notifies Cognizant Individual that work may begin. |
| | 6. If ACM is present and removal is necessary, initiates EM-OP-01. |
| | **Note: In the area where ACM is present, under no circumstance will any building construction activity, which could disturb the ACM, begin prior to completion of the asbestos removal phase of the project.** |
| | **During the asbestos removal phase of the project ER/WM is responsible for activities in the area.** |
| | 7. Notifies Cognizant Individual that ACM has been removed and that work can proceed. |
| | 8. When survey certifies that no ACM is present, or when ACM has been secured from damage, or when asbestos removal is complete, notifies the Cognizant Individual. |

***B. Emergency Conditions***

| | |
|---|---|
| Cognizant Individual | 1. Determines that ACM has been disturbed and fibers have been released. |
| | 2. Immediately notifies ER/WM Waste Management Branch Manager or designee (e.g. if manager is away from site) of the release of asbestos fibers. |

| Responsibility | Action |
|---|---|
| | 3. Immediately stops work in area, and does not allow work to resume until asbestos hazard has been cleared. |
| | **Note: If a release of asbestos has occurred, only an immediate threat to the physical safety of personnel will override the health threat of the presence of ACM.** |
| **ER/WM Waste Management Engineer or designee** | 4. Implements EM-OP-01, Emergency Procedure. |
| | 5. When the area has been cleared of fibers, notifies Cognizant Individual that work can proceed. |
| Cognizant Individual | 6. Resumes construction activities. |
| ***C. Unexpected ACM*** | |
| Cognizant Individual | 1. After project has begun, discovers unexpected ACM that has not been disturbed. |
| | 2. Immediately stops work in area, and does not allow work to resume until asbestos hazard has been cleared. |
| | 3. Notifies ER/WM Waste Management Branch Manager of unexpected ACM. |
| **ER/WM Waste Management Engineer or designee** | 4. Evaluates situation and implements EM-OP-01, if necessary. |
| | 5. Notifies Cognizant Individual that ACM has been removed or is no longer in danger of being disturbed and that work can proceed. |
| Cognizant Individual | 6. When asbestos removal is complete, resumes construction. |
| | **Note: If, during any activity, asbestos fibers are released to the air, go to Section B, step 1.** |

**Attachments**

I Suspected Asbestos Containing Materials at PPPL.

Asbestos containing materials are suspected to exist in the following buildings:

Admin. Building-GPOC/Library
Cafeteria/Admin. Wing
CAS Building
COB Building
Cooling Tower Pump House
CS Building
Engineering Wing
ESU
FCPC Building
Hot Cell and NB Test Cell
L Wing Addition
Laboratory Building
LSB East Wing
LSB West Wing
Maintenance Building
Materials Storage Building
MG Building
Mock-up Building
Module 1
NBPC Building
PLT Power Building
Radioactive Waste Storage
Receiving #3
Receiving #4
RF Building
Shop Building
System Test Building (Experimental Power ESAT)
TFTR Cooling Tower Pump House
TFTR MG Building
TFTR Test Cell
Theory Wing

**Note: Asbestos can be found anywhere in the Laboratory. Reference to this list does not, and is not meant to replace a site evaluation by ER/WM Division.**

The following materials may be assumed to contain asbestos:

Acoustic Wall Panels
Asphalt Non-Skid Treads
Asphalt/Composite Roofing
Asphalt Roof Shingles
Ceiling Tile (drop-in)
Ceiling Tile (spline, glued-on)
Chiller Insulation
Drywall w/joint compound
Duct Insulation
Duct Patching
Fiberglass Batting w/foil and white paper backing
Firestopping
Firestopping Board
Floor Tile (including mastic)
Header Pipe Insulation (on boiler)
Lab Bench/Table Tops
Lagging (covering over non-suspect pipe insulation)
Linoleum/Sheet Flooring (including mastic)
Pipe Insulation (block, corrugated (Aircell), compressed, and fittings)
Plaster
Roll Roofing
Roof Flashing
Roof Flashing Cement/Sealant
Roof Patching
Sealant (on foam pipe insulation)
Spray-on Fireproofing
Stack Insulation
Tank Insulation
Textured Paint
Transite Panels, Fume Hoods, Shelves
Vibration Isolation Cloth
Wallboard (N.C.F.R. Wallshield)

