
ENVIRONMENTAL Fact Sheet



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Handling and Repair Requirements for Asbestos-Cement Pipe (For Water and Wastewater Systems)

This fact sheet reviews the various levels of worker qualifications needed to work on asbestos-cement pipe. It does NOT address the work skills or techniques necessary to perform that work, only the required license, certifications and training. Contact the state. Asbestos Control Program at (603) 271-1370 for additional information.

Background Information

Asbestos is a non-conducting, non-combustible, fibrous mineral, which was first used in the 1880s to produce a variety of commercial and industrial products. By the end of the 20th century, most asbestos use ceased after health concerns became associated with the material.

Asbestos-cement pipe was developed in the early 1900s by reinforcing concrete with asbestos. This gave the pipe a much greater strength, allowing it to operate under much higher pressures. The pipe was inexpensive, easy to work with and extremely durable, making it very popular for use in drinking water distribution and wastewater collection systems, beginning in the 1940s. It is estimated that about 20 percent of distribution piping in the US is asbestos-cement pipe. Utilities stopped using the pipe in the 1970s when health concerns arose due to the potential release of asbestos fibers during the handling of the piping material.

Health Concerns

The inhalation of asbestos fibers is known to cause respiratory disease and cancer in humans. Asbestosis, mesothelioma and lung cancer are associated with asbestos exposure. Those diseases are physically debilitating and typically lead to death. Generally speaking, the symptoms of asbestos-caused diseases do not appear until 10 to 35 years after exposure. The exposure risk varies depending on the potential for materials to release asbestos fibers.

Asbestos containing material that can be easily crushed, pulverized or reduced to powder when dry is referred to as *friable* asbestos. Materials that do not crush or pulverize easily when dry are referred to as *non-friable* asbestos. Friable asbestos is the greatest concern because of its potential to release fibers to the air and surrounding surfaces where it may result in human exposure. Intact and undamaged asbestos-cement pipe is considered non-friable. Asbestos-cement pipe that it is broken, chipped, crushed or being cut is regulated as asbestos-containing material and is treated the same as friable asbestos under the law.

Abatement Projects and Certification

There are three types of asbestos abatement projects when working with asbestos-cement pipe: small-scale, short-duration activities, involving less than or equal to three linear feet of asbestos-cement pipe; minor asbestos abatement projects, no more than ten linear feet of asbestos-cement pipe; and major asbestos abatement projects, greater than 10 feet of pipe.

Entities such as companies and municipalities, and persons engaged in asbestos abatement projects must be licensed and certified by the DES Asbestos Control Program. An entity license is not required for minor and small-scale, short-duration activities. However, the individuals involved must still have the appropriate level of certification for the activity and job task. The certification is to assure that persons performing asbestos work are suitably qualified and have sufficient knowledge and ability to perform their job tasks without risk to themselves and others. All asbestos containing waste materials must be properly identified, packaged and delivered to a landfill licensed by the DES Solid Waste Management Program for disposal. Call (603) 271-2925 for more information.

There are two levels of personnel certification needed for asbestos abatement work involving asbestos-cement pipe repair:

- **Asbestos Abatement Supervisor:** supervises asbestos abatement projects and workers. They may also perform minor asbestos abatement projects. To become certified, the abatement supervisor must attend an approved 40-hour course for asbestos abatement supervisors and pass a written exam. To renew, supervisors must attend an eight-hour refresher and pass another written exam annually.
- **Asbestos Abatement Worker:** works for a certified asbestos abatement supervisor, removes and packages asbestos for disposal. To become certified, the abatement worker must attend an approved 32-hour course (or the 40-hour supervisor course) and pass a written exam. To renew, abatement workers must attend an annual eight-hour refresher and pass another written exam.

There is one level of training that exempts workers on small-scale, short-duration activities from licensing and certification requirements, except for the requirement to have a certified asbestos abatement supervisor.

- **Maintenance Worker:** an employee engaged in work activities designed or intended to contribute to on-going maintenance and operation of the facility or system, such as water distribution or wastewater collection operators. To become classified as a maintenance worker, the employee must initially attend an approved 16-hour course specific to the job task (for example, abatement, cleanup and repair of asbestos-cement) and an approved annual four-hour refresher. The 16-hour initial training is a combination asbestos awareness and job-specific training that includes a hands-on component. A maintenance worker can only perform the asbestos operations, maintenance and repair for small-scale, short-duration activities covered by the training.

Other employees of the water or wastewater system, not directly involved in asbestos abatement work, that may come in contact either directly or indirectly with asbestos containing materials are not required to be certified, for example, water distribution or wastewater collection operators involved in the repair of broken asbestos-cement pipe after the broken section has been removed and cleaned-up. However, these employees must receive annual two-hour asbestos awareness training.

Training courses must be approved by the USEPA or the DES Asbestos Control Program. Courses can only be obtained from approved asbestos training providers. These courses may be eligible for continuing education credit for the state Drinking Water or Wastewater Operator Certification programs.

For More Information

For more information on licensing, certification and training contact the Asbestos Licensing and Certification, Asbestos Control Program at (603) 271-4609.

Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov or visit <http://des.nh.gov/organization/divisions/water/dwgb/index.htm>. All of the bureau's fact sheets are available at <http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm>.

Note: This fact sheet is accurate as of October 2012. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.