H. M. COLE'S ADDRESS - PHYSICIANS' MTG., 9/78

RE: ASBESTOS



SINCE OUR LAST MEETING, IN PHOENIX, MUCH NEW INFORMATION HAS SURFACED, REGARDING THE OCCUPATIONAL HEALTH ASPECTS OF ASBESTOS. THIS, COUPLED WITH RECENT FEDERAL REGULATICNS DEALING WITH ACCESS TO MEDICAL RECORDS AND EMPLOYEE EXPOSURE INFORMATION, I THINK, WARRANTS SOME REPETITION ON THE SUBJECT.

I AM SURE THAT MOST OF YOU KNOW THAT OSHA PROMULGATED ITS FIRST ASBESTOS STANDARD IN JULY 1972. THE STANDARD SET A 5 FIBERS/CC, 8-HOUR TIME-WEIGHTED AVERAGE EXPOSURE, WITH A CEILING LEVEL OF 10 FIBERS/CC, NOT TO BE EXCEEDED IN ANY 15 MINUTE PERIOD. IT ALSO ESTABLISHED THAT THE STANDARD WOULD BE LOWERED TO 2 FIBERS/CC IN JULY 1976.

THE STANDARD REQUIRED THAT ENGINEERING CONTROLS AND WORK PRACTICES BE INSTITUTED TO REDUCE EMPLOYEE EXPOSURE TO WITHIN ACCEPTABLE LEVELS. THE STANDARD SPECIFICALLY STATED THAT RESPIRATORS COULD NOT BE USED AS ACCEPTABLE CONTROL MEASURE, EXCEPT IN CASES OF EMERGENCY, OR UNTIL ENGINEERING CONTROLS COULD BE INSTALLED. IN ADDITION, THE STANDARD REQUIRED A VERY EXTENSIVE INDUSTRIAL HYGIENE MONITORING AND MEDICAL SURVEILLANCE PROGRAM. ALL PLACES OF EMPLOYMENT WHERE ASBESTOS FIBER WAS THOUGHT TO BE RELEASED HAD TC BE MONITORED WITHIN 6 MONTHS, AND MEDICAL EXAMINATIONS OFFERED TO ALL AFFECTED EMPLOYEES.

OSHA STANDARD FOR ASBESTOS -

MEDICAL SURVEILLANCE REQUIREMENTS INCLUDE:

1) CHEST X-RAY (POSTERIOR AND ANTERIOR, 14-17 INCHES).
2) MEDICAL HISTORY TO ELICIT SYMPTOMATOLOGY OF RESPIRATORY DISEASE.
3) PULMONARY FUNCTION TEST (TO INCLUDE FVC AND $FEV_{1.0}$).

IN ADDITION, SIMILAR EXAMINATIONS WERE REQUIRED ON PREPLACEMENT, FOR EMPLOYEES ASSIGNED TO JOBS HAVING AN ASBESTOS EXPOSURE, AS WELL AS FOR EMPLOYEES TERMINATED WHO HAD HAD A PREVIOUS EXPOSURE.

ANOTHER FAR-REACHING PART OF THIS RULEMAKING INVOLVED EMPLOYEE NOTIFICATION. IF EXPOSURE MONITORING INDICATED LEVELS ABOVE THE STANDARD, IT WAS REQUIRED THAT THE EMPLOYEE BE NOTIFIED IN WRITING OF THIS EXPOSURE, AS WELL AS THE ENGINEERING STEPS BEING TAKEN TO REDUCE SUCH EXPOSURE. EMPLOYERS, THEN, FOR THE FIRST TIME, WERE REQUIRED TO KEEP AND MAINTAIN EMPLOYEE EXPOSURE INFORMATION AND MEDICAL RECORDS, REGARDING A SPECIFIC AIR CONTAMINANT ---ASBESTOS.

IN LATE 1972, THE MEDICAL DEPARTMENT SET OUT TO EVALUATE THE COMPANY'S USAGE OF ASBESTOS, AS WELL AS ESTABLISH A PROGRAM FOR COMPLYING WITH THE OSHA STANDARD. WE DEVELOPED AN IN-HOUSE CAPABILITY TO MEASURE ASBESTOS LEVELS AND INITIATED OUR INDUSTRIAL HYGIENE MONITORING PROGRAM.