On the following pages are listings, by building, of the location, material, approximate amount and condition of known ACM. Please refer to this when planning construction activities. Again, reference to the lists is not meant to replace consultation with ER/WM.

| Building | Floor | Room No. | Description | Quantity SF | Quantity LF | Total Asbestos Percentage | Friable |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **Admin Bldg-** | Roof | (perimeters, penetrations) | Roof Flashing | 1200 | | 10%; Chrysotile | No |
| **GPOC/** | 1 | 141 (closet) | Vibration Isolation Cloth | 5 | | 25%; Chrysotile | Yes |
| **Library** | 1 | 116 (closet) | Firestopping | 1 | | 30%; Chrysotile | No |
| | 1 | 140 (perimeter) | Fiberglass batting w/foil and white paper | 565 | | 30%; Chrysotile | Yes |
| | Roof | (comput add'n/11D, lib/108) | Roll Roofing (w/stone aggregate) | 6580 | | 5%; Chrysotile | No |
| | 1 | Various | Pipe Insulation Fittings a/w Fiberglass P.I. | | 200 | 60%; Amosite* | Yes |
| | Roof | (main admin. area) | Asphalt Tar Paper Roofing | 18950 | | Assumed ACM | No |
| | 1 | Various | Floor Tile (9"x9", gray) | 5650 | | Assumed ACM | No |
| | 1 | Various | Floor Tile (9"x9", tan) | 2085 | | Assumed ACM | No |
| | 1 | 102A | Floor Tile (12"x12", gray) | 50 | | Assumed ACM | No |
| | 1 | Various | Floor Tile (12"x12", white) | 3530 | | Assumed ACM | No |
| | 1 | Hall 100, Lounge Foyer | Floor Tile (9"x9", red) | 400 | | Assumed ACM | No |
| | 1 | 11A,C-D,H (comp fl. pnls on cart) | Floor Tile (12"x12", tan w/streaks) | 3650 | | Assumed ACM | No |
| | 1 | Women's Lounge | Floor Tile (12"x12", tan mottled) | 120 | | Assumed ACM | No |
| | 1 | 121, 142, 144-9 | Floor Tile (12"x12", red) | 1250 | | Assumed ACM | No |
| | 1 | 123 | Floor Tile (12"x12", blue) | 195 | | Assumed ACM | No |
| | 1 | 140-1, 140A-F, 141A-D | TransiteÆ Panels | 3940 | | Assumed ACM | No |
| | 1 | Various (too many to list) | Drywall w/joint Compound | 13160 | | Assumed ACM | No |
| | | | | | | | |
| **Cafeteria/** | 1 | 130A, 135 | Pipe Insulation (corrugated) | 25 | | 40%; Chrysotile | Yes |
