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PETER MAGGIORE  
SECRETARY

February 10, 2000

Mark Hansen  
Chief, Toxics Enforcement Section  
US EPA Region 6 6EN-AT  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733

Dear Mr. Hansen:

This letter is a follow-up to our conversation this morning regarding DOE's intent to dispose of radioactive asbestos waste in the Waste Isolation Pilot Plant (WIPP). Attached is their November 22, 1999, notification letter to NMED which describes their understanding regarding the exemption of such waste from NMED's Solid Waste Management regulations. I have also attached relevant portions of these regulations (20 NMAC 9.1) and my analysis of their applicability to radioactive asbestos waste.

Although NMED has issued a Hazardous Waste Facility Permit to WIPP which regulates the management, storage, and disposal of transuranic mixed waste, it is not clear that this permit would regulate radioactive asbestos waste. I would appreciate it if you could investigate the regulatory framework for this waste, and determine who is responsible for enforcing those regulations. NMED is reluctant to issue a response to DOE's letter until these questions are resolved.

The DOE letter assumes prior knowledge which I will provide here. Transuranic waste is generally contained in sealed plastic bags which are then placed in containers fitted with HEPA filters to prevent the buildup of radiolytically generated gases. EPA's Office of Radiation and Indoor Air certified WIPP's compliance with the radiation disposal requirements of 40 CFR §§191 and 194. You may contact Mary Kruger, WIPP Program Director, for further information regarding EPA's current regulatory role at WIPP. To date, no asbestos waste has been shipped to WIPP, and no asbestos waste is anticipated in the next several months.

I appreciate any help you can provide in this manner. If you need to contact me, my phone number is (505) 827-1560 x1013, and my e-mail address is [steve\\_zappe@nmenv.state.nm.us](mailto:steve_zappe@nmenv.state.nm.us).

Sincerely,

  
Steve Zappe  
NMED WIPP Project Leader

Attachments

cc: WIPP File - Red '00

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## Analysis of asbestos disposal at WIPP

1. By definition, "asbestos waste" means regulated asbestos containing material (RACM) as specified in 20 NMAC 9.1.105.H
2. "Solid waste" is defined in 20 NMAC 9.1.105.BV.
3. "Special wastes" means solid wastes which have unique handling, transportation, or disposal requirements, such as asbestos waste, as specified in 20 NMAC 9.1.105.BZ.3.
4. The definition of "solid waste" excludes "source, special nuclear, or by-product material as defined by the Atomic Energy Act," as specified in 20 NMAC 9.1.105.BV.7.
5. The contamination of a solid waste with AEA-regulated radioactive materials is still a solid waste. The intent of 20 NMAC 9.1.105.BV.7 is to exclude the radioactive component from the solid waste regulations. Therefore, radioactive special wastes (i.e., asbestos waste contaminated with AEA-regulated radioactive materials) is still a solid waste, although it may be managed by regulations other than 20 NMAC 9.1.
6. By definition, "solid waste facility" does not include "a facility that is permitted pursuant to the provisions of the Hazardous Waste Act, NMSA 1978, Sections 74-4-1 through 74-4-14," as specified in 20 NMAC 9.1.105.BX.2. Therefore, WIPP is not a "solid waste facility" under 20 NMAC 9.1. by virtue of its hazardous waste facility permit.
7. Under "Prohibited Acts," 20 NMAC 9.1.107.I states that "No person shall process, recycle, transfer, transform, or dispose of radioactive waste including low level radioactive waste in a solid waste facility..." The effect of this requirement is to also preclude the disposal of radioactive special wastes in a solid waste facility.

Following this line of reasoning, the New Mexico Solid Waste Management Regulations exempts radioactive special wastes (i.e., asbestos waste contaminated with AEA-regulated radioactive materials) from their authority. References in DOE's November 22, 1999 letter regarding notification of asbestos disposal operations to exemption from registration of operations requirements under 20 NMAC 9.1.213 are unnecessary, since WIPP does not serve "the general public."

