



From

To

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PITTSBURGH OFFICE

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February 6, 1995

RE: ASBESTOS REVIEW CLASS - CRITICAL ISSUES AND NOTES FROM CLASS

From the 1995 January 18 asbestos review class, a number of interpretive items/issues were identified. Major issues are listed by number with additional items that apply listed as bullets. This summary is listed as follows:

1. Classification of asbestos work (class I -IV) should be consistent across all Alcoa locations; Specific guidance is needed for Alcoa job tasks.
 - A specific definition is required for "Removal vs. Disturbance and which operations fall under each: provide specifics under definition for Class II gasket removal.
 - A specific definition is requested for "intact" as it applies to Class II gasket removal.
2. Clarification of training requirements.
 - Who has jurisdiction with respect to training - OSHA or EPA? and what are requirements?
 - What is required length for refresher training for Classes I-IV?
 - Can Class II exemption (8 hrs.) be used under AHERA?
 - Define requirements for "competent person" for training in terms of both initial and refresher.
3. Specific requirements/duties of competent person.
 - Define "appropriate interval" for Class III and IV inspection.
 - What are competent person requirements under Class II work?
4. Guidance on PACM and surveys.
 - What constitutes "documentation"?
 - How long should we maintain procurement records?
 - What testing is necessary to prove materials are asbestos-free?
 - What is Alcoa's position on fiberglass as it relates to PACM and surveys (resurveys); what is OSHA's position? How do previous AHERA inspections tie into new regulation?

5. "Trigger" limits for medical surveillance under new standard.
 - What if PEL is exceeded less than 30 days?
 - What guidance is available concerning "Exit" examinations?
6. Guidance on asbestos exposure assessments (monitoring) for each classification of work (I-IV).
 - How much exposure data over time is needed for asbestos exposures?
 - Can a negative exposure assessment (NEA) be performed for Class I work and what would constitute a Class I NEA?
 - Is an initial exposure assessment needed for all work classifications and what would one consist of?
 - What is the flexibility of exposure profiles for similar jobs?
 - If a job lasts only a couple of hours, do you still need a 24-hr turn around for area/perimeter monitoring?
7. Guidance on labeling/Hazcom requirements.
 - What are facility requirements?
 - Can we label with process maps?
 - To meet requirements, do we have to survey?
 - What is definition of "foreseeable use" as it relates to labeling?
 - Is pipe lagging an "article" under Hazcom?
8. General regulatory issues.
 - What is guidance concerning MSHA vs. OSHA crossover?
 - What may be Alcoa's third -party issues and how do we limit liability?
9. General Industry requirements.
 - What is definition of "area" under General Industry as this would relate to housekeeping?
 - What are requirements under General Industry for HEPA sweeping and recordkeeping?
 - What are training requirements (such as length, initial and refresher training)? Also what are requirements for employee information?

To provide assistance with these issues, we are obtaining guidance from ORC, Alcoa Legal and are also benchmarking other companies such as Exxon, Dupont, Dow , and Westinghouse. It is expected that a clarification memo will be sent out to the field by the end of February, 1995. It is expected that Engineering Standard 18.18 will be sent to select locations for review and

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comment by April, 1995. Alcoa locations are asked to send in job classifications for asbestos operations to me by mid-March, 1995 for guidance on Alcoa-specific asbestos work consistencies under Class I-IV.

One important item of interest is that OSHA is expected to extend their compliance deadlines for six months (however, this has not been officially confirmed). In addition, ORC is working with OSHA to define ambiguous issues for their guidance document due later in 1995.

Attached are Laura Rippey's and my notes for your information . Thank-you again for your participation.

If you have any questions or concerns, please contact me via cc: mail or VMX at 8-225-3220 or 412/553-3220.

KAREN M. KRALL

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Attachments

ARD 014910

AGENDA

Asbestos Review Class

January 18, 1995

A. E. Hunt Room - 23rd Floor Alcoa Building

9:30 am - 5:00 pm

9:30 - 10:00 am	Class overview (introduction, objectives, course structure, ground rules)
10:00 - 10:30 am	General Description of New Requirements for General Industry and Construction
10:30 - 10:45 am	BREAK
10:45 am - 12:30 pm	Detailed Requirements under the Construction Standard - PEL - notification requirements - regulated areas - exposure assessments and air monitoring - methods of compliance - PPE - hygiene facilities
12:30 - 1:30 pm	LUNCH
1:30 - 2:30 pm	- hazard communication - housekeeping - medical surveillance - recordkeeping - training *For each of these topics, we will cover what is required and any regulatory interpretation. Darrell Mattheis will cover the regulatory interpretation part of each section and provide input on how OSHA sees things.
2:30 - 2:45 pm	BREAK
2:45 - 3:45 pm	Requirements under the General Industry Standard
3:45 - 4:15 pm	Training Module - Joan Karas has prepared a draft outline and overheads for a training program that may be used for in-house asbestos awareness training
4:15 - 5:00 pm	Additional Question/Answer Period