| **Admin** | 1 | 134 (on 2 units) | Tank Insulation | 235 | | 80%; Chrysotile* | Yes |
| **Wing** | 1 | 130, 131 | Floor Tile (12"x12", tan mottled) | 1100 | | Assumed ACM | No |
| | 1 | 130A, 136 | Floor Tile (12"x12", white mottled) | 320 | | Assumed ACM | No |
| | 1 | 132, 132A | Floor Tile (9"x9", brown) | 260 | | Assumed ACM | No |
| | 1 | 131, 135, 135A | Plaster (ceiling) | 1390 | | Assumed ACM | No |
| | Roof | Roof | Asphalt Tar Paper Roofing | 6800 | | Assumed ACM | No |
| | Roof | (perimeters, penetrations) | Roof Flashing | 560 | | Assumed ACM | No |
| | 1 | 130-1, 130A, 135D, 132A, 132 | Drywall w/joint Compound | 3460 | | Assumed ACM | No |
| | | | | | | | |
| **CAS Bldg** | 1 | 120 | 12" Floor Tile (tan speck) | 1500 | | Assumed ACM | No |
| | 1, 2 | 200, 110 | Lab Bench Top | 250 | | Assumed ACM | No |
| | 1 | 112 | 12" Floor Tile (dark tan) | 480 | | Assumed ACM | No |
| | 1 | 100, 100A | 12" Floor Tile (tan) | 200 | | Assumed ACM | No |
| | | | | | | | |
| **COB Bldg** | 1 | 105 | Pipe Insulation Hangers (putty) | | 4 | 2%; Chrysotile | No |
| | 1, 2 | All | Ceiling Tiles (elongated pits w/pinholes) | 9000 | | 5%; Amosite | Yes |
| | 1, 2 | Various | Floor Tile (9"x9", tan) | 4655 | | Assumed ACM | No |
| | 1 | 105 | Vibration Isolation Cloth | 2 | | Assumed ACM | Yes |
| | 1, 2 | Various | TransiteÆ Panels | 10120 | | Assumed ACM | No |
| | 1 | 127, 128 | Lab Table Tops | 105 | | Assumed ACM | No |
| | 1 | 127 (patch) | Floor Tile (12"x12", tan) | 15 | | Assumed ACM | No |
| | 1, 2 | Various | Floor Tile (12"x12", white) | 190 | | Assumed ACM | No |
| | 1 | 109 | Floor Tile (12"x12", gray) | 345 | | Assumed ACM | No |
| | 2 | hall 200 (near men's room) | Floor Tile (12"x12", red) | 85 | | Assumed ACM | No |
| | 2 | 222 | Floor Tile (12"x12", white w/gray specks) | 300 | | Assumed ACM | No |
| | Roof | (under rubber membrane) | Asphalt Tar Paper Roofing | 5400 | | Assumed ACM | No |
| | Roof | (perim, under rubber membrane) | Roof Flashing | 720 | | Assumed ACM | No |
| | | | | | | | |
| **Cooling** | Exterior | Cooling Tower | TransiteÆ Panels | 12000 | | Assumed ACM | No |
| **Tower** | | | | | | | |
| **Pump House** | | | | | | | |

