

OSHA/ASBESTOS HEARINGS
ORAL TESTIMONY OF JOHN L. MYERS

July 10, 1984

I. INTRODUCTION

My name is John L. Myers and I am Product and Production Manager of Calidria Corporation's chrysotile asbestos operation at King City, California. Calidria Corporation is a wholly-owned subsidiary of Union Carbide corporation. I manage the asbestos mine and mill operations, and a significant part of my responsibilities include the administration of a comprehensive safety and health program.

The purpose of my appearance in these hearings is to describe King City's respirator program in the context of the overall health and safety program in effect at that facility. I want the record to be clear that I am not testifying as an official representative of Calidria Corporation or Union Carbide Corporation. Rather, I am here as a witness for the Asbestos Information Association/North America, which is sometimes called AIA/NA. I also want the record to be clear that, as a witness for AIA/NA, the scope of my appearance is limited to King City's overall health and safety program and in particular to our experience with respirators. I have not been authorized to address any other matters.

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Accompanying me today is Robert Kronkhyte, who was primarily responsible for implementing and overseeing the King City respirator program. Bob will discuss the details of the program after my statement is concluded. Thereafter, Mr. John Pritchard will review on a broader scale the questions of what role respirators should play in the OSHA standard and how effective they can be as part of a good overall safety and health program.

II. BACKGROUND ON THE KING CITY OPERATION

The King City operation, which opened in 1963, consists of a chrysotile asbestos mine and mill. Ore is delivered from the mine to the mill where the asbestos is extracted by a wet process. Raw asbestos is fiber bagged and stored at the plant for shipment to our customers.

One of my chief duties is to supervise the general program for safety and health protection, which is designed to effect compliance with recommended TLVs and PELs for asbestos as well as other MSHA and CAL-OSHA regulations on worker safety and health. This responsibility includes meeting MSHA and Cal-OSHA regulations for occupational exposure to asbestos.

III. LONG CITY'S EFFORTS TO REDUCE EXPOSURES TO ASBESTOS WITHOUT USING RESPIRATORS

A. Engineering and Work Practice Controls

Our general safety and health program includes a variety of methods to reduce employee exposure to asbestos. Toward this end we rely predominantly upon engineering controls and work practices. We use engineering controls such as extensive ventilation and dust collector systems, automatic bagging machines, hooded equipment, isolated operations and pressurized vehicle cabs. Work practices include wet sweeping and cleaning, wash-down systems, portable and mobile vacuum cleaners and plastic wrap on individual bags and pallets of asbestos fiber.

A major factor in dust reduction has been the development and use of a wet beneficiation process to remove fibers from asbestos ore. Ore from the mine is stockpiled at the mill and mixed with water to form a slurry which is pumped to the mill for processing. The operation is a wet one until the final stages of drying, grinding, and packaging. The wet process also enables the production of asbestos in pelletized form, which reduces dust during subsequent customer use.

Air monitoring of personnel has been conducted at the mine and mill since startup in 1963, originally using the impinger method and now phase contrast per the NIOSH method.

Personal monitoring is performed monthly in assignments such as packaging where the PELs could be exceeded. Our current monitoring program requires monitoring other jobs every two or three months and area samples are collected quarterly. The program is reviewed annually by Corporate personnel and modified as necessary to achieve continued employee protection. Our facility is regularly inspected by MSHA and CAL-OSHA and we have never been cited for exceeding PELs or any other violation of regulations of these agencies.

B. The supplemental role of
respirators at King City

We have achieved our record compliance through reliance on engineering and work practice controls. To the extent that respirators are used at King City, then, their use is largely not required by federal or state regulations but rather is primarily intended to provide supplemental worker protection. Nonetheless, we have required that respirators be worn in designated areas and encouraged their use elsewhere on the plant premises. Respirators must be worn in the bagging areas and some dry process areas where employees move bags of asbestos by hand or by forklift. The respirator-required areas are based on monitoring results that are usually within the PEL but which are higher than other plant areas.

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C. General Health And Safety Training
For Employees And Supervisors

Each supervisor is required to file periodic reports concerning the results of his health and safety inspections. These inspections include checks on whether employees are wearing respirators properly and in areas where such use is required. As Mr. Kronkhyte will explain, the acceptance of King City's safety and health program, including the use of respirators, plays an integral role in employee performance evaluation and promotion.

In addition to inspections, monthly safety meetings are held to discuss with employees both workplace and off-the-job practices relating to safety and health. One of these monthly meetings is devoted to retraining in the hazards of asbestos exposure and the proper use of respirators. See Attachment E to the outline of my testimony that was submitted into the record on June 18. For convenience, a copy of the outline and attachments is appended to my written statement to be filed here today.

