Paving Determination Letter #1

Control Number: C37

Category: Asbestos

Region: 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 National Emission Standards for 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

Paving Determination Letter #2

Control Number: C29

Category: Asbestos

Region: Region 4

Date: 12/26/1986

Title: Road Paving with Asbestos Waste Prohibited

Recipient: Rocco, John M.

Author: Wilburn, James T.

Comments: Removed asbestos shingles are not automatically considered ACWM.

However, they're not allowed to go to any facility that would

turn into ACWM.

Subparts: Part 61 M National Emission Standards for Asbestos

References: 61.141

61.143

61.144

61.145

61.150

61.152

61.154

Abstract:

The use of any asbestos-containing waste material, as defined in 40 CFR Section 61.141, to surface any roadway (including highways, roads, streets, parking areas and driveways) is prohibited under 40 CFR Section 61.143.

Letter:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 Courtland Street

Atlanta, Georgia 30365

DECEMBER 26, 1986

4APT-AC

Mr. John M. Rocco

Vice President/Sales & Marketing

Resource Recovery Association Inc.

509 East Jackson Street

Tampa, Florida 33602

Dear Mr. Rocco:

This letter is in reply to your letter of October 27, 1986

to Mr. Beals of my staff concerning applicability of federal rules to your recycling operation in Tampa Florida.

The federal rule promulgated at 40 CFR 61, Subpart M National Emission Standard for Asbestos is designed to prevent asbestos fibers from becoming airborne and therefore a threat to human health.

We have researched your situation and have determined that the use of any asbestos-containing waste material, as defined in 40 CFR 61.141, to surface any roadway (including highways, roads, streets, parking areas and driveways) is prohibited under 40 CFR 61.143. The term "asbestos-containing waste material", as used above is defined, in part, as "any waste material that contains commercial asbestos and is generated by a source subject to the provisions of this subpart." The asbestos in the shingles you propose to process is commercial asbestos since it was extracted from asbestos ore and was a deliberate additive in the manufacture of shingles which is considered a fireproofing/ insulating material whose manufacture is regulated by 40 CFR - 61.144. The shingles, and like material, you propose to process for use on roadways are waste material containing asbestos. The removal of thee shingles from their original site is regulated under 40 CFR 61.145 through 61.147. Consequently, upon removal, these shingles became asbestos-containing waste material. Thus, the recycled

material cannot be used on roadways if it is derived solely or from a portion of these asbestos-containing waste materials. Analysis of samples taken by our inspector during the week of October 27, 1986, indicate that asbestos is present in the recycled product. Since non-friable asbestos-containing material may became friable during disposal at a waste disposal site, if subject to mechanical forces such as from bulldozers, this material is subject to the regulations at 40 CFR 61.152 and 61.156 which prescribe certain work practices to prevent asbestos fibers from becoming airborne. The regulations state that no visible emissions are permitted to the outside air at landfill operations where asbestos-containing waste material is deposited.

Lastly, if you choose to process asbestos-containing waste material for some other purpose, the provisions of 40 CFR 61.152(b) (2) will apply. Specifically, the resulting product must be in a non-friable form and there must be no visible emissions discharged from the collection or processing operations. Alternatively, air cleaning provisions specified at 40 CFR - 61.154 may be utilized.

Since your operation is subject to the provisions of 40 CFR 61, a new source construction permit will be required according to 40 CFR 61.07. Since we have delegated the implementation of the federal asbestos regulations to the Florida Department of Environmental Regulation, it will be

necessary to obtain appropriate construction and operating permits from them.

In closing, I want to emphasize that the Environmental Protection Agency considers asbestos to be a very hazardous material and it is our intent to regulate the use and processing of this material as strictly as possible since exposure to asbestos can result in devastating health consequences. If you have any questions concerning this letter please call me or Brian Beals of my staff at 404/347-2904.

Sincerely yours,

James T. Wilburn, Chief

Air, Compliance Branch

Air, Pesticides, and Toxic

Management Division

Enclosure (40 CFR 61 - Subpart M)

cc: Mr. Darrell Graziani

Hillsborough County Environmental Protection Commission

Mr. Mike McCann

Mr. Ed Palagyi

Florida Department of Environmental Regulation