This guidance document provides a synopsis of the regulatory requirements applicable to the removal, transporting, and disposal of asbestos-containing roofing products in North Carolina. The information supplied in this document is meant only as an overview of regulatory requirements. For full details, please refer to the specific rule or regulation referenced. The rules/regulations and responsible agencies are as follows:

**National Emission Standards For Hazardous Air Pollutants (NESHAP)**

Asbestos Renovation and Demolition Regulation (40 CFR Part 61, Subpart M)

The objective of the asbestos NESHAP regulation is to eliminate or minimize the release of asbestos fibers into the environment during renovations or demolitions of buildings. This is accomplished through the asbestos inspection, notification, work practices, and disposal requirements of this regulation. The NESHAP regulation is applicable to industrial, commercial, institutional, public, and some residential buildings. Single family dwellings and residential buildings with 4 or fewer units are not covered under NESHAP, except when these structures are being renovated or demolished for commercial or public purposes.

The first step in determining what aspects of the NESHAP regulation may be applicable to a renovation or demolition project is the inspection of the building or the affected area of the building for the presence of asbestos-containing materials (ACM). It is specifically stated in the NESHAP regulation that this inspection must include roofing materials. For details on the training/accreditation requirements for persons conducting this inspection, please refer to the summary of the North Carolina Asbestos Hazard Management Program Rules in this document.

As provided in the interpretive guidance issued in the June 17, 1994, Federal Register, the EPA's asbestos NESHAP regulation is applicable, under certain conditions, to the removal of asbestos-containing asphalt/bituminous roofing products and asbestos-cement shingles/panels. Under this guidance the following types of roofing projects involve the removal of regulated asbestos-containing material (RACM), and are, therefore, covered under the NESHAP regulation:

1. >160 square feet of friable** roofing ACM will be removed.
2. >5580 square feet of nonfriable ACM, such as built-up roofing, will be removed using a rotating blade cutter.
3. >160 square feet of nonfriable asbestos/cement roofing products will be removed using techniques that will create friable ACM.

** Friable means the material has been crumbled, pulverized, reduced to powder, or otherwise deteriorated so the asbestos is no longer likely to be bound with its matrix.
The EPA guidance also states that neither the use of manual techniques (i.e. axes, knives, etc.) for the removal of built-up roofing nor the controlled removal of asbestos/cement shingles would be covered under the NESHAP regulation.

If an asbestos roofing project is covered under the NESHAP regulation, then wet removal techniques, an asbestos trained supervisor/foreman, containerization of the regulated waste, and waste shipment forms must be used. Also, written notification to the EPA delegated agency must be made 10 working days prior to the start date.

The responsible agencies and their jurisdictions are as follows:

**North Carolina's Asbestos Hazard Management Program (AHMP) Rules**

**G.S. 130A, Article 19 (10A NCAC 41C .0600)**

The objective of the AHMP rules is to protect the public from exposure to asbestos fibers. This is accomplished through training/accreditation and permitting requirements for conducting asbestos abatement activities. These rules are applicable to all types of buildings, including single family dwellings under certain circumstances, when regulated asbestos-containing roofing products are removed or handled. (See guidance on RACM under the NESHAP summary.) Under these rules, an asbestos removal permit needs to be obtained ten working days prior to beginning of the project.

The removal of regulated asbestos containing roofing products must be conducted under the supervision of an accredited roofing supervisor. Each worker who will be handling regulated asbestos containing roofing products must be accredited as an asbestos roofing worker. To be accredited, each person would have to successfully complete an approved training course--two days, for supervisors and one day for workers--and apply to the NC-DHHS, Health Hazards Control Unit for accreditation. To maintain accreditation, the roofing supervisors and workers must complete a refresher training course annually. Again, all of the requirements are only applicable when the roofing products are classified as RACM per the NESHAP regulations. If an alternative removal technique is used, then the AHMP Rules would not be applicable. The person conducting the NESHAP inspection for the roofing renovation project must also be accredited under these rules.

