



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: C37

Category: Asbestos
EPA Office: SSCD
Date: 12/21/1987
Title: Recycled Roof./Siding Mater. Used for Paving
Recipient: Wilburn, James T.
Author: Seitz, John S.
Comments: see section 61.145(c) "...asbestos emission control",
section 61.144 "standard for manuf." and memo 3/18/92

Subparts: Part 61, M, Asbestos

References: 61.143
61.144
61.145(c)
61.154

Abstract:

Only roofing/siding materials which were removed from a source not subject to Section 61.147 (Section 61.145, 1990 regulations) may be recycled for pavement. The recycling of such materials is subject to Section 61.144. The application of pavement containing such materials is subject to Section 61.144, but complies with 61.143. However, if the pavement is not encapsulated with asphalt, EPA should consider further action to protect health.

Letter:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DECEMBER 21, 1987

MEMORANDUM

SUBJECT: NESHAP Applicability Determination - Use of Ground-up Asbestos Containing Asphalt Shingles on Roadways

FROM: John S. Seitz, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: James T. Wilburn, Chief
Air Compliance Branch
Air, Pesticides and Toxics
Management Division

My office in conjunction with OECM have reviewed your November 5, 1987 request for an applicability determination on the use of recycled asbestos containing roofing/siding materials for pavement. You spoke of two companies which have performed this kind of recycling: Resource Recovery Association, Inc. (RRA), located at the Bay Drums dump site in Tampa, Florida, and Ramco Recycling, Inc. (Ramco) headquartered in Seffner, Florida. As indicated by the information you submitted to us, these two companies have recycled asbestos containing roofing/siding in different manners.

The roofing/siding materials recycled by the two companies includes asbestos cement shingles, asbestos cement siding, asbestos containing asphalt shingles, and built-up roofing. Generally this waste material is non-friable because it is either cementitious or encapsulated in asphalt, and as such cannot be crumbled by hand pressure when dry.

Any friable asbestos-containing material which was removed from a facility subject to Section 61.147 (Standard for Demolition and Renovation) must be maintained as asbestos-containing waste materials according to Section 61.156 (Active Waste Disposal Sites), and therefore cannot be recycled. The proceeding rationale of this determination is based on the assumption that the recycle operations will be recycling roofing/siding materials which were removed from a facility not subject to the NESHAP.

RRA is located at an EPA Superfund site (Bay Drums dump site) which contains asbestos roofing/siding shingles, the majority, if not all of which, is cementitious. Before selling their recycling operation to Smith Recycling, RRA crushed the asbestos cement (A/C) shingles using a hammer mill without any binding encapsulant. The resulting product was for sale as aggregate to asphalt companies. This kind of recycling process is subject to Section 61.144 (Standard for Manufacturing) which "applies to . . . manufacturing operations using commercial asbestos (Section 61.144(a))." The definition of "commercial asbestos" is "any asbestos that is extracted from asbestos ore." Because the asbestos contained in asbestos roofing/siding shingles was extracted from asbestos ore, that asbestos is considered "commercial asbestos." Therefore, any operation which manufactures aggregate for asphalt pavement from A/C shingles is subject to Section 61.144. In addition, any operation which uses the commercial asbestos aggregate in the production of pavement is also asphalt pavement, is not subject to Section 61.143 (Standard for Roadways) which reads:

No person may surface a roadway with asbestos-containing waste material on that roadway, unless it is a temporary roadway on an area of asbestos ore deposits.

Because a Section 61.144 operation manufactures asbestos containing products and not "asbestos-containing waste material", Sect 61.143 does not apply to asphalt companies using aggregate produced under Section 61.144.

The RRA recycling operation is now owned by Smith Recycling of Tampa, Florida. It is expected that Smith Recycling will recycle asbestos-containing roofing/siding and apply the resulting material as pavement in an operation similar to Ramco's recycling operation. Unlike the RRA operation Ramco recycles a mix of asbestos containing asphalt/shingles and A/C shingles instead of A/C shingles alone. This mix is shredded and applied to surfaces as pavement. Similar to RRA's operation, Ramco's process is subject to .61.144.

The asphalt in Ramco's paving mix is supposed to bind the mix together as it becomes heated by the Florida sunshine. If such a pavement mix does indeed become bound so as to encapsulate the asbestos materials, then the pavement is acceptable. Although the present NESHAP does not prohibit the application of pavement mix which is not bound and which may therefore cause a health problem resulting from vehicles crushing exposed asbestos,

(some material was unreadable at this point)

In summary, only roofing/siding materials which were removed from a source not subject to Section 61.147 may be recycled for pavement. The recycling of such materials is subject to Sect 61.144. The application of pavement containing such materials is subject to Section 61.144, but complies with §61.143. However, if the pavement is not bound (i.e., encapsulated) with asphalt, EPA should consider it unacceptable for use by traffic, and should consider further action to protect public health. Any questions concerning this determination may be addressed to Jim Engel at 382-2877.

cc: Bill Anderson
Elliott Gilberg
Gil Wood