| Building | Floor | Room No. | Description | Quantity SF | Quantity LF | Total Asbestos Percentage | Friable |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **CS Bldg** | 2-3, Roof | Various | Duct Insulation (w/silver paint - roof only) | 8415 | | 2%; Chrysotile | Yes |
| | B-2 | Various | Pipe Insulation Fittings a/w Fiberglass P.I. | | 275 | 60%; Chrysotile | Yes |
| | 1 | 106, 104, 103, N 100 hall | Pipe Insulation Fittings a/w Block P.I. | | 7 | 70%; Chrysotile | Yes |
| | 1 | 103, 104, 106, 107, 108 | Floor Tile (9"x9", red/brown) | 2210 | | Assumed ACM | No |
| | 1, 2 | 100 hall; 2nd fl. Stairwell | Floor Tile (12"x12", red) | 2095 | | Assumed ACM | No |
| | 1, 2 | 103, 105, 107, 211 | Lab Table Tops | 340 | | Assumed ACM | Yes |
| | 1-3 | Various | TransiteÆ Panels | 45030 | | Assumed ACM | No |
| | 3 | Ceiling of 102A (PLT area) | Pipe Insulation (unknown type) | 60 | | Assumed ACM | Yes |
| | 3 | Ceiling of 102A (PLT area) | Pipe Insulation Fittings (unknown type) | | 3 | Assumed ACM | Yes |
| | 2 | PDX Control , Annex/235 | Floor Tile (12"x12", white) | 300 | | Assumed ACM | No |
| | 1, 2 | Various | Floor Tile (9"x9", red) | 1680 | | Assumed ACM | No |
| | 2 | 202-C2, 201-C1 | Floor Tile (12"x12", white) | 1470 | | Assumed ACM | No |
| | 2 | 202-C2, 201-C1 | Floor Tile (12"x12", light red) | 1470 | | Assumed ACM | No |
| | | | | | | | |
| **Engineering** | Roof | (perimeters, penetrations) | Flashing Cement | 200 | | 5%; Chrysotile | No |
| **Wing** | 1, 2 | Stairwells, 2nd fl. Janitor's Closet | 12" Floor Tile (gray) | 150 | | Assumed ACM | No |
| | 2 | 280, 208 | 12" Floor Tile (tan) | 1100 | | Assumed ACM | No |
| | 2 | 280, 208 | Lab Bench Top | 150 | | Assumed ACM | No |
| | 2 | 280 | TransiteÆ (fume hood liner) | 80 | | Assumed ACM | No |
| | | | | | | | |
| **ESU** | 1, 2 | SCBA , Stairs and Stairwell | 12" Floor Tile (tan) | 325 | | Assumed ACM | No |
| | 1 | Kitchen Area | 12" Floor Tile (red) | 50 | | Assumed ACM | No |
| | Roof | Roof | Membrane Roof | 3100 | | Assumed ACM | No |
| | | | | | | | |
| **FCPC** | Roof | Roof | Flashing Cement | 800 | | 15%; Chrysotile | No |
| **Bldg** | 2 | 243, 242 | Lab Bench Top | 300 | | Assumed ACM | No |
| | 2 | 243 | TransiteÆ (Fume Hood Liner) | 80 | | Assumed ACM | No |
| | 2 | 242 | Linoleum | 80 | | Assumed ACM | No |
| | 2 | 239-40, 236-7, 233-4, E hall | 12" Floor Tile (tan & white) | 3500 | | Assumed ACM | No |
| | | | | | | | |
| **Hot Cell/** | 1 | Hot Cell Area | Floor Tile (12"x12", white) | 1275 | | Assumed ACM | No |
| **NB Test Cell** | B | Instrument | Floor Tile (12"x12", White with tan streaks) | 190 | | Assumed ACM | No |
| | 1 | Clean Rm, Clean Rm Entr | Linoleum (with/gray) | 910 | | Assumed ACM | No |
| | | | | | | | |
| **L** | Roof | Roof | Flashing Cement | 130 | | 10%; Chrysotile | No |
| **Wing** | 1,2 | Various | 12" Floor Tile (gray speck) | 3500 | | Assumed ACM | No |
| **Addition** | 2 | 255, 253 | Lab Bench Tops | 250 | | Assumed ACM | No |
| | 2 | 253, 255 | 12" Floor Tile (dark tan) | 750 | | Assumed ACM | No |
| | | | | | | | |
| **Laboratory** | 1, 2 | Throughout Building | Hard Fittings on Fiberglass | | 540 | 10%; Chrysotile | Yes |
| **Bldg** | | | | | | | |
| | 1 | Hall | 9" Floor Tile (tan) | 1400 | | Assumed ACM | No |
| | 1 | Hall | 9" Floor Tile (red) | 1250 | | Assumed ACM | No |
| | 1, 2 | Throughout | 9" Floor Tile (beige) | 16525 | | Assumed ACM | No |
| | 1 | 109 | Drywall w/joint Compound | 120 | | Assumed ACM | |
| | 1, 2 | 213, 214 | 12" Floor Tile (gray) | 450 | | Assumed ACM | No |
| | 1, 2 | 131, E Hall; 2-Stair, 280A | 12" Floor Tile (black) | 170 | | Assumed ACM | No |
| | 1, 2 | 111; 2-hall | 12" Floor Tile (gray speck) | 300 | | Assumed ACM | No |
| | 1, 2 | Various (too many to list) | Lab Bench Top | 900 | | Assumed ACM | No |
| | 1, 2 | 116, 216 | 9" Floor Tile (gray) | 300 | | Assumed ACM | No |