For additional details, please contact the NC-DHHS, Health Hazards Control Unit (see address above).
Asbestos Roofing Guidance

Occupational Safety and Health Act (OSHA)
Asbestos Construction Standard (29 CFR 1926.1101)

The OSHA asbestos regulations are for the protection of workers involved in the removal or handling of asbestos-containing materials. Unlike the asbestos NESHAP regulations and AHMP rules; OSHA's Asbestos Construction Standard is applicable to all types of asbestos roofing products, including nonfriable ACM. However, certain types of roofing products are regulated differently under this standard. The class and categories are as follows:

Built-Up Roofing and Shingles

The removal of these types of asbestos-containing roofing products would be considered "Class II Asbestos Work". Under this class of asbestos work, each worker involved in the removal must receive at least 8 hours of asbestos training on proper work practices and worker protection. The supervisor on the project is required to have additional training. Annual refresher training is also required. This standard also requires regulating the removal area, wetting, collecting and properly disposing of any asbestos dust/debris generated during the removal. Also, if the contractor cannot provide air monitoring data showing that exposures will be below OSHA's permissible exposure limits, worker exposure air monitoring must be conducted. (Note: Air monitoring data known as "Objective Data", which has been compiled by the National Roofing Contractors Association can be used to meet the exposure monitoring requirements of this standard.) Depending on exposure levels and/or work practices, use of worker protection equipment, such as respirators, may be required.

Intact Incidental Roofing (Coatings, Mastics, Flashing, and Cements)

The definition of intact under this standard is essentially the same as non-friable under the NESHAP regulations. These incidental roofing products must still be handled by appropriately trained personnel (workers and supervisors), but the time-frame of the training is not specified. The work practice and handling requirements for these types of materials are less stringent than for "Class II Asbestos". However, before work can begin, a competent person must conduct an inspection of the worksite and determine that the roofing material is intact and will likely remain intact during the removal. If these materials are removed in a way that causes them to become non-intact, then the project would be considered "Class II Asbestos Work".

For additional information on this standard, you may contact:

NC Dept. of Labor
Occupational Safety and Health Division
Bureau of Education, Training, and Technical Assistance
4 West Edenton Street
Raleigh, NC 27601
Phone: (919) 807-2875 (1-800-LABOR-NC)
North Carolina Solid Waste Rules
(10A NCAC 10G .0505)

North Carolina’s solid waste rules require that asbestos-containing waste, including roofing materials, be disposed of in certain types of landfills. The primary type of landfill that can accept asbestos waste is the municipal solid waste landfill. Some construction and demolition debris landfills may also be approved to take certain types of asbestos waste.

For details, please contact the local landfill or NCDENR, Division of Solid Waste Management:

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<thead>
<tr>
<th>Eastern Regional Coordinator</th>
<th>Western Regional Coordinator</th>
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<tbody>
<tr>
<td>Fayetteville Regional Office</td>
<td>Winston-Salem Region Office</td>
</tr>
<tr>
<td>Phone: (910) 486-1191</td>
<td>(336) 771-4600</td>
</tr>
</tbody>
</table>

Department of Transportation Regulations
(49 CFR 173.1090)

There are limited requirements for transporting and manifesting asbestos waste under these regulations. These include, use of enclosed or covered trucks and manifest requirements. For more information, contact:

Enforcement Section
NC Division of Motor Vehicles
1100 New Bern Avenue
Raleigh, NC 27697
Phone (919) 733-4077

Building Owners/Operators Responsibilities

The building owner/operator has certain responsibilities under these rules and regulations. For example, the NESHAP regulations are applicable to the owner or operator of the demolition or renovation activities. The definition of owner/operator from NESHAP, includes any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated; or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation; or both. Thus, under this regulation, the owner/operator (including contractors) are equally responsible for ensuring that the affected area is surveyed for potential asbestos-containing materials prior to the renovation or demolition. The OSHA Asbestos Construction Standard also contains similar requirements for the determining the location of and communicating information about potential asbestos-containing materials. North Carolina’s Asbestos Hazard Management Program Rules are also applicable to building owners and operators. Finally, if violations are identified under any of these rules and regulations, the building owner/operator have been and could be issued citations, which could result in the assessment of monetary penalties.

Revised: 8/05; 7/07