Steve Zappe  
February 9, 2000

TITLE 20  
CHAPTER 9  
PART 1

ENVIRONMENTAL PROTECTION  
SOLID WASTE  
SOLID WASTE MANAGEMENT

105. DEFINITIONS. As used in this Part: [6-2-74; 1-30-92; 11-30-95]

H. "asbestos waste":

1. means regulated asbestos containing material (RACM) which contains more than 1 percent asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR part 763 Section 1, Polarized Light Microscopy (PLM) and includes:

a. friable asbestos material, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure;

b. Category I nonfriable asbestos containing material (ACM) that has become friable including asbestos containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos;

c. Category I nonfriable ACM that will be or has been subjected 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 powder by the forces expected to act on the material in the course of demolition or renovation operations, which excludes Category I nonfriable ACM; but

2. does not include nonfriable asbestos containing materials that, when dry, cannot be crumbled, pulverized, or reduced to a powder by hand pressure;

[5-14-89; 1-30-92; 8-17-94; 11-30-95]

BV. "solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities, but does not include:

1. drilling fluids, produced waters and other non-domestic wastes associated with the exploration, development or production, transportation, storage, treatment or refinement of crude oil, natural gas, carbon dioxide gas or geothermal energy;

2. fly ash waste, bottom ash waste, slag waste and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels and wastes produced in conjunction with the combustion of fossil fuels that are necessarily associated with the production of energy and that traditionally have been and actually are mixed with and are disposed of or treated at the same time with fly ash, bottom ash, boiler slag or flue gas emission control wastes from coal combustion;

3. waste from the extraction, beneficiation and processing of ores and minerals, including phosphate rock and overburden from the mining of uranium ore, coal, copper, molybdenum and other ores and minerals;

4. agricultural waste, including, but not limited to, manures and crop residues returned to the soil as fertilizer or soil conditioner;

5. cement kiln dust waste;

6. sand and gravel;

7. solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, 33 U.S.C. Section 1342, or source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, 42 U.S.C. Section 2011 et seq.;

8. densified-refuse-derived fuel; or

9. any material regulated by Subtitle C or Subtitle I, 42 U.S.C. Section 6901 et seq., except petroleum contaminated soils, of the federal Resource Conservation and Recovery Act of 1976, substances regulated by the Federal Toxic Substances Control Act, 7 U.S.C. Section 136 et seq., or low-level radioactive waste;

[6-2-74; 5-14-89; 1-30-92; 8-17-94]

BX. "solid waste facility" means any public or private system, facility, contiguous land and structures, location, improvements on the land, or other appurtenances or methods used for processing, transformation, recycling or disposal of solid waste, including landfill disposal facilities, transfer stations, resource recovery facilities, incinerators and other similar facilities not specified. Solid waste facility does not include:

1. equipment specifically approved by order of the Secretary to render medical waste generated on site non-infectious;

2. a facility that is permitted pursuant to the provisions of the Hazardous Waste Act, NMSA 1978, Sections 74-4-1 through 74-4-14;

3. a facility fueled by a densified-refuse-derived fuel as long as that facility accepts no other solid waste;

4. a facility that collects, transfers, or processes source separated household or commercial solid waste for recycling and has a design capacity of 25 tons or less per day;

5. storage containers with a total on site storage container capacity of 120 cubic yards or less;

6. that portion of a facility that refurbishes or re-sells used clothing, furniture or appliances for reuse;

7. scrap metal or auto salvage operations;

8. a composting facility which occupies less than 5 acres, uses only water or an inoculant as an additive and utilizes no more than 50% manure in the final mix, and does not compost municipal sewage sludge or municipal solid waste, excluding yard waste;

9. manufacturing facilities that use recycled material in production of a new product;

10. facilities designed and operated to handle less than 25 tons per day, by dry weight, of sludge on land, such as land application or land injection;

11. landfarming of petroleum contaminated soils unless within a landfill or composting facility, where "landfarming" is the remediation of petroleum contaminated soils on the land surface;

12. any facility or person accepting, stockpiling, or using clean fill material as long as;

a. the material does not create a public nuisance or adversely impact the environment;

b. the material is not placed in a watercourse or in any other manner inconsistent with the Water Quality Control Commission regulation 2-201 "Disposal of Refuse"; and

c. the material used is covered with two feet of clean earth immediately after deposition or within a reasonable time as determined by the Secretary;

