



## ASBESTOS Q & A

**Q: Do you want to know when PPS is going to take care of a small asbestos job?**

**A:** Yes, EHSRM should be informed of all asbestos abatement on campus. The only exception is small floor tile repair/removal by the Carpenter Shop.

**Q: Can we sweep in the mechanical rooms or should they be vacuumed?**

**A:** With few exceptions mechanical rooms can be swept. Personnel must always be vigilant to spot potential asbestos contamination or debris. Potential ACM must not be swept. Only HEPA vacuums may be used to vacuum asbestos debris. Call your supervisor for instructions on how to proceed, if necessary. Call EHSRM for consultation in these situations.

**Q: When you talk about 260 linear feet, how do you measure?**

**A:** In the case of floor tile, we simply take the square footage of the room; 160 square feet isn't much floor tile (16' x 10'). In the case of pipe insulation, we generally "eyeball it" since we are usually well below the 260 linear feet reporting requirement. Many pipe insulation lengths are each 3 feet, so 260' is roughly 90 lengths. Count one "T" or "L" as one length.

Our criticism of the 160/260 rules is that these numbers are arbitrary and don't take into account the complexity of the project or the friability of the material. Non-friable floor tile (160 square feet reporting requirement is far less of a concern/hazard than friable pipe insulation (260 linear feet reporting requirement). This discrepancy has been brought to the attention of the DNR/EPA. In the meantime we must allow ample time to schedule floor abatement so that we can file the necessary notifications to DNR and the Department of Health and Family Services (DHFS).

**Q: What about the sand "weeping" through the walls of the Alumni House?**

**A:** Based on the age of the Alumni House (built in 1923) there is the likelihood that wall plaster could contain asbestos. The Alumni House is similar in age to the Chancellor's residence, Kenilworth and Sabin Hall. From our research we have discovered that asbestos was often added to wall plaster during the 1910s through the late 1920s. One isolated sample in the Alumni House had "trace" fibers; otherwise, areas sampled where there has been significant repair work have all be negative. The rule of thumb in these older buildings is that we sample the wall plaster in any given area prior to significant wall disturbance.

**Q: How quickly can we expect to receive lab results on bulk samples?**

**A:** Please allow at least 7 working days for bulk sample analysis. Currently our labs include the State Lab of Hygiene in Madison and Analytica Solutions (Denver). Be sure to let us know how quickly you need the results so we can prioritize your request.

**Q: It sometimes takes a long time to find out whether something is asbestos or not. Are there any “field tests” available for asbestos so that we can have immediate results like you have for sampling lead-based paint?**

**A:** No. There are no “field tests” available for asbestos analysis. We use the Asbestos Inventory to make an informed assumption whether the material is negative or positive based on sampling performed in a “homogeneous area”; this practice follows criteria established by the U.S. EPA AHERA Rule. Actual confirmation of any material requires microscopic analysis. All our samples are analyzed by Polarized Light Microscopy (PLM) by an accredited laboratory. Electron microscopy and X-ray analysis is also available for analysis, but this is generally cost prohibitive and too time consuming.

**Q: What about asbestos insulation in the elevator shafts? Should I be concerned about this?**

**A:** Please identify which shafts have suspect (i.e., “presumed”) asbestos insulation. Let your supervisor know when you have this done and he will schedule times between you and EHSRM so that we can investigate these areas. Damaged insulation or debris needs to be identified and repaired. If the insulation is still in good condition there is little need for concern since there is no exposure potential.

**Q: How do we know when a building summary is complete?**

**A:** The building summaries are considered "living documents", so they will always be under development. In other words, we intend to update these records for the life of the building. The UWM web site is the most feasible way to do this. So far most of our buildings have summaries that are only 75% complete. We will distribute updated copies when significant changes are made for a specific building.

**Q: Why didn't you discuss the common asbestos-related diseases?**

**A:** We normally cover the asbestos related diseases in the new employee safety awareness orientation. The intent of last week's seminar was to present new information to existing employees, specifically our initiative to document or summarize what we know (or don't know) about each of our buildings.

If anyone would like to attend the “Two-Hour Asbestos Awareness” class again in order to refresh their memory, they should notify their supervisor and a class will be scheduled.

If there is any interest we will also provide 16-hour Asbestos Operations and Maintenance training.

**Q: Is there any test that can be done to find out if you have asbestos in your system?**

**A:** The chest x-ray can be used to determine if you have been exposed to significant amounts of asbestos. A trained medical specialist called a “B-Reader” must interpret the x-ray; persons without this certification may not be able to detect the presence of asbestos-related lung damage. Persons having had significant exposure to asbestos will tend to have opacities of shadows on the x-ray. These anomalies are generally where the asbestos has turned otherwise healthy lung tissue into non-functional fibrotic tissue (i.e., asbestosis). Lung cancer and mesothelioma should also show up on the x-ray.