1994 Revisions to OSHA Asbestos Standards

Issue	Gen. Ind. 1910.1001	Construction 1926.1101
Scope	All except construction and shipping related industries	Where asbestos is involved in: demolition; removal or encapsulation; construction, alteration, repair, maintenance, or renovation of structures; installation; spill/emergency cleanup; transportation and storage etc. on construction site
Special provisions	PACM (Potential asbestos containing material) - thermal system insulation, sprayed or troweled surfacing mat'l, and floor tile, installed prior to 1980, are <u>assumed</u> to be asbestos unless sampled and analyzed	PACM - see 1910.1001 Classification of work: Class I - removal of thermal systems insulation or surfacing material containing ACM or PACM Class II - removal of ACM which is not Class I work Class III - repair and maintenance where ACM or PACM is likely to be disturbed Class IV - maintenance and custodial activities which involve contact with ACM or PACM Multi-employer worksite provisions
Permissible exp. limit (PEL)	0.1 f/cc 8-hr TWA 1.0 f/cc for 30 mins.	0.1 f/cc 8-hr TWA 1.0 f/cc for 30 minute excursion
Exp. assessment	Monitoring or objective data for each job class, repeat as needed or every six months if exp. $\geq$ PEL	Initial, representative monitoring done by competent person; <u>daily</u> monitoring for Class I & II work; repeat periodically as needed
Compliance methods	Specific requirements for asb. product manufacture & brake and clutch repair	Regulated area for Class I, II & III worksites; specific and general engineering and work practice controls such as vacuums, glovebags and enclosures; "Competent person" for all work.
Written program	Req'd. if exp. $\geq$ PEL	None required
Communication	Annual training for housekeeping employees <u>or</u> if exp. $\geq$ PEL; warning signs and waste labels; employee notification of presence, location, and quantity of ACM; availability of standard to all affected employees	Communicate presence, location, and quantity to affected individuals (occupants, employees, etc.); warning signs and waste labels; 24 hours training for Class I & II workers, 16 hours training for Class III workers, 2 hours training for Class IV workers; availability of standard to all affected employees

Medical surv.	Pre-emp., annual and termination if exp. $\geq$ PEL	Pre-emp., annual, and termination if exp. $\geq$ PEL or involved in Class I, II, or III work thirty days or more per year, or if respirators are worn
Housekeeping	HEPA vacuums, proper waste disposal, special <u>floor care provisions</u> for vinyl and asphalt tile	HEPA vacuums, proper waste disposal, special <u>floor care provisions</u> for vinyl and asphalt tile
Respirators and protective clothing	Req'd. if exp. $\geq$ PEL	Respirators required for Class I, II, and III jobs and Class IV jobs in regulated areas or whenever exp. $\geq$ PEL; clothing required for Class I jobs or if exp. $\geq$ PEL
Hygiene facilities	Change rooms, showers, lunchrooms, no smoking in work area, req'd if exp. $\geq$ PEL	Class I - extensive decontamination, change room, showers, lunch room, no smoking in work area; Class II, III & IV - simple decontamination, no smoking in work area
Record keeping	Exposure assessment Exempted operations Medical surveillance Training	Exposure assessment Exempted operations Medical surveillance Training Notifications