| | | | | Quantity | | Total Asbestos | |
|---|---|---|---|---|---|---|---|
| Building | Floor | Room No. | Description | SF | LF | Percentage | Friable |
| | | | | | | | |
| **Laboratory** | 1 | 116B | 9" Floor Tile (black) | 80 | | Assumed ACM | No |
| **Bldg(Cont'd)** | 1 | 115 | 9" Floor Tile (tan speck) | 80 | | Assumed ACM | No |
| | 1, 2 | Stairs; 2-hall, 210 | 12" Floor Tile (tan speck) | 2300 | | Assumed ACM | No |
| | 1, 2 | 1 - 112 | 9" Floor Tile (yellow) | 650 | | Assumed ACM | No |
| | 1 | 112 | 9" Floor Tile (dark tan) | 50 | | Assumed ACM | No |
| | 1, 2 | 1st fl. near stairs; 217 | 12" Floor Tile (red) | 250 | | Assumed ACM | No |
| | 1, 2 | 122, 217, 254 | TransiteÆ Shelves and Fume Hood | 160 | | Assumed ACM | No |
| | 2 | 219A-D | 12" Floor Tile (light tan) | 600 | | Assumed ACM | No |
| | 2 | 251, 280A | 12" Floor Tile (dark tan) | 750 | | Assumed ACM | No |
| | | | | | | | |
| **LSB** | Roof | Roof, PH Roof | Roof Flashing Sealant | 890 | | 10%; Chrysotile | No |
| **East** | B | Various | Floor Tile (12"x12" Tan) | 2490 | | Assumed ACM | No |
| **Wing** | 1-3 | Various | Floor Tile (12"x12" beige) | 2715 | | Assumed ACM | No |
| | B, 1 | B - Throughout, 120 | Plaster | 12425 | | Assumed ACM | No |
| | 1 | 120 | Plaster (textured) | 1000 | | Assumed ACM | No |
| | B | 20 | Lab Table Tops | 45 | | Assumed ACM | No |
| | | | | | | | |
| **LSB** | Roof | Roof | Flashing Cement | 600 | | 10%; Chrysotile | No |
| **West** | 1-3 | Throughout Building | Drywall w/joint Compound | 105000 | | Assumed ACM | No |
| **Wing** | 2 | 279 | 12" Floor Tile (tan) | 120 | | Assumed ACM | No |
| | | | | | | | |
| **Maint Bldg** | 1 | Boiler, 137A, 131, Weld Shp, Office | Hard Fittings on Fiberglass | | 130 | 20%; Chrysotile | Yes |
| | Roof | (North Addition) | Flashing Cement | 830 | | 20%; Chrysotile | No |
| | Roof | over Trans. Services | Flashing Cement | 200 | | 20%; Chrysotile | No |
| | 1 | Boiler , HVAC Shp, H2O Tt Lab | Pipe Insulation Fittings on Suspect Lines | | 15 | 30%; Chrysotile | Yes |
| | Roof | over Boiler Rm., S Weld Shop | Composite Roofing (tar & gravel) | 5800 | | 5%; Chrysotile | No |
| | Roof | over Boiler, S Weld Shop | Flashing Cement | 405 | | 5%; Chrysotile | No |
| | 1 | Boiler, H2O Tt Lab, HVAC Shp | Block Pipe Insulation | | 80 | 55%; Chrysotile* | Yes |
| | 1 | Boiler | Header Pipe Insulation (Boiler 2&3) | | 50 | 75%; Chrysotile* | Yes |
| | 1 | Boiler | Stack Insulation | 250 | | Assumed ACM | Yes |
| | 1 | EMCS Off, 118, 104, 133, Pln & Rec | Sound Absorbant Wall Panels | 1700 | | Assumed ACM | No |
| | 1 | Water Treatment Lab | Lab Bench Top | 40 | | Assumed ACM | No |
| | 1 | H2O Tt Lab, EMS Office, Locker | 12" Floor Tile (gray) | 650 | | Assumed ACM | No |
| | 1 | Boiler , Restroom | 12" Floor Tile (red) | 40 | | Assumed ACM | No |
| | 1 | 139, 137, 115, hall 115A, Office | 12" Floor Tile (white) | 1000 | | Assumed ACM | No |
| | 1 | Lkr, Mens, Elec Shop, hall | 12" Floor Tile (tan) | 400 | | Assumed ACM | No |
| | 1, 2 | 117, 119, 115/A, 105-6, 122, 211 | Drywall w/joint Compound | 1850 | | Assumed ACM | No |
| | 1 | 115/A, hall | TransiteÆ Panels | 550 | | Assumed ACM | No |
| | 1 | Hall, Office Area | 12" Floor Tile (white w/tan) | 1600 | | Assumed ACM | No |
| | 1 | 105, 105A, 103, 103A | 12" Floor Tile (tan specks) | 800 | | Assumed ACM | No |
| | 1 | 108, 110 | 12" Floor Tile (tan, brown, white) | 50 | | Assumed ACM | No |
| | | | | | | | |
| | | | | | | | |
| **Materials** | 1 | 100A | Drywall w/joint Compound | 720 | | Assumed ACM | No |
| **Storage** | | | | | | | |
| | | | | | | | |
| **MG Bldg** | B, 1 | Throughout Building | Pipe Insulation Fittings (on Roof Drain Lines) | | 100 | 10%; Chrysotile | Yes |
| | 1 | near deionized H2O tank | Lagging Canvas & Tar Paper on Fiberglass | | 20 | 10%; Chrysotile | No |
| | B, 1 | Throughout Building | Compressed Pipe Insulation (on Roof drains) | | 800 | 2%; Chrysotile | Yes |
| | B, 1 | Throughout Building | Compressed Pipe Insulation (on Roof drains) | | 800 | 2%; Chrysotile | Yes |