13. small transfer stations;

[1-30-92; 8-17-94]

BZ. "special wastes" means the following types of solid wastes that have unique handling, transportation, or disposal requirements to assure protection of the environment and the public health, welfare and safety:

1. treated formerly characteristic hazardous wastes (TFCH);

2. packing house and killing plant offal;

3. asbestos waste;

4. ash;

5. infectious waste;

6. sludge, except compost which meets the provisions of 40 CFR 503;

7. industrial solid waste;

8. spill of a chemical substance or commercial product;

9. dry chemicals, which, when wetted, become characteristically hazardous; and

10. petroleum contaminated soils;

[5-14-89; 1-30-92; 8-17-94]

107. PROHIBITED ACTS. No person shall: [1-30-92; 8-17-94]

A. dispose of any solid waste in this state in a manner that the person knows or should know will harm the environment or endangers the public health, welfare or safety; [1-30-92; 8-17-94]

B. dispose of any solid waste in a place other than a solid waste facility that meets the requirements of this Part; [1-30-92; 8-17-94; 11-30-95]

C. dispose of any solid waste, including special waste, in a solid waste facility when a regulation of the Board or a condition of permit prohibits the disposal of the particular type of solid waste in that facility; [1-30-92]

D. construct, operate, modify or close a solid waste facility unless the facility has approval under this Part from the Department for the described action; [1-30-92; 8-27-94; 11-30-95]

E. modify permit conditions or modify a solid waste facility unless the facility has applied for and received permission from the Secretary for the modification pursuant to 20 NMAC 1.4, Permit Procedures - Environment Department; [1-30-92; 11-30-95]

F. dispose of petroleum waste, sludge which does not meet the analytical criteria of Section 704 of this Part domestic

sewage, treated domestic sewage, or septage at any solid waste facility; [1-30-92; 11-30-95]

G. dispose of hazardous wastes which are subject to regulation under Subtitle C of the Resource Conservation and Recovery Act, 42 USC 6901 et seq, at any solid waste facility, unless the facility is permitted for the disposal of hazardous wastes; [1-30-92]

H. dispose of bulk or non-containerized liquid waste at any landfill unless;

1. the liquid waste is household waste other than septic waste; or

2. the container holding liquid waste is a small container similar in size to that normally found in household waste and the container is designed to hold liquids for use other than storage, and the waste is household waste;

[1-30-92; 8-17-94]

I. process, recycle, transfer, transform, or dispose of radioactive waste including low level radioactive waste in a solid waste facility; however, nothing in this section shall prohibit the storage or disposal of radioactive materials or radioactive waste from a uranium mine or mill pursuant to a license or other authorization from the United States nuclear regulatory commission or the state; [1-30-92; 8-17-94]

J. dispose of lead-acid batteries, at any landfill or incinerator; [1-30-92]

K. dispose of any infectious waste in a landfill; [8-17-94]

L. dispose of any material regulated under the Federal Toxic Substances Control Act, including PCB's as defined in that Act, except asbestos, in a solid waste facility; [8-17-94]

M. discharge from a solid waste facility to surface or ground waters of New Mexico which may violate the New Mexico Water Quality Act, Commission regulations or standards, or the Federal Clean Water Act and Safe Drinking Water Act; [1-30-92; 8-17-94]

N. dispose of any solid waste in violation of any applicable requirements of the New Mexico Air Quality Implementation Plan promulgated under Section 110 of the Federal Clean Air Act; [8-17-94]

O. allow open burning at the solid waste facility; [1-30-92; 8-17-94]

P. dispose or process any solid waste at a new or modified solid waste facility until:

1. a permit has been issued by the Secretary; and

2. the Secretary has either:

a. made an inspection of the solid waste facility and determined that the site has been developed in accordance with the application and its permit conditions and in compliance with the applicable regulations; or

b. failed to make an inspection of the solid waste facility within 60 days of written notice of completion of construction.

