

Asbestos Handling Requirements at Licensed Solid Waste Landfills

Enforcement Selection Criteria

Pub-WA-616 2006



P.O. Box 7921
Madison, Wisconsin
53707-7921

Asbestos Definitions

Asbestos containing material (ACM) means mill tailings or any waste that contains commercial asbestos and is generated by a source.

Category I nonfriable ACM means asbestos containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1% asbestos.

Category II nonfriable ACM means any material, excluding Category I nonfriable ACM, containing more than 1% asbestos.

Friable asbestos material means any material containing more than 1% asbestos that when dry, can be crumbled, pulverized or reduced to a powder by hand pressure.

Nonfriable asbestos material means any material containing more than 1% asbestos that when dry, can't be crumbled, pulverized or reduced to a powder by hand pressure.

Regulated asbestos containing material (RACM) means (a) friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subject to sanding, grinding, cutting or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized or reduced to a powder by the forces expected to act on the material in the course of demolition or renovation operations.

Waste generator means any owner or operator of a source whose act or process produces asbestos-containing waste material.

Issue

The Department's Waste and Materials Management Program requirements in s. NR 506.10, Wis. Adm. Code, identify asbestos handling requirements that apply to different categories of ACM. The Department's Air Program, s. NR 447.17, Wis. Adm. Code, requirements for landfill disposal of asbestos containing material (ACM) are not identical to the NR

500 requirements. Although ACM from all generators and sources are not subject to NR 447, it is not always possible to determine the source of ACM at a landfill. For this reason, landfill operators have expressed concern about the potential for the department to apply enforcement actions against the landfill for ACM disposal practices acceptable under NR 500 but not identified in NR 447. Landfill operators have also expressed concerns about their lack of control over ACM received at their sites from generators, solid waste transporters or transfer stations that have not complied with ACM management practices in NR 447 or NR 500.

The department is interested in clear enforcement standards and cooperation from landfill owners to take all reasonable steps to encourage proper disposal of ACM, particularly ACM from sources subject to NR 447. Properly operated MSW landfills significantly prevent asbestos released from ACM disposal activities. Likewise, properly trained landfill personnel and sound waste screening protocols protect the landfill from the delivery of regulated ACM without proper notification.

The department does not want the potential for enforcement to discourage landfills from continuing to accept ACM, since this could cause increased illegal dumping and decreased safety from asbestos release. A workgroup, representing the landfill industry, participated with the Department Air and Waste Programs in the development of this document and the attached decision matrix the department will use in determining the appropriate enforcement authority for violations of ACM management requirements at licensed landfills.

Background

The NR 500.08(1)(a) exemption for on-site disposal of household waste does not preclude proper management of household waste at off-site locations.

Asbestos Handling Requirements at Licensed Solid Waste Landfills

Enforcement Selection Criteria

Similarly, wastes from projects exempt from NR 447 requirements are not exempt from storage, transport and disposal requirements of NR 502 and NR 506.10.

The Air Management Program (NR 447 series) and the Waste & Materials Management Program (NR 500 series) asbestos requirements are not identical; however, both focus on practices to minimize the release of asbestos. “Friable” and “Category II” ACM have the greatest potential for becoming airborne and are more rigorously controlled by both series. “Category I” ACM, such as pliable roofing shingles and vinyl flooring, are less likely to release asbestos fibers during handling and disposal. Because of this, no special operational requirements apply to landfill disposal of Category I ACM, and it may be handled either separately or with other wastes for landfill disposal as allowed by NR 506.10(1)(c).

While projects subject to NR 447 comprise the greatest quantity of ACM, construction and demolition wastes from individual households and certain small projects, exempt from NR 447 requirements, are lesser sources of ACM with the potential for asbestos release during handling and disposal. MSW landfill operational requirements in NR 506.05 and 506.07 (daily cover, confined active area and provisions to prevent escape of windblown material) help prevent release of friable and Category II ACM that from time to time is taken to landfills from these NR 447 exempt sources. Although it isn’t feasible for landfills to inspect all wastes in all loads, landfill waste screening protocols encourage contractors to comply with NR 447 and NR 506.10(1)(a) and (b) requirements and deter delivery of friable and Category II without notice to the landfill.

The Department’s Air and Waste Division Enforcement Policy recommends enforcement levels that correspond to the seriousness of a violation, and that stepped enforcement is used to resolve compliance issues at the lowest possible level (see the Environmental Enforcement Handbook). NR 447.19 citation authorities are interim steps in the Department’s enforcement strategy, where lower level enforcement options are available. The level of enforcement utilized must be made on a case-by-case basis, weighing the facts related to the specific situation.

Conclusion: Air and Waste Program Coordination and Enforcement Selection Criteria

Coordination: The Air Management and the Waste and Materials Programs will coordinate ACM enforcement actions at licensed landfills approved to accept ACM to select the most appropriate level of enforcement. Enforcement will consider the landfill’s compliance with their NR 500 approvals, the sources of the ACM and the adequacy of management practices at the landfill to control ACM releases.

Landfill Practices: The following matrix summarizes appropriate handling practices for asbestos containing materials (ACM) that is subject to either NR 447.19 citation or NR 500, stepped enforcement. The appropriate practices take into consideration differences in ACM handling requirements between NR 447.17 and NR 506.10. Licensed landfills that are operated in compliance with their approvals and NR 500 are less likely to be subject NR 447.19 citation actions. Violations that defer NR 447.19 citations may be subject to an appropriate NR 500 stepped enforcement level based upon the specifics of the violation.