| Building | Floor | Room No. | Description | Quantity SF | Quantity LF | Total Asbestos Percentage | Friable |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **MG Bldg(Cont'd)** | B, 1 | Throughout | Gray Sealant on Foam Insulation | 500 | | 60%; Chrysotile | Yes |
| | B, 1 | All; Ext-Recitifier Walls, UCA | TransiteÆ Panels | 600000 | | Assumed ACM | No |
| | 1 | Beneath Observation Booth | 1' Spline Ceiling Tile | 800 | | Assumed ACM | Yes |
| | 1 | Control Room | 9" Floor Tile (tan) | 2000 | | Assumed ACM | No |
| | 1 | Control Room | 12" Floor Tile (gray) | 80 | | Assumed ACM | No |
| | | | | | | | |
| **Mock-up** | 1 | 109-11 | Drywall w/joint Compound | 1000 | | Assumed ACM | No |
| **Bldg** | 1 | 113 | 12" Floor Tile (white speck) | 850 | | Assumed ACM | No |
| | | | | | | | |
| **NBPC** | Roof | Roof | Flashing Cement | 300 | | 15%; Chrysotile | No |
| **Bldg** | 2 | 233-8 | 12" Floor Tile (white speck) | 1800 | | Assumed ACM | No |
| | 2 | Mens, Ladies | 12" Floor Tile (tan) | 100 | | Assumed ACM | No |
| | B | 38 | Lab Bench Top | 65 | | Assumed ACM | No |
| | | | | | | | |
| **PLT** | Roof | Roof | Flashing | 180 | | 10%; Chrysotile | No |
| **Power** | Roof | Roof | Composite Roofing (tar & gravel) | 4000 | | 5%; Chrysotile | No |
| **Bldg** | 1 | Main | TransiteÆ Panels | 4300 | | Assumed ACM | No |
| | | | | | | | |
| **Receiving # 3** | 1 | Whse, 108, 102 (poss in bath walls) | Pipe Insulation Fittings a/w Fiberglass P.I. | | 65 | 40%; Chrysotile | Yes |
| | 1 | 107A-B | Floor Tile (12'x12' white) | 1000 | | Assumed ACM | No |
| | 1 | Hall (entrance) | Floor Tile (12"x12", tan) | 20 | | Assumed ACM | No |
| | 1 | Hall, 100 (patch) | Floor Tile (9"x9", tan) | 260 | | Assumed ACM | No |
| | 1 | 104, 105, 109, 100 (patch) | Floor Tile (12"x12", red) | 185 | | Assumed ACM | No |
| | | | | | | | |
| **Receiving #4** | 2 | 151 | Floor Tile (12"x12", white) | 530 | | Assumed ACM | No |
| | | | | | | | |
| **RF Bldg** | 1-4, Roof | Various | Pipe Insulation Fittings a/w Fiberglass P.I. | | 820 | 20%; Chrysotile | Yes |
| | 4 | 400 (units 3&4) | Chiller Insulation (end caps) | 20 | | 30%; Chrysotile | Yes |
| | 1 | 104A | Floor Tile (12"x12", white) | 200 | | Assumed ACM | No |
| | 1-3, Roof | Various | TransiteÆ Panels | 98270 | | Assumed ACM | No |
| | 1 | 101 (on equip in area) | Tank Insulation (cloth wrap) | 55 | | Assumed ACM | Yes |
| | 1-3 | 105, 230, 252, 342 | Floor Tile (12"x12", red) | 1550 | | Assumed ACM | No |
| | 1 | 106A | Floor Tile (12"x12", white w/specks) | 120 | | Assumed ACM | No |
| | 2 | 237, Mens/Ladies | Floor Tile (12"x12", brown) | 120 | | Assumed ACM | No |
| | 2, 3 | 229, 340 | Lab Table Tops | 65 | | Assumed ACM | No |
| | 2 | Throughout 238-52 | Floor Tile (9"x9", red) | 3300 | | Assumed ACM | No |
| | 3 | 320 (NW section of room) | Floor Tile (12"x12", tan) | 490 | | Assumed ACM | No |
| | 3 | 380 (old fenced area) | Floor Tile (12"x12", blue) | 65 | | Assumed ACM | No |
| | | | | | | | |
| **Shop Bldg** | 1, 2 | Various | Pipe Insulation Fittings a/w Fiberglass P.I. | | 400 | 20%; Chrysotile | Yes |
| | 1 | 119 | Vibration Isolation Cloth | 20 | | 50%; Chrysotile | Yes |
| | 1 | 109C | Pipe Insulation Fitting a/w Block P.I. | | 1 | 70%; Chrysotile | Yes |
| | 1 | 119 | Tank Insulation | 35 | | 80%; Amosite* | Yes |
| | 1, 2 | Various | Floor Tile (12"x12", red) | 2080 | | Assumed ACM | No |
| | 1 | 102A, 107A, 107 | Floor Tile (9"x9", red) | 975 | | Assumed ACM | No |
| | 1 | 107A (replacement tiles) | Floor Tile (9"x9", black) | 50 | | Assumed ACM | No |
| | 1 | 110 | Floor Tile (12"x12", tan) | 350 | | Assumed ACM | No |
| | 1, 2 | 110 (replmt tiles), 109A; New hall 200 | Floor Tile (12"x12", white w/brown streaks) | 1100 | | Assumed ACM | No |
| | 1 | 110 (border of room) | Floor Tile (12"x12", black) | 80 | | Assumed ACM | No |
| | 1 | 116 | Floor Tile (12"x12", white) | 90 | | Assumed ACM | No |
| | 1 | 117 | Floor Tile (12"x12", tan mottled) | 75 | | Assumed ACM | No |