Employees involved in the PPS Asbestos Operations and Maintenance program have annual chest x-rays which are interpreted by a “B-reader.” If you’re not in the O&M program, you should discuss your concerns with your personal medical care provider.

**Q: Is there anything that can be done to get asbestos out of your system?**

**A:** No, there is nothing you can do for asbestos already in your system. Asbestos that reaches the deep recesses of your lungs stays there. That’s why asbestos is known as a pneumoconiosis disease, which is Latin for “dusty-lung” disease, similar to coal miner’s black lung disease or silicosis. Please keep in mind that asbestos is ubiquitous and nearly everyone has some amount of asbestos in his/her lungs. The goal is to prevent any future exposure to this occupational/environmental hazard.

The amount of any dust, including asbestos that reaches the deep portions of the respiratory tract is largely dependent on the “aerodynamic size” of the dust. In general, larger dust generally have more mass, is trapped in your upper respiratory track or sinuses. This is good because you blow your nose, spit it out, or swallow it; in other words, it doesn’t reach your lungs. But the smaller dust, generally having less mass, behaves like a gas and reaches the terminal portion of the respiratory tract known as the alveoli. This is where the gas exchange takes place and where asbestos does its damage. Asbestos fibers are often very small.

**Q: Just being in the basement of Kenilworth makes some people uncomfortable. Is it safe?**

**A:** Air monitoring in Kenilworth has been well below applicable hygienic standards. However, please be aware of the following: Room B57 and 171, the (southwest) boiler room, are a designated restricted area on the UWM Confined Space/Hazardous Space inventory. This area is placarded with warning signs. Room B57 was cleaned of presumed asbestos debris several years ago when the City required UWM to permanently seal the coal chute under Farwell Avenue. Room B57 is open to room 171 above, which was not cleaned and which has asbestos contamination resulting from the furnace explosion. Persons should not enter B57 or 171 without first informing and consulting

with EHSRM. Depending on the work you need to perform and the length of time you will be in this area, we may require that you wear respiratory protection, protective clothing and/or a personal sampling pump to determine your exposure to fibers, if any.

**Q: What about the area above the Ladies' Restroom in Kenilworth, across from the elevator?**

**A:** The attic space above 111, 112 and 113 is also a restricted area due to the presence of asbestos debris. Persons should not enter this area without first informing and consulting with EHSRM. Depending on the work you need to perform and the length of time you will be in this area, we may require that you wear respiratory protection, protective clothing and/or a personal sampling pump to determine your exposure to fibers, if any. We will be submitting any agency request to have this area cleaned.

**Q: How is money appropriated for abatement? Where does the money come from?**

**A:** Most small abatement projects are paid for by UWM's general maintenance fund. For larger projects we often submit "agency requests" to the Department of Administration-Division of Facilities Development (DOA-DFD). Other projects, like building renovations are automatically paid for by DOA-DFD.

**Q: If I come across a valve that has asbestos, then why aren't all adjacent valves abated at the same time?**

**A:** There is usually no reason to remove insulation that is in good condition. It comes back to the issue of available funds and prioritization. The more abatement we do, the more it costs (i.e., where do you end?) We have been taking proactive steps, for example in the tunnel, to abate insulation on critical valves. The U.S. EPA does not advocate removing asbestos simply for the sake of removing asbestos, as it increases the chance of exposure.

**Q: Can't EHSRM negotiate more money to address abatement as a health and safety issue?**

**A:** For larger projects we petition DOA-DFD for an "agency request," otherwise abatement comes out of the general maintenance fund. The maintenance budget has remained nearly constant over the past 15 years. There is just more to fix.

**Q: Do the examples presented today represent all of the places where I might expect to find asbestos?**

**A:** No. These are just examples where we commonly look and find asbestos. As we said, asbestos is ubiquitous. Asbestos was commonly used through the mid to late 1970s. You must always be on the lookout for asbestos, particularly in older buildings.

**Q: Can I put screws into drywall that contains asbestos fibers?**

**A:** Except for joint compound, we have not identified asbestos in drywall. The question should really be: Can I put screws into an asbestos plaster wall? Assuming it's just a couple of screws, this should result in little, if any, disturbance of the material. Your supervisor will contact EHSRM if he feels an exposure assessment should be scheduled. Call EHSRM for an exposure assessment. We prefer you do this well in advance of your intended project.

**Q: Should I assume that all doors contain asbestos?**

**A:** Per OSHA and the U.S. EPA, you must assume that all building material installed before 1980 contains asbestos. The exception to this is glass, metal and solid wood. So yes, if a material is pre-1980, you should presume that you may find asbestos and you must take appropriate precautions if suspect material is found. If you see suspect material, you should stop your work so that we can take a bulk sample and conduct an asbestos exposure assessment. We will be meeting the carpenters and locksmiths to discuss precautions and common-sense solutions for dealing with the asbestos-core door issue.