IT WAS DETERMINED EARLY-ON THAT ASBESTOS EXPOSURE WITHIN THE COMPANY WAS MUCH MORE OF A PROBLEM THAN ORIGINALLY THOUGHT, AND THAT SIMPLE ELIMINATION WAS GOING TO BE AN EXTREMELY DIFFICULT TASK. I THINK DR. IRBY'S MEMO OF MARCH 1973, SUGGESTING THAT "ALL WORKING AND MACHINING OF ASBESTOS-CONTAINING PRODUCTS BE PROHIBITED, UNTIL SUCH OPERATIONS COULD BE BROUGHT INTO COMPLIANCE WITH OSHA GUIDELINES" LAID THE GROUNDWORK FOR OUR VERY POSITIVE PROGRAM FOR DEALING WITH ASBESTOS.

WHILE THERE WERE OUTCRIES, SUCH AS:

WHAT ARE YOU DOING, TRYING TO SHUT US DOWN?
WE CAN'T LIVE WITHOUT ASBESTOS!
THERE ARE NO SUBSTITUTES FOR ASBESTOS!

...SUCH REMARKS WERE SHORT-LIVED, AND WE GOT ON WITH THE OBJECTIVE OF ASBESTOS SUBSTITUTION AND ELIMINATION. TODAY, I FEEL WE HAVE MADE SIGNIFICANT PROGRESS TOWARD THIS OBJECTIVE. IN PARTICULAR, WITHIN THE REDUCTION DIVISION, BUT MORE RECENTLY, THE MILL PRODUCTS DIVISION HAS MADE A CONCERTED EFFORT TOWARD IDENTIFYING AND ELIMINATING ALL USES OF ASBESTOS.

WE HAVE:

1) INSTITUTED AN INDUSTRIAL HYGIENE MONITORING AND MEDICAL SURVEILLANCE PROGRAM, IN ORDER TO COMPLY WITH THE STANDARD.

2) ELIMINATED MANY USES OF ASBESTOS, SUCH AS DOUGHBALLS FOR PLUGGING FURNACES AND ASBESTOS-CONTAINING INSULATION.

3) Eliminated all machining of Marinite containing asbestos, except at our Massena Reduction Plant.

4) Established on-going research programs to find asbestos substitutes for Marinite inserts and hot metal floats.

5) In some plants - established procedures for demolition and removal of asbestos previously installed, which has become worn and frayed.

6) Instituted waste disposal procedures for asbestos-containing materials.

7) Through our Respirator Training Programs - attempted to educate employees as to the hazards of asbestos.

As a result of this effort, I feel that our major problem with asbestos today is THE FOLLOWING OF THE EMPLOYEES THOUGHT TO HAVE HAD PREVIOUS EXPOSURE, AND THE REMOVAL OF ASBESTOS ALREADY IN PLACE. Certain plants, of course, like Sherwin and Hurricane Creek, will have a more difficult problem with this than others, since use of asbestos as an insulator in those plants is the most extensive.

The reason I have chosen to review the asbestos standard again is that I feel this standard sets the format for future standards on other chemical or physical agents and, more or less,

DICTATES OUR FUTURE INDUSTRIAL HYGIENE AND MEDICAL SURVEILLANCE EFFORTS, REGARDING OCCUPATIONAL EXPOSURE. JUST TO GIVE YOU AN IDEA OF WHAT CHANGES ARE TAKING PLACE IN STANDARDS TODAY --- IN 1975, OSHA PRESENTED ANOTHER STANDARD PROPOSAL FOR ASBESTOS, RECOMMENDING THE LOWERING OF THE PRESENT STANDARD OF 2 FIBERS/CC TO ONE-HALF FIBER/CC. MEDICAL SURVEILLANCE REQUIREMENTS OF THE NEW PROPOSAL WOULD REQUIRE - IN ADDITION TO WHAT WE HAVE ALREADY DISCUSSED - SPUTUM CYTOLOGY FOR EMPLOYEES WITH 10 OR MORE YEARS OF EXPOSURE TO ASBESTOS, OR FOR EMPLOYEES 45 YEARS OF AGE OR OLDER, HAVING AN ASBESTOS EXPOSURE. IT ALSO REQUIRES THAT THE EMPLOYER OBTAIN A PHYSICIAN'S WRITTEN OPINION, REGARDING THE EXAMINATION OF THE EMPLOYEE. THIS WRITTEN OPINION WOULD INCLUDE, AND I QUOTE:

"(6) PHYSICIAN'S WRITTEN OPINION. (i) WITH RESPECT TO EACH EXAMINATION REQUIRED BY THIS PARAGRAPH, THE EMPLOYER SHALL OBTAIN A WRITTEN OPINION FROM THE EXAMINING PHYSICIAN, CONTAINING THE FOLLOWING:

(A) THE PHYSICIAN'S OPINION AS TO WHETHER THE EXAMINED EMPLOYEE HAS ANY MEDICAL CONDITIONS WHICH WOULD PLACE THE EMPLOYEE AT INCREASED RISK OF MATERIAL IMPAIRMENT OF HIS OR HER HEALTH FROM EXPOSURE TO ASBESTOS FIBERS, OR WHICH WOULD DIRECTLY OR INDIRECTLY, BE AGGRAVATED BY SUCH EXPOSURE;