| | | | | Quantity | | Total Asbestos | |
|---|---|---|---|---|---|---|---|
| **Building** | **Floor** | **Room No.** | **Description** | **SF** | **LF** | **Percentage** | **Friable** |
| | | | | | | | |
| **Shop Bldg** | 2 | Corridor 200 | Floor Tile (12"x12", white w/tan streaks) | 715 | | Assumed ACM | No |
| | 2 | 231-3 | Floor Tile (12"x12", blue) | 1260 | | Assumed ACM | No |
| | | | | | | | |
| **System Test** | 1, 2 | Throughout Building | Pipe Insulation Fittings a/w Fiberglass P.I. | | 40 | 30%; Chrysotile | Yes |
| **(Exper** | 1, 2 | Area 002; ESAT 1 | Lab Bench Top | 150 | | Assumed ACM | No |
| **Power** | 2 | Restroom (Upper level) | 12" Floor Tile (light green) | 50 | | Assumed ACM | No |
| **ESAT)** | 2 | Restroom Storage | Drywall w/joint Compound | 550 | | Assumed ACM | No |
| | 1, 2 | Area 002; ESAT 2 | 9" Floor Tile (tan) | 750 | | Assumed ACM | No |
| | | | | | | | |
| **TFTR** | Roof | Pump House | Flashing Cement | 250 | | 10%; Chrysotile | No |
| **Cooling** | 1, Roof | Cooling Tower | TransiteÆ Panels | 20000 | | Assumed ACM | No |
| **Tower** | | | | | | | |
| **Pump house** | | | | | | | |
| | | | | | | | |
| **TFTR MG** | 1 | Control | 12" Floor Tile (white) | 2100 | | Assumed ACM | No |
| **Bldg** | 1 | Control, Men's | Drywall w/joint Compound | 125 | | Assumed ACM | No |
| | | | | | | | |
| **TFTR** | DA, B | D43-013, D43-034 | Floor Tile (12"x12", white w/gray streaks) | 1075 | | Assumed ACM | No |
| **Test Cell** | B | Various | Floor Tile (12"x12", White w/tan streaks) | 1780 | | Assumed ACM | No |
| | | | | | | | |
| **Theory** | 1 | 172, Women's & Men's Rm | Floor Tile (12"x12", white) | 125 | | Assumed ACM | No |
| **Wing** | 1 | All | Drywall w/joint Compound | 13100 | | Assumed ACM | No |
| | | | | | | | |