The supervisors themselves undergo periodic instruction on a variety of health and safety topics. Upon advancing to a supervisory position, each employee is required to attend pre-supervisor training on safety and health. We also conduct an ongoing supervisor's workshop which includes supplemental training on the reasons for and method of wearing respirators.

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D. Medical Surveillance

The medical surveillance part of our safety and health program begins with a pre-employment examination and a similar examination is performed annually. The program has included chest x-rays since 1963, pulmonary function tests since 1972 and sputum cytologies since 1980. Other tests include audio, blood work, urinalysis, hemocult (required by CAL-OSHA), and a general physical examination. In addition, the local physician visits the plant periodically to review our medical surveillance program; and we are audited annually by Corporate medical, safety, and occupational health personnel. A portion of these audits involves an assessment of our respirator program.

Because of the increased adverse health effect of smoking in asbestos workers, we have always prohibited smoking in certain plant areas; and, since 1977, no smoking has been permitted anywhere on plant property. Many employees have quit and others have reduced the amount they smoke. There has been broad acceptance of this policy.

E. General Enforcement Procedures

Written standard operating procedures set forth a hierarchy of sanctions for failure to abide by the rules for health and safety, which include requirements for respirator use. Supervisors and other personnel who are responsible for screening the health and safety program are instructed

Another measure, although imperfect, of the success of the program is the results of our medical surveillance program. Chest X-rays, pulmonary function tests, and sputum cytologies show that no employee has suffered any asbestos-related health effect of even a minor character since the King City operation started up over twenty years ago. A letter from Dr. D.F. Hyde, who runs our medical surveillance program, summarizes the results and is appended to my June 18 testimony outline as Attachment C. Moreover, we have no evidence that any employee has experienced dermatitis, or other physical or psychological problems in connection with respirator use.

I would now like to turn the presentation over to Mr. Kronkhyte, who will explain the details of personal respiratory protection at the King City operation.

OSHA/ASBESTOS HEARINGS
ORAL TESTIMONY OF ROBERT J. KRONKHYTE

July 10, 1984

1. INTRODUCTION

My name is Robert J. Kronkhyte and I have worked as safety engineer at the King City, California operation. I have been the individual chiefly responsible for the design and implementation of the respiratory protection component of King City's overall health and safety program.

My experience in the use of respirators began when operations started at King City in 1963. For the first eight years I worked as a shift supervisor. I oversaw a crew of seven employees, trained them in production and safety, and wrote shift and safety reports. In 1971 I was promoted to maintenance supervisor. My responsibilities included managing the warehouse, maintaining the asbestos mill, and supervising the production and safety of eight maintenance mechanics and a warehouseman.

From 1971 to 1984 I also served as King City's safety engineer. This job required that I learn and oversee plant-wide industrial and mining safety, the economic and regulatory aspects of King City's safety program, and off-the-job safety. From this position I enjoyed a great deal of flexibility to design and implement safety programs for King City.

In 1973 I advanced from maintenance supervisor to mill foreman. There I planned and managed plant production, distribution, and laboratory operations. My work force comprised up to 35 hourly employees and five front-line supervisors. In 1984 I resigned from my position as mill foreman and safety engineer at King City to become safety supervisor at Kaiser Refractories in Moss Landing, California. Since this change occurred only last month, this testimony may sound like I'm still employed at the King City operation. I am not authorized to speak as a representative of my former employer.

These jobs have afforded me full and varied exposure to the use of respiratory protection. Since operations began in 1963, I have worn a respirator where such use is required and in areas where we do not require but do encourage such use. As shift supervisor, maintenance supervisor and mill foreman, I worked alongside my work force and thus was able to monitor respirator use. In addition to visual oversight, I have been required to file routine safety reports which included results from inspections. As safety engineer I conducted unannounced spot-checks of respirator use and other safety items several times per day.

As safety engineer I implemented the respiratory protection portion of King City's general health and safety program. In this capacity, I have encouraged the personal

involvement of the employees in program design and implementation where appropriate. I have incorporated the results of our efforts into King City's approach to respirator protection.

II. THE USE OF RESPIRATORS AT KING CITY

A. Respirator Areas

As Mr. Myers pointed out, we require respirators to be worn in certain areas generally for the purpose of providing supplemental worker protection beyond that afforded by compliance with applicable PELs. These areas include the bagging area and certain operations involving the handling of dry asbestos. We also strongly encourage respirator use in other areas. We continue to monitor for airborne asbestos on a monthly basis in areas where respirators are required to be worn and every 2 to 3 months in other plant areas. Signs are posted that clearly denote the areas where respirators are required to be worn.

