



Construction and Demolition Waste Guidance

As Missouri communities continue to grow, older buildings are being renovated or demolished to make room for newer, more modern buildings. Properly managing waste during demolition helps prevent threats to human health and the environment.

If a demolition or renovation project is entered with an eye toward the environment and human health, the impact to both can be lessened or even removed. This will allow communities to continue to grow in harmony with the citizens and environment.

Construction and Demolition Waste Regulations

The Missouri Department of Natural Resources regulates demolition and renovation projects for institutional, commercial, public and industrial structures. The department also regulates residential structure projects such as apartment buildings with more than four units or two or more residential structures within 500 feet of each other. Single family residential structures or other residential structures containing four units or less are exempt from most asbestos regulations. However, all construction, demolition and renovation wastes are regulated under the solid waste management law.

All construction, renovation and demolition waste must be properly disposed of at a permitted transfer station or landfill regardless of whether it was generated from a commercial or residential structure. Before a regulated renovation or demolition project begins, the business or entity requesting the work should make the waste disposal a part of the contract. This will deflect liability if the waste is not properly managed and should be considered by the contractors during the bid process.

Demolition or renovation operations can create several different kinds of waste:

- **Clean fill** includes uncontaminated soil, rock, sand, gravel, asphaltic concrete, blocks and bricks, and minimal amounts of wood, metal and inert solids. Minimal means the smallest amount possible. These can be used to fill in excavated holes from demolition or construction projects.
- **Recovered materials** includes doors and windows, which can be removed for reuse, or scrap metal and asphalt shingles, which can be taken to a recycling center.
- **Regulated wastes** are wastes that cannot be used as clean fill and cannot be recovered for reuse or recycling. These wastes must be taken to a permitted landfill or transfer station for proper disposal.
- **Hazardous waste and asbestos containing material** - The most common hazardous materials encountered during demolition and renovation projects are lead paint and objects contaminated by lead paint. There are many rules and regulations regarding management and disposal of hazardous and asbestos containing materials.

For more information about clean fill, recovered materials or regulated wastes, contact the department's Solid Waste Management Program at (573) 751-5401 or see the fact sheet *Managing Construction and Demolition Wastes*, PUB2045, available on the department's Web site at www.dnr.mo.gov/pubs/pub2045.pdf. For more information about proper hazardous waste disposal contact the department's Hazardous Waste Program at (573) 751-3176.

Asbestos

Asbestos is a naturally occurring mineral fiber. It can be positively identified only with a special type of microscope. Because the fibers are so small, they can float into the air, where they can be inhaled and accumulate in the lungs. This can lead to diseases like asbestosis, mesothelioma and lung cancer.

Most products made today do not contain asbestos. However, until the 1970s, asbestos was added to a variety of products to strengthen them and to provide heat insulation and fire resistance.

For more information about the proper disposal of asbestos containing materials, contact the department's Air Pollution Control Program at (573) 751-4817 or see the fact sheet *Asbestos: What is it and why is it a concern?*, PUB2077, available on the department's Web site at www.dnr.mo.gov/pubs/pub2007.pdf.

Asbestos Inspection Requirements

Additionally, before a regulated project begins, a state licensed asbestos inspector must inspect the entire structure for asbestos containing material. If the inspectors finds regulated quantities of asbestos containing material or assumes it to be in the structure, an asbestos abatement contractor must complete the project.

Abatement contractors are trained in the proper procedures for safely removing and disposing of asbestos containing material. The Department of Natural Resources has a listing of Missouri-certified asbestos professionals and training providers on the department's Web site at www.dnr.mo.gov/env/apcp/Asbestos.htm.

The department requires notification for all regulated demolition and asbestos abatement projects. The information must be submitted to the department's Air Pollution Control Program at least 10 working days before the project begins. The department will review the project to ensure that it is being performed in compliance with all of the applicable requirements. The department will issue an approval letter for all asbestos abatement and demolition project notifications for regulated projects. Businesses or entities performing these types of projects should not proceed with the project without this approval.

For more information about asbestos inspections and notification requirements, contact the department's Air Pollution Control Program at (573) 751-4817 or see the fact sheet *Asbestos Requirements for Demolition and Renovation Projects*, PUB2157, available on the departments Web site at www.dnr.mo.gov/pubs/pub2157.pdf.

Open Burning of Construction or Demolition Waste

It is important to note that there are limited circumstances where waste from a renovation or demolition project can be open burned in Missouri. Untreated wood waste in limited circumstances can be open burned with a permit from the Department of Natural Resources. The burning of waste can lead to toxic emissions like dioxins, volatile organic compounds and hydrogen chloride. Those nearby the burn site could potentially experience skin and eye irritation, respiratory problems, and even central nervous system issues like headaches or dizziness.

For more information about open burning, contact the department's Air Pollution Control Program at (573) 751-4817 see the fact sheet *Facts on Open Burning under Missouri's Regulations*, PUB2047 available on the department's Web site at www.dnr.mo.gov/pubs/pub2047.pdf.

Local Ordinances

There may be local ordinances that are stricter than the state's rules and regulations. Any business or entity beginning a renovation or demolition project should be aware of all of the ordinances and regulations affecting them before the project starts.

For more information

Missouri Department of Natural Resources
Solid Waste Management Program
P. O. Box 176, Jefferson City, MO 65102-0176
1-800-361-4827 or (573) 751-5401 office
(573) 526-3902 fax
www.dnr.mo.gov/env/swmp/index.html

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P.O. Box 176, Jefferson City, MO 65102-0176
1-800-361-4827 or (573) 751-2706 fax
www.dnr.mo.gov/env/apcp/index/html