[1-30-92; 8-17-94]

108. EXEMPTIONS. This Part does not apply [5-14-89; 1-30-92; 11-30-95]

A. disposal of solid waste by a homeowner, residential lessee or tenant or agricultural enterprise, on the property she or he owns, rents or leases, if the waste was generated on that property, and the disposal by the homeowner, residential lessee or tenant or agricultural enterprise of the solid waste does not harm the environment or endanger the public health, welfare or safety and does not violate any provision of this Part; [5-14-89; 1-30-92; 8-17-94; 11-30-95]

B. on-site disposal of domestic solid waste generated by a person residing and occupying that same property only if that property is located in a place where it is not feasible, as determined by the Department, to dispose of the solid waste in a permitted solid waste facility and the disposal of the solid waste does not harm the environment or endanger the public health, welfare or safety and does not violate any provision of this Part; or [5-14-89; 1-30-92; 8-17-94; 11-30-95]

C. disposal of construction and demolition debris or yard refuse by a person in possession of property if the material was generated on the property and if the disposal of the solid waste does not violate any provision of this Part. [5-14-89; 1-30-92; 8-17-94; 11-30-95]

213. REGISTRATION OF OPERATIONS WHICH ARE NOT DEFINED AS SOLID WASTE FACILITIES. [8-17-94]

A. The owner or operator of a facility that meets any exemption under Section 105.BX and that serves the general public shall register with the Department.

1. the owner or operator of a small transfer station shall:

a. for a new operation, register prior to any construction or operations;

b. for existing operations register by January 31, 1995; and

c. registration shall not be required for individual storage containers that either serve a commercial or industrial establishment, an apartment complex, a hospital or those set up as up as part of a regular collection program.

2. owners or operators of facilities that collect, transfer, or process source separated household or commercial solid waste for recycling and have a design capacity of less than 25 tpd shall register with the Department according to the following schedule:

a. for new recycling facilities register prior to any site development or operations; or

b. for existing recycling facilities register by January 31, 1995.

[8-17-94]

B. Any owner or operator who seeks to register with the Department shall provide the following information:

1. the name, address, phone number of the applicant and contact person;

2. the anticipated start up date and hours of operation;

3. legal description and map of the proposed facility site, including land use and zoning of the surrounding area;

4. means of controlling and mitigating odors;

5. when appropriate, listing and description of the number, type and size of equipment to be used at the facility for processing, recovering, recycling, transforming or disposing of solid waste;

6. narrative description of the operating plan for the proposed facility, including but not limited to, the origin, expected composition and weight or volume of solid waste or recyclable materials that is proposed to be received at the facility, the process, the loading rate, the proposed capacity of the facility and the expected life of the facility; and

7. a plan for an alternative waste handling or disposal system during periods when the proposed facility is not in operation, including procedures to be followed in case of equipment breakdown. Procedures may include the use of standby equipment, extension of operating hours and contractual agreements for diversion of waste to other facilities.

[8-17-94]

705. ASBESTOS WASTE. [1-30-92]

A. Transportation of asbestos waste.

1. No transporter shall accept or transport asbestos waste unless the waste has been properly wetted and containerized.

a. Asbestos waste is properly wetted when its moisture content prevents fiber release.

b. Asbestos waste is properly containerized when it is placed in a plastic bag of 6-mil or thicker, sealed in such a way to be leak-proof, and the amount of void space or air in the bag is minimized. Asbestos waste slurries shall be packaged in leak-proof drums if they are too heavy for the plastic bag containers. The Secretary may authorize other proper methods of containment which may include double bagging, plastic-lined cardboard containers, plastic-lined metal containers, or the use of vacuum trucks for the transport of slurry.

c. Pipes or other facility components which are removed as sections without first removing the asbestos shall be wrapped in a minimum of 6-mil plastic sufficient to create a leak-proof container.

d. Public access to asbestos wastes shall be prevented and asbestos wastes shall be transported as soon as possible after acceptance.