(B) ANY RECOMMENDED LIMITATIONS UPON THE EMPLOYEE'S EXPOSURE TO ASBESTOS FIBERS, OR UPON THE USE OF PROTECTIVE CLOTHING AND EQUIPMENT, SUCH AS RESPIRATORS; AND

(C) A STATEMENT THAT THE EMPLOYEE HAS BEEN INFORMED BY THE PHYSICIAN OF ANY MEDICAL CONDITIONS WHICH REQUIRE FURTHER EXAMINATION OR TREATMENT.

(II) THE WRITTEN OPINION SHALL NOT REVEAL SPECIFIC FINDINGS OR DIAGNOSES UNRELATED TO OCCUPATIONAL EXPOSURE TO ASBESTOS FIBERS.

(III) A COPY OF THE WRITTEN OPINION SHALL BE PROVIDED TO THE AFFECTED EMPLOYEE."

AS YOU CAN SEE, YOU ARE BEING DRAWN INTO THE PICTURE MORE AND MORE, AND, IN MY OPINION, THE LEGAL RESPONSIBILITIES ARE INCREASING FOR THE BOTH OF US.

JUST TO GIVE YOU SOME IDEA ABOUT THE MEDICAL SURVEILLANCE REQUIREMENTS OF OTHER STANDARDS, I WOULD LIKE TO REVIEW THE FOLLOWING TABLE.

NOW, YOU MAY REMEMBER, IN 1972 OSHA ADOPTED THE THRESHOLD LIMIT VALUES (TLV'S) AS INTERIM HEALTH STANDARDS. THE OSHA ACT REQUIRED THAT THESE STANDARDS BE UPDATED AND PROMULGATED AS PERMANENT STANDARDS. TO DATE, ONLY 8 PERMANENT STANDARDS HAVE SURVIVED THE FINAL RULEMAKING PROCESS, OUT OF APPROXIMATELY 400 (THE ORIGINAL LIST OF THRESHOLD LIMIT VALUES). HOWEVER, THE IMPACT OF THESE 8 HAS BEEN FAR-REACHING, INDEED.

MEDICAL SURVEILLANCE REQUIREMENTS

PERMANENT AND PROPOSED OSHA STANDARDS

CONTAMINANT	STANDARD	HEALTH EFFECT CONSIDERED	MEDICAL TEST REQUIRED																	
			WORK HISTORY	MEDICAL HISTORY	PHYSICAL EXAM	CHEST X-RAY	PULMONARY FUNCTION	SPUTUM CYTOLOGY	CBC	URINALYSIS	URINE CYTOLOGY	LIVER FUNCTION TEST	PREGNANCY TEST	BASELINE WEIGHT	SKIN EXAM	E-K-G	BIOLOGICAL MONITORING BLOOD	BIOLOGICAL MONITORING URINE	FECAL OCCULT/ BLOOD	PROCTOSIGMOIDOSCOPY
PLANNED																				
ARSENIC	10 µg/m³	Dermatitis, lung & lymphatic cancer	X	X	X	X			X						X					
ASBESTOS	2 fib/cc Ceiling: 10 f/cc	Asbestosis	X	X	X	X	X		X									X		
BENZENE	1 ppm Ceiling 5 ppm	Blood changes, inc. Leukemia	X	X	X															
COKE OVEN EMISSIONS	0.15 mg/m³	Lung cancer	X	X	X	X	X	X		X	X			X	X					
VINYL CHLORIDE	1 ppm Ceiling 5 ppm	Liver cancer	X	X	X							X								
PROPOSED																				
ACRYLONITRILE	2 ppm	Lung & Bowel cancer	X	X	X	X													X	X
AMMONIA	Ceiling: 50 ppm	Airway & Mucus Membrane irrita.	X	X	X															
ASBESTOS	0.5 fib/cc Ceiling: 5 f/cc	Asbestosis, Lung cancer	X	X	X															
BERYLLIUM	1 µg/m³ Ceiling: 5 µg/m³	Lung cancer	X	X	X	X	X	X						X	X					
LEAD	100 µg/m³	Kidney, Blood, & Nervous system	X	X	X				X	X			X				X	X		
SULFUR DIOXIDE	2 ppm Ceiling 5 ppm	Respiratory system	X	X	X	X	X													
TRICHLOROETHYLENE	100 ppm Ceiling: 150 ppm	Central Nervous system (Depressant)	X	X	X	X			X	X						X				

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