**Q: What are bulk samples?**

**A:** Teaspoon-sized samples we obtain of all building material manufactured before 1980 to determine whether the material contains asbestos or not. Per OSHA and the U.S. EPA, the exceptions are glass, metal and solid wood.

**Q: Why don't you have your own microscope for analysis here?**

**A:** Microscopy work is both a science and an art; we cannot justify the training, equipment and personnel expenditure for this endeavor. Also, samples should be submitted to an accredited laboratory to ensure accurate analysis. We want to avoid any potential for "conflict of interest."

**Q: Do they give you a percentage count of asbestos fibers in the samples?**

**A:** Yes. The analyst gives a percentage range of asbestos in the sample. Microscopy has a subjective component involved, so we rely on the training and expertise of the analyst. We often submit a "split sample" to two independent labs to ensure confirmation of our samples.

**Q: Why don't we know about the Trouble Report? It's been out for about a year.**

**A:** Today is the official introduction of the trouble report. You may still continue using the PPS trouble report or simply notify your supervisor. We prioritize trouble reports based on a variety of factors, including exposure assessment, availability of funds, availability

of contractors, complexity and location of the project, etc. Your supervisor should contact EHSRM if he feels that a particular project should be on the fast-track.

**Q: Do you always put up a sign in areas where your samples are taken?**

A: No, but we try.

**Q: Do you ever take the sample number off where you mark it?**

A: The past several years we have been marking the bulk sample locations with a unique ID number. If the particular insulation is abated, the sample number will be removed, otherwise the numbers are left in place. This last year we have started photo documentation of nearly all samples.

**Q: What about the yellow stickers? Who puts those on?**

A: We prefer to not use stickers or labeling, since this often confuses the issues more than it solves. This is particularly the case where we have asbestos and asbestos-free insulation side-by-side in a particular building. Instead, we prefer that you become informed of asbestos application in a particular building by reading the webpage building summary information. If warranted, your supervisor can contact EHSRM for an assessment.

**Q: Does “asbestos free” mean no asbestos on the surface and inside?**

A: Yes. If we apply asbestos-free labels, we are stating that this material has been abated or installed after 1980. We would normally only apply asbestos-free labels in an area where there is also known asbestos insulation. We gave an example during the presentation where new insulation was applied directly over old insulation. We would not do this anymore unless we would explicitly label the material as asbestos.

**Q: Is DFD keeping you updated on what’s going on?**

A: Yes, but they could do a better job.

**Q: Are updates done to the inventory as DFD or PPS complete their projects?**

A: As a general rule, no. We do not routinely update the inventory to that extent. The purpose of the inventory is more to give the “big-picture” of what’s in the building as to what has been removed in the past. We are attempting to improve notations in the inventory and on the webpage summaries if a particular area has been abated.

**Q: Does “DANGER ASBESTOS” sign mean there is a danger? If it’s on a pipe, is that pipe a problem?**

A: The signs we buy are for general labeling of known or presumed asbestos containing material. We generally buy whatever is cost-effective or readily available. If the word

“Danger” catches your attention, the sign is doing what it is intended to do. If the pipe is well encapsulated, there is no exposure potential. We often label where there is the likelihood of damage. Your supervisor can contact EHSRM if there are any questions regarding a particular area.

**Q: Is the “Renovation Project” sign used for anything other than asbestos?**

**A:** The so-called “Renovation” sign may be used for other activities that EHSRM is involved in (chemical spills, etc.) This is intended as a courtesy sign and to keep non-authorized persons out of the area. The sign generally states: “Authorized Persons Only.” PPS craftworkers and maintenance workers are generally considered to be “authorized persons.” If there is an imminent danger, we will normally explicitly state the hazard. Please use your discretion when you see these signs and contact your supervisor if you have any questions or comments.

**Q: What are we supposed to do when we discover asbestos doors? Is there a procedure for pulling off the closer and locks on asbestos doors?**

**A:** We will be meeting with the carpenters and locksmiths to discuss the issue of asbestos-core doors and safe and prudent work practices when dealing with these articles. If you find a door with suspect material, please notify your supervisor. Your supervisor will contact EHSRM so that we can obtain a sample. That way we can update the inventory and building summary.

**Q: At the Chancellor’s residence, was the asbestos residue on the pipes ever cleaned up?**

**A:** Nearly all abatement work at the residence takes place when UWM changes chancellors. The residence had extensive abatement prior to Chancellor Schroeder moving in. I believe this was when most pipes were abated throughout the building.