	MAP	OSHA
Rule	ASHARA Training (new 40 CFR Part 763	OSHA Training 29 CFR 1926.58 (k)(3)
Scope	Conduct of any defined activities involving friable ACMB in commercial buildings, schools, and public buildings.	All employees exposed to airborne asbestos > action level and/or the excursion limit.
Frequency	Initial, annual refresher	Annually
Training Audience	W = Workers - 4 days (14 hrs. hands on) S = Workers supervisor - 5 days (14 hrs. hands on); Separate from Worker training & more in-depth I = Inspector - 3 days (4 hrs. hands on, field trip) M = Management/Planner - Inspector Course + 3 day Planner course (REQUIRED for schools only) P = Project design - 3 days (+ field trip) PM = Project Monitor - Recommended training by the EPA - 5 days (6 hrs. hands on)	E = Employees C = Competent person
	O & M = Operations & Maintenance as defined in the EPA Green Book & the "Schools Rule". Exempt from MAP unless doing work other than SSSD or if O&M meets criteria for major fiber release.	
Methods:	EPA specified hours of training as well as the method (hands-on vs. classroom).	OSHA requires that the following topics be covered in training without specifying training duration or method of instruction.
Topics:		
Recognizing ACM	W, S, I*, M, P*, PM *(locations & uses of ACM)	E, C
Identification of ACM	I*, M**, *Inspection of ACM condition & Field trip **Interpretation of survey results	C

	MAP	OSHA
Rule	ASHARA Training (new 40 CFR Part 763	OSHA Training 29 CFR 1926.58 (k)(3)
ACM substitutes	P	
Health effects	W, S, I, M, P, PM	E, C
Asbestos and smoking, smoking cessation programs	W, S, I, M, P Smoking cessation programs were not mentioned in the EPA curriculum.	E, C
Nature of operations and applicable controls (including personal hygiene)	W, S (including hands-on training)	E, C
PPE (including respiratory protection)	W, S, I, M, P, PM	E, C
Work practices, and other safety hazards (e.g electrical, heat stress, ladders & scaffolds, etc.)	W, S, M*, P** *Evaluation/assessment of controls **Fiber aerodynamics & control	E, C
Medical surveillance	W, S	E, C
OSHA Standard (or other relevant regulation)	W, I, M, P, PM	E, C
Posting and labeling		E, C
Exposure monitoring (& other air monitoring)	W, S, PM	C
Final clearance process	P, PM	
Bulk sampling/documenta tion	I, M	
Set up and use of enclosure, hygiene facilities, work practices, etc.	M, P, PM	C

	MAP	OSHA
Rule	ASHARA Training (new 40 CFR Part 763	OSHA Training 29 CFR 1926.58 (k)(3)
Proper functioning of engineering controls	P*, PM *Safety system design specifications	C
Managing respiratory protection & medical monitoring programs	S	
Managing liability issues	S, I, M, P, PM	
Recordkeeping	S, I, M*, PM *Management Plan	
Contract specifications	S, P*, PM *Contract administration	
Writing abatement specifications/drawi ngs	P, PM* *Understanding contracts/drawings	
Understanding building systems	I, M, P*, PM *Occupied building special design	
PR & building occupant relations	I, M, P	
Pre-inspection planning; review of previous inspection records	I, M	
Functions and qualifications of "accredited discipline"	I, M, P, PM	
Developing O & M plan	M	
Financing abatement actions	M, P* *budgeting & cost estimating	
Abatement practices, response actions	P, PM	

	MAP	OSHA
Rule	ASHARA Training (new 40 CFR Part 763	OSHA Training 29 CFR 1926.58 (k)(3)
Exam	W, S*, I*, M* *Written Exam	

Glossary

Action level - means an exposure, usually half of the PEL, which is used to distinguish exposed from unexposed employees and trigger administrative action. Neither asbestos standard contains an action level. Most administrative requirements are triggered by exceeding the PEL or EL for general industry, by the nature of the work covered by the construction standard, and for housekeepers.

Aggressive methods - means removal or disturbance of building material by sanding, abrading, grinding or other method that breaks, crumbles, or disintegrates intact ACM.

Amended water - means water to which surfactant (wetting agent) has been added to increase the ability of the liquid to penetrate ACM.

Asbestos - includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos and any of these minerals that has been chemically treated and/or altered. For purposes of this standard "asbestos" includes PACM, as defined below.

Asbestos-containing material (ACM) - means any material containing more than one percent asbestos.

Assistant Secretary - means the Assistant Secretary of Labor for Occupational Safety and Health, U. S. Department of Labor, or designee.

Authorized person - means any person authorized by the employer and required by work duties to be present in regulated areas.

Building/facility owner - is the legal entity, including a lessee, which exercises control over management and record keeping functions relating to a building and/or facility in which activities covered by this standard take place.

Certified Industrial Hygienist (CIH) - means one certified in the comprehensive practice of industrial hygiene by the American Board of Industrial Hygiene.