2. Transporter waste handling.

a. A transporter shall ensure that the asbestos waste is properly contained in leak-proof containers with appropriate labels, and that the outsides of the containers are not contaminated with asbestos debris adhering to the containers. The transporter shall not accept nor transport asbestos waste if there is a reason to believe that the condition of the asbestos waste may allow fiber release.

b. The transporter shall ensure that the asbestos waste containers are loaded into the transport vehicle in a manner which prevents the breaking of the containers. The transporter shall ensure that the asbestos waste containers are transferred at the disposal site in such a manner to avoid fiber release.

c. if the transporter discovers that the asbestos waste is not properly containerized in conformance with 705.A.1, the transporter shall immediately clean up the contaminated area and repair or reseal the container by means of double bagging, plastic wrap, or other appropriate methods. The Department shall be notified of any release. The transporter shall ensure that all containers in his possession are leak-proof and cannot release fibers.

3. Asbestos waste handling. Vehicles used in transport of containerized asbestos waste shall have an enclosed carrying compartment. All surfaces of vehicles and other asbestos handling equipment and facilities shall be maintained free from the accumulation of dusts and waste containing asbestos. No vehicle which uses compactors to reduce waste volume may be used to transport asbestos waste. Vacuum trucks shall be inspected to ensure that liquid is not leaking from the truck.

[1-30-92; 8-17-94]

B. Labeling requirements for asbestos containers.

1. Warning labels. All asbestos containers shall be tagged with a warning label. Labels approved by the EPA or the Occupational Safety and Health Administration (OSHA) shall be worded, as shown below. The Secretary may authorize the use of other similar labels.

DANGER  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD

[1-30-92; 8-17-94]

C. Disposal of asbestos waste.

1. Receipt of asbestos waste.

a. The transporter of the asbestos waste shall notify the landfill operator that the load contains asbestos.

b. The landfill owner or operator shall inspect the loads to verify that the asbestos is properly contained in leak-tight containers and labeled appropriately. The owner or operator shall notify the Secretary if the owner or operator believes that the asbestos waste is in a condition that may cause significant fiber release during disposal. If the wastes are not properly containerized, and the landfill owner or operator accepts the load, the owner or operator shall thoroughly soak the asbestos with a water spray prior to unloading, rinse out the truck, and immediately cover the wastes with non-waste containing material which prevents fiber release prior to compacting the waste in the landfill.

2. Waste deposition and covering. The owner or operator shall:

a. prepare a separate trench to receive only asbestos wastes. The trench shall be as narrow as possible while complying with all applicable trenching regulations;

b. align the trench perpendicular to the prevailing winds;

c. place asbestos containers into the trench with sufficient care to avoid breaking the containers;

d. completely cover the containerized waste within 18 hours with a minimum of 6 inches of non-waste containing material;

e. completely cover improperly containerized asbestos containing material with 6 inches of non-waste containing material immediately; and

f. not compact the asbestos containing material until it is completely covered with 6 inches of non-waste containing material.

3. Closure of an asbestos containing cell. For closure of a cell containing asbestos material, the landfill owner or operator shall:

a. cover with an additional 30 inches of compacted non-waste containing material to provide a 36-inch final cover to the original grade,

b. at the discretion of the Secretary, implement measures where necessary to control erosion and rodent intrusion.

4. Control of public access. The operator shall provide barriers adequate to control public access. At a minimum, the owner or operator shall:

a. limit access to the asbestos management site to no more than two entrances by gates that can be locked when left unattended and by fencing adequate to deter access by the general public.

b. place warning signs at the entrance and at intervals no greater than 100 feet along the perimeter of the sections where asbestos waste is deposited. The sign shall read as follows:

ASBESTOS WASTE DISPOSAL SITE  
DO NOT CREATE DUST  
BREATHING ASBESTOS IS HAZARDOUS  
TO YOUR HEALTH

The signs shall be posted in such a manner and location that a person can easily read the legend and conform to the requirements of 20 inches by 14 inches upright format signs specified in 29 CFR 1910.145(d)(4) (or equivalent regulation adopted by the Board under the Occupational Health and Safety Act). Spacing between any two lines shall be at least equal to the height of the upper of the two lines.

5. The owner or operator shall have at least one employee who has received at least 24 hours of course work in an EPA certified training course which deals with the identification, hazards and management of asbestos wastes. An employee with this training shall be present at all times when asbestos wastes are being disposed.

[1-30-92]