B. Selection of Respirators

As already mentioned, one way in which we have achieved broad employee acceptance of the respiratory protection program is by involving employees in the selection of respirators approved for asbestos. It has long been our operating premise that when we afford employees a choice among such respirators and get them personally involved in the details

of the program, they are more likely to achieve a proper fit and wear them. From 1963 to 1973 we provided #600A Wilson Monomask respirators to all employees. In 1974 we switched to Welsh 7165 and 7170 models, which employees told me afforded an improvement in fit and comfort over the respirators we had used previously. This program where employees participated in the selection of respirators began in 1981. As you can see from Attachment C to the outline of my testimony that was submitted June 18, a wide variety of approved respirator brands and models were evaluated. Following their lengthy evaluation the employees decided to continue to use the Norton quarter-mask negative pressure air purifying respirator.

Since then we have offered the single-use and reusable models of this respirator to all employees although most of them prefer the single use type. In addition, we inform employees that we can obtain other respirators for their use if they are unable to achieve a proper fit or adequate comfort using one of the Norton respirators.

C. Physical Fitness to Wear Respirators

As part of our pre-employment medical examination, prospective employees are evaluated with regard to their ability to perform work while wearing a respirator. The annual medical examination provides for an ongoing evaluation of an employee's ability to use a respirator. During

the term of my employment at King City, no employee who has passed this initial screening test has been unable to work effectively while using a respirator.

D. Field Fit-Testing

In addition to testing for physical fitness to work while using a respirator, we take steps to assure a proper fit. We require that facial hair be trimmed to permit a proper face seal. We fit-test by instructing the wearer to plug the air valve and exhale. In this way the tester and the employee can determine whether the seal is proper. We require all employees to fit-test their respirators daily.

E. Training

When an employee is hired, he undergoes twenty-four hours of MSHA safety training. This training includes a variety of instructions concerning the use of respirators and is based on a comprehensive respiratory protection manual. See Attachment B to my June 18 outline. Each new employee views a videotape in which another employee explains and demonstrates the proper use of respirators. In another videotape our plant's physician, Dr. Hyde, explains the reasons for using respirators and the nature of the health hazards related to asbestos exposure. The videotape is accompanied by face-to-face instruction by fellow employees who have advanced to supervisory positions. Interpreters

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are used where needed. From the time that an employee first comes to work at King City, he/she participates in formal respiratory protection training on an annual basis. Supervisors at all levels of the King City operation join in this training and receive further instruction through mandatory in-house seminars and outside safety programs.

F. Monitoring and Supervising Respirator Use

New employees are assigned to a shipping/labor crew where respirators are required for certain jobs involving the handling of dry asbestos. Their next assignment would ordinarily be working full shifts in the bagging area where respirator use is mandatory at all times. Even when employees advance to other positions where respirator use is not required, they have become accustomed to them and usually continue to wear them for extra protection. Most supervisors are promoted from the hourly payroll and therefore provide a good example in using respirators themselves and know how to monitor the use of respirators.

We rely heavily on this system of promotion from within knowledgeable for the administration of the respiratory protection program. Nevertheless, a variety of supervisors monitor the use of respirators in any given area. The mill foreman and his assistant conduct random spot-checks and include their findings in daily safety reports. Each shift supervisor remains in the presence of his work force throughout

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most of the shift. His production record and health and safety reports are weighed equally in performance reviews. Unscheduled checks by the safety engineer and plant management supplement the monitoring done by foremen and supervisors.

As Mr. Myers has stated, the written standard operating procedure sets forth sanctions for failure to abide by the general health and safety rules. I am pleased to note that I neither have had to nor do I know of anyone else who has had to proceed beyond a verbal warning in connection with any failure to properly use a respirator, and that even verbal warnings are rare.

G. Storage and Maintenance of Respirators

New hires are also instructed in the proper storage of respirators. Records are kept of when and where respirators are used, both for accounting purposes and for insuring proper turnover of respirators. Steps are taken to assure that each employee has access to an ample supply of his/her choice of respirator.

H. Employee Acceptance

The respiratory protection program has achieved broad employee acceptance. My personal experiences and the inspection reports of other supervisors indicate full usage of respirators in areas where such use is required. Where

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respirator use is encouraged but not required, nearly all employees wear their respirators at least 80 percent of the time.

Moreover, employees have succeeded in overcoming any impairments to oral communication related to the use of respirators. Even in areas where noise exceeds 60 decibels, employees remain in contact through the use of mechanical buzzers and handsignals which they developed at the plant. These methods have helped King City employees to avoid any on-the-job accident in connection with the use of respirators.

That concludes my statement. I would like now to turn the presentation over to Mr. John Pritchard, who will address the respirator issue more broadly.

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