Class I asbestos work - means activities involving the removal of TSI and surfacing ACM and PACM.

Class II asbestos work - means activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

Class III asbestos work - means repair and maintenance operations, where "ACM", including thermal system insulation and surfacing material, is likely to be disturbed.

Class IV asbestos work - means maintenance and custodial activities during which employees contact ACM and PACM and activities to clean up waste and debris containing ACM and PACM.

Clean room - means an uncontaminated room having facilities for the storage of employees street clothing and uncontaminated materials and equipment.

Closely resemble - means that the major workplace conditions which have contributed to the levels of historic asbestos exposure, are no more protective than conditions of the current workplace.

Competent person - means, in addition to the definition in 29 CFR 1926.32(f) one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them as specified in 29 CFR 1926.32(f); in addition, for Class I and Class II work who is specially trained in a training course which meet the criteria of EPA's Model Accreditation Plan (40 CFR 763) for project designer or supervisor, or its equivalent and for Class II and Class IV work, who is trained in an operations and maintenance (O&M) course developed by EPA (40 CFR 763.92(a)(2)).

Critical barrier - means one or more layers of plastic sealed over all openings into a work area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a work area from migrating to an adjacent area.

Decontamination area - means an enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, materials, and equipment that are contaminated with asbestos.

Demolition - means the wrecking or taking out of any load-supporting structural member and any related razing, removing, or stripping of asbestos products.

Director - means the Director, National Institute for Occupational Safety and Health, U. S. Department of Health and Human Services, or designee.

Disturbance - means contact which releases fibers from ACM or PACM or debris containing ACM or PACM. This term includes activities that disrupt the matrix of ACM or PACM, render ACM or PACM friable, or generate visible debris. Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount which can be contained in our standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained in one glove bag or waste bag which shall not exceed 60 inches in length and width.

Employee exposure - means that exposure to airborne asbestos that would occur if the employee were not using respiratory protective equipment.

Equipment room (change room) - means a contaminated room located within the decontamination area that is supplied with impermeable bags or containers for the disposal of contaminated protective clothing and equipment.

Fiber - means a particulate form of asbestos, 5 micrometers or longer, with a length-to-diameter ratio of at least 3 to 1.

Glovebag - means an impervious plastic bag-like enclosure affixed around an asbestos-containing material, with glove-like appendages through which material and tools may be handled.

High-efficiency particulate air (HEPA) filter - means a filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter.

Homogeneous area - means an area of surfacing material or thermal system insulation that is uniform in color and texture.

Industrial Hygienist - means a professional qualified by education, training, and experience to anticipate, recognize, evaluate and develop controls for occupational health hazards.

Intact - means that the ACM has not crumbled, been pulverized, or otherwise deteriorated so that is no longer likely to be bound with its matrix.

LEV - means local exhaust ventilation.

Modification - for purposes of paragraph (g) (6) (ii), means a changed altered procedure, material or component of a control system, which replaces a procedure, material or component of a required system. Omitting a procedure or component, or reducing or diminishing the stringency or strength of a material or component of the control system is not a "modification" for purposes of paragraph (g)(6)(ii) of this section.

Negative initial exposure assessment - means a demonstration by the employer, which complies with the criteria in paragraph (f)(2)(iii) of the OSHA construction standard, that employee exposure during an operation is expected to be consistently below the PELs.

PACM - means "presumed asbestos containing material".

Presumed asbestos containing material - means thermal system insulation and surfacing material found in buildings constructed no later than 1980.

Project designer - means a person who has successfully completed the training requirements for an abatement project designer established by 40 U.S.C. 763.90 (g).

Regulated area - (General Industry) -- means an area established by the employer to demarcate areas where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limits, e.g., PEL or EL.

Regulated area (Construction) - means an area established by the employer to demarcate areas where Class I, II, and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos exceed or there is a reasonable possibility they may exceed the permissible exposure limit.

Removal - means all operations where ACM and/or PACM is taken out or stripped from structures or substrates, and includes demolition operations.

Renovation - means the modifying of any existing structure, or portion thereof.

Repair - means overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates, including encapsulation or other repair of ACM or PACM attached to structures or substrates.

Surfacing material - means material that is sprayed, troweled or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes).

Surfacing ACM - means surfacing material which contains more than 1% asbestos.

Thermal system insulation (TSI) - means ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.

Thermal system insulation ACM - is thermal system insulation which contains more than 1% asbestos.