During the most recent vacancy, I felt the pipe-fittings particularly near the pipe threads could have been cleaner than they were. The residual material may have been simply mineral deposits rather than residual asbestos. The goal was to clean them so this wouldn’t be an issue in the future. In my professional opinion, nearly all fitting in general view are now acceptable for future PPS work if the need occurs. As always, if you come across a mudded fitting that was missed, we will need to abate it or utilize some other exposure control method.

**Q: Isn’t the glue more of a hazard than the tile with asbestos tiles?**

**A:** In my professional opinion, the mastic is less of a hazard than even the non-friable tile. The asbestos is encapsulated in a tar-like substance, thereby minimizing any likelihood of friability. Unless the mastic is dried-out (and potentially friable) the mastic shouldn’t be a concern. Call EHSRM for an exposure assessment if you have any questions about a particular area.

**Q: Are we allowed to contact EHSRM directly?**

**A:** Prudence dictates that you keep your supervisor apprized of your work and concerns. For the sake of efficiency or in an emergency, do not hesitate to consult with us; just please make sure that you or we keep your supervisor “in the loop” as soon as possible.

**Q: Why aren't we told on a monthly basis what project are going on?**

**A:** Abatement is an ongoing endeavor at UWM. As we stated during the presentation, we do hundreds of projects per year. We do our best to inform the supervisor and affected employees of ongoing work, but we may often overlook various parties or individuals. We plan on giving Dan Walker a list of completed and pending abatement projects. Dan will post this in the Safety Committee minutes.

**Q: Why are you breaking the law and not posting the proper warning sign?**

**A:** The OSHA red, black and white “DANGER” sign is only required where exposure is likely to exceed the permissible exposure limit (PEL-TWA) of 0.1 f/cc. These are generally Class I designated projects. All Class I projects are indeed posted with the OSHA required sign. OSHA also accepts deviation to this rule as long as equally effective measures are taken; so, for example, we could post a person outside of the abatement area. To answer your question, we are not violating OSHA/DNR/DHFS regulations since all Class I projects are properly signed. The majority of the projects at UWM are Class III Operations and maintenance projects. The expected exposure level for these projects should not exceed 0.1 f/cc, so signage is not required. We do our best to put up appropriate signs and will do a better job of notification.

**Q: Did they take out all of the asbestos in Sabin?**

**A:** No. Not all asbestos was removed from Sabin. Asbestos plaster still exists on the exterior walls throughout the building. To our knowledge, all interior wall and ceiling job-mixed asbestos plaster was removed. In the case of the exterior walls, metal studs and drywall were installed, thereby effectively protecting the plaster from future damage. Due to budget constraints, DOA-DFD will not be placing drywall over the job-mixed asbestos plaster in the lecture hall. This information will be documented on the building summary. All pipe insulation and floor tile was removed from the building.

**Q: Have you ever checked the plaster in Mitchell Hall?**

**A:** Based on the age of Mitchell Hall (built 1908/1912) there is the likelihood that wall plaster could contain asbestos. Mitchell is similar in age to the Chancellor's residence, Kenilworth and Sabin Hall which all have job-mixed asbestos plaster. From our research we have determined that asbestos was often added to wall plaster during the 1910s through the late 1920s. One isolated sample in the north wing of Mitchell had “trace” fibers; otherwise, all other areas sampled have all been negative. The rule of thumb in

these older buildings is that we sample the wall plaster in any given area prior to significant wall disturbance.

**Q: What about lead?**

**A:** Like asbestos, lead is also a health hazard and is regulated. The carpenters and painters are at greatest risk due to work involving lead-based paint and should be aware of the issues. Plumbers may also encounter lead. EHSRM can easily provide lead awareness orientation. Check with you supervisor to schedule this.

**Q: Should we be concerned with the amount of asbestos already inhaled?**

**A:** This is the most difficult question I am asked, especially when we deal with carcinogens like asbestos, or for that matter tobacco smoke, which is also a carcinogen. We feel that it is prudent that you remain conscious about your health and well-being. You should speak to your personal physician on a regular basis about this type of issue.

In regard to asbestos risk, there are two schools of thought: the “one fiber can kill” theory and the “dose-response” theory. The one fiber can kill theory is interesting in concept, but not highly accepted by the medical community. If this were indeed the case, the maximum human life span in the industrialized world would be about 30 years, since nearly everyone has been exposed to asbestos. The dose-response phenomenon applies to all chemicals, including asbestos. This theory states that the greater the exposure, the greater the risk. This is why we advocate that you be knowledgeable about this issue and take necessary precautions to minimize your exposure to below the hygienic values, and preferably lower than that if at all possible.

Most importantly, you should act to eliminate any future exposure; be aware of potential asbestos in your work area; call for samples to be taken; report damaged asbestos; avoid asbestos exposure away from work; get an annual physical and don't smoke.