Disclaimer: *This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.*

Equal Opportunity Employer and Americans with Disabilities Act Statement: *The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Chief, Public Civil Rights, Office of Civil Rights, U.S. Department of the Interior, 1849 C. Street, NW, Washington, D.C. 20240.*

This publication is available in alternative format (large print, Braille, etc.) upon request. Please call 608-266-2111 for more information. Note: If you need technical assistance or more information, call the Accessibility Coordinator at 608-267-7490 / TTY Access via relay – 711.

Asbestos Handling Requirements at Licensed Solid Waste Landfills
Enforcement Selection Criteria

Licensed Landfills - Asbestos Management Requirements	
(Criteria for deferring s. NR 447.19, Wis. Adm. Code citation authority to NR 500)	
1. Category I ACM disposal in the active area	
NR 447.19 Citation: Requirement	Appropriate NR 500 Landfill Practices
NR 447.17(1),(2) or(3): Cover	Facility has adequate NR 500 6-inch daily cover or other approved alternative daily cover
NR 447.17(1) to (4): Emissions	No waste containing ACM dragged outside of the active area
NR 447.17: Mapping	Citation not applicable for the material identified
NR 447.17(5)(a): Manifests	Citation not applicable for the material identified
2. Category II or Friable ACM disposal in active area from households delivered with regular trash or from drop off center	
NR 447.19 Citation: Requirement	Appropriate NR 500 Landfill Practices
NR 447.17(1),(2) or(3): Cover	Facility has adequate NR 500 6-inch daily cover or other approved alternative daily cover
NR 447.17(1) to (4): Emissions	No waste containing ACM dragged outside of the active area
NR 447.17: Mapping	Landfill is following appropriate ACM landfill practices and their approvals
NR 447.17(5)(a): Manifests	Citation not applicable for the material identified
3. Category II or Friable ACM disposal in active area from projects exempt from NR 447 reporting requirements.	
NR 447.19 Citation: Requirement	Appropriate NR 500 Landfill Practices
NR 447.17(1),(2) or(3): Cover	<ul style="list-style-type: none"> - Facility has adequate NR 500 6-inch daily cover or other approved alternative daily cover - Operators are trained in identifying Category II or friable ACM and proper ACM covering procedures
NR 447.17(1) to (4): Emissions	<ul style="list-style-type: none"> - No waste containing ACM dragged outside of the active area - ACM covered with non-ACM material prior to placing 6-inch daily cover or other approved alternative daily cover
NR 447.17: Mapping	<ul style="list-style-type: none"> - Landfill is following appropriate ACM landfill practices and their approvals - Adequate NR 500 random load inspection program to deter improper delivery of ACM
NR 447.17(5)(a): Manifests	Citation not applicable for the material identified
4. Category II or Friable ACM disposal in active area from projects with quantities that are not exempt from NR 447 reporting requirements received at the landfill without the generator notifying the landfill of ACM contents.	
NR 447.19 Citation: Requirement	Appropriate NR 500 Landfill Practices
NR 447.17(1),(2) or(3): Cover	<ul style="list-style-type: none"> - ACM, upon discovery, is covered with non-ACM material prior to placing 6-inch cover
NR 447.17(1) to (4): Emissions	<ul style="list-style-type: none"> - No waste containing ACM dragged outside of the active area - No visible emissions from covering ACM materials
NR 447.17: Mapping	<ul style="list-style-type: none"> - Landfill is following appropriate ACM landfill practices and their approvals

Asbestos Handling Requirements at Licensed Solid Waste Landfills

Enforcement Selection Criteria

	<ul style="list-style-type: none"> - Adequate NR 500 random load inspection program to deter improper delivery of ACM - Facility following a special waste plan that includes requirement for generators to identify ACM
NR 447.17(5)(a): Manifests	<ul style="list-style-type: none"> - Landfill is following preferred practices and their approvals - Facility is following proper manifest handling for other NR 447 regulated Category II or friable ACM received
5. NR 447 regulated Category II or Friable ACM disposal in active area. ACM was properly identified at the landfill as regulated ACM and misdirected to the active area. NR 447.19 Citation: Requirement Appropriate NR 500 Landfill Practices	
NR 447.17(1),(2) or(3): Cover	<ul style="list-style-type: none"> - ACM, upon discovery, is covered with non-ACM material prior to placing 6-inch cover - Or, facility has contacted department Waste Program staff for an approved alternative action - Operators trained in identifying Category II or friable ACM and proper ACM covering procedures
NR 447.17(1) to (4): Emissions	<ul style="list-style-type: none"> - No waste containing ACM dragged outside of the active area - No visible emissions from covering ACM materials
NR 447.17: Mapping	<ul style="list-style-type: none"> - Adequate NR 500 random load inspection program to deter improper delivery of ACM - Facility following a special waste plan that includes requirement for generators to identify ACM - Facility is properly mapping their approved ACM disposal areas. - The active areas containing regulated ACM are mapped
NR 447.17(5)(a): Manifests	Facility followed proper NR 447 manifest requirements for the regulated materials received