The attached states the EPA Asbestos Emission Standard more succinctly than any wording I have seen thus far. I suggest you use this wording if need for any further explanation arises. note that "visible emission" are permitted if specified air cleaning methods are employed.

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EPA Sets Final Emission Standards For Asbestos, Beryllium, Mercury

National emission standards for the first three air pollutants to be designated as hazardous to health under the 1970 Clean Air Act Amendments—*asbestos*, *beryllium*, and *mercury*—were set by Environmental Protection Agency Administrator William D. Ruckelshaus on March 30. The Act defines hazardous air pollutants as those which "may cause, or contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness." The EPA action complied with order issued January 29 by U. S. District Court in Washington, D.C., in suit brought by the Environmental Defense Fund, Inc., and Ralph Nader's Health Research Group last December. The suit charged that EPA had illegally delayed issuance of the standards for more than six months, and the court ordered EPA to promulgate the standards within 60 days.

Many studies have shown a link between occupational exposure to asbestos and a higher-than-expected incidence of bronchial cancer, Ruckelshaus said. Asbestos also has been identified as a causal factor in development of cancers of the membranes lining the chest and abdomen.

The proven effects of beryllium on health include both acute and chronic lethal inhalation effects as well as skin and eye effects. The Beryllium Case Register at Massachusetts General Hospital in Boston now contains over 820 proven cases of beryllium-related diseases, mostly from occupational exposure.

Exposure to metallic mercury vapors may cause central nervous system injury and kidney damage, Ruckelshaus noted. Laboratory data from animal tests indicate a risk of accumulation of mercury in body systems that could result in brain damage, while prolonged exposure involves a definite risk of mercury intoxication, he said.

A summary of specific regulations for each of the pollutants follows.

Asbestos Standards

The asbestos standards are:

- There shall be no visible emissions to the outside air from any asbestos mill except when a specified method of air cleaning, also part of these standards, is used before the emissions escape to the outside air. In general, these air-cleaning systems filter asbestos emissions to the point that visible emissions would not be produced anyway.
- The surfacing of roadways with asbestos tailings is prohibited, except for temporary roadways in an area of asbestos ore deposits.
- There shall be no visible emissions to the outside air, unless the specified air-cleaning methods are used, from any operation which manufactures: cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, other textile products, cement products, fireproofing and insulating materials, friction products, paper, millboard, felt, floor tile, paints, coatings, caulks, adhesives, sealants, plastics and rubber materials, and chlorine.
- The regulations covering demolition of buildings are: (1) asbestos materials used to insulate or fireproof any boiler, pipe, or structural member shall be wetted and removed from any building before the wrecking begins. The asbestos debris shall be wetted at all stages of demolition and related handling operations. (2) No pipe or structural member covered with asbestos insulating or fireproofing material shall be dropped or thrown from any building but shall be carefully lowered to ground level. (3) No asbestos debris shall be dropped or thrown to the ground or from one floor to another. For buildings, 50 feet or greater in height, asbestos debris shall be lowered to the ground via dust-tight chutes or containers.
- Certain demolition operations are exempt from the regulations, except for the wetting of asbestos debris, if a building has been declared to be structurally unsound and in danger of imminent collapse.
- There shall be no visible emissions from the spray-on application of materials containing more than one percent asbestos, on a dry weight basis, used to insulate or fireproof equipment and machinery. Spray-on materials used to insulate or fireproof buildings, structures, pipes, and conduits must contain less than one percent asbestos dry-weight basis.

Beryllium Standards

The beryllium standards apply to extraction plants, ceramic plants, foundries, incinerators, and propellant plants which process beryllium ore, beryllium, beryllium oxide, beryllium alloys, beryllium-containing waste, and machine shops which process beryllium, beryllium oxides, or any alloy when such alloy contains more than 25 percent beryllium by weight.

The beryllium standards are:

- Emissions from stationary sources shall not exceed 10 grams of beryllium over a 24-hour period. As a substitute for this standard, an owner or operator may request approval from the EPA Administrator to meet an ambient concentration limit on beryllium in the vicinity of the stationary source of 0.01 micrograms per cubic meter ($\mu g/m^3$).
- The burning of beryllium and/or beryllium containing waste is prohibited except in incinerators. Incinerator emissions must comply with the above 24-hour standard.

Beryllium emission standards for rocket-motor firings at test sites are:

- Emissions to the atmosphere from rocket motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an effect adverse to public health could occur.
- If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from the tank shall not exceed 2 grams per hour and a maximum of 10 grams per day.

Mercury Standard

The mercury standard applies to stationary sources which process mercury ore to recover mercury and to those which use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide.

The mercury standard is: Emissions shall not exceed 2300 grams of mercury per 24-hour period.

'Complex Source' Air Pollution Rules To Be Established by June 11

Regulations requiring states to review, prior to construction, the air quality impact of "complex sources" such as shopping centers, sport complexes, highways, and similar facilities, will be issued by the Environmental Protection Agency by June 11. Rules will require states to determine whether activities associated with such sources, including newly generated auto traffic,

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