PLAINTIFF'S EXHIBIT
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March 22, 1989

Mr. Allen Gerson
Kelley, Drye & Warren
39 Old Ridgebury Road
Danbury, CT 06817-0001

Re: Union Carbide Witness - Dr. Carl Durnehl
Deposition of 3/10/89 and 3/15/89

Dear Allen:

On March 10, 1989, we began the deposition of Dr. Carl Durnehl. Initial cross-examination was conducted by Bob Brownson, attorney for third party defendant ConWed. Cross-examination was also conducted by Mike Polk, counsel for plaintiffs (he is associated with the Motley firm). It is my impression that third party defendant ConWed is making a "full court press" on Union Carbide in an effort to avoid liability in this case. They are going after Union Carbide with a vengeance, in my opinion, and are conducting significantly greater discovery than plaintiffs would otherwise attempt. As I have previously discussed with you, I think this will work to the detriment of Union Carbide in this litigation for years to come. It is very important that in future depositions of individual Union Carbide witnesses that they be as thoroughly prepared for the deposition as possible and that good efforts be made to control the scope and the tone of the deposition. Additional thought should be given to the overall approach Union Carbide is making in their defense of these asbestos personal injury cases. As we have already discussed, a consistent approach and a consistent line of defense is helpful for preparing corporate witnesses for these depositions.

I will summarize below briefly the points of interest from Dr. Durnehl's cross-examination on March 10.

Dr. Durnehl is a 75 year old retired associate medical director of Union Carbide; he retired on August 30, 1979. His career with Union Carbide began in 1947, as medical director of Union Carbide's Texas City Chemical Plant. He moved up the ladder with Union Carbide to assistant medical director, director of toxicology, then associate corporate medical director. His first involvement with Union Carbide Corporation's asbestos group was in the early 1960's, before Union Carbide began their California mining operations.

He has visited the King City, California operation on two occasions, once in the mid 60's and once in the early 1970's. One concern of his at the plant was the possible dust hazard of piles of ore and the proper maintenance of ventilation equipment. He has known asbestos was potentially hazardous since he began his work with Union Carbide in 1947. At the time of his initial visits to King City, his concerns were possibly asbestosis, and not lung cancer; at this time he had not heard of mesothelioma. Chest x-rays have been taken annually at King City since the facility opened.

Union Carbide had a small medical library in New York with about 300 books. Additionally they had subscriptions to a number of medical and scientific journals. The company also had its own toxicology research facilities at the Mellon Institute in Pittsburgh. Union Carbide had a chemical hygiene fellowship there for years, on a staff with about 35 people. Research on toxicology was conducted there from 1938-1979.

Union Carbide has had an annual chest x-ray program for all its employees since the 1940's. The King City asbestos operation began in the early 1960's. Brownson reviewed an old material safety data sheet and an old Calidria asbestos product bulletin. He did not review one of the M.S.D.S's from the 1980's.

Witness was shown an article by Langer, Rohl and Selikoff entitled "Variations of Properties of Chrysotile Asbestos Subjected to Milling"; Journal of Toxicology and Environmental Health, 1978. He knew Dr. Selikoff, but did not know the article. The article stated it was a study of Calidria R.G. 144 Asbestos; he did not know what that was. He did not know whether this was Chrysotile or not. He was not sure whether Calidria was a Chrysotile fiber.

Witness was shown the 1966 Mellon Institute Study of Intraperitoneal Injection of rats, guinea pigs and rabbits. This was the only Mellon Institute Study he could recall regarding asbestos. The study was done because the medical literature in his mind showed only that long fibers caused asbestosis; yet, he learned that new forms of silicosis were developing from ultra fine particles of silica. As a result, he became concerned with the possibility that the short fibered nature of Calidria could cause a similar response. No conclusions were really reached.

Witness was shown an early copy of the Asbestos Toxicology Report. He believed both he and Dr. Lane wrote parts of the report.

Pelletizing was used as a means to reduce dust in the Calidria Asbestos which was marketed. Even when pelletized, dust was generated by the handling of that product.

While he was not familiar with the ConWed Company, or its products, he was familiar with recommendations made to companies using Union Carbide products, including: Control of dust, closed flow systems, wetting of asbestos processes, physical examinations and chest x-rays, pelletizing, adequate exhaust ventilation, environmental monitoring, and maintenance of the T.L.V. He did not know whether Union Carbide ever did dust sampling at the ConWed Plant.

A lengthy discussion of Sayers report was done. Dr. Durnehl did not know Sayers personally, and initially did not recall the Report. A fairly effective review of the negative parts of the Sayers Report was then conducted.

An attempt was made to cross-examine the doctor regarding the 1962 and 1963 insulation dust studies at the Union Carbide West Virginia facility; witness did not really recall those studies, but did remember they were done to determine what dust levels were present in insulation work. Four documents were shown to him; he remembered receiving several of them, but could not elaborate on any of them.

The next letter reviewed was a June 7, 1967 letter from Dr. Durnehl to Dr. Tom Hall. In this letter it states he reviewed the Sayers Report, which concludes among other things that the 5 mppcf. threshold limit value would not protect against mesothelioma. When asked if this information was communicated to the customers, he said that he did not believe so because it was only a personal opinion of his. (This topic is addressed on direct examination). The next letter reviewed was exhibit 34,

letter from T. J. Hall to Frank Dexter, 6/13/67 with asbestos toxicology report attached. Durnehl did not recall the letter, but recalled the incidents reflected in it. Dr. Durnehl stated that while he followed asbestos toxicology closely, as he did with other marketable chemicals, he did not follow it very closely.

Dr. Durnehl was shown and recognized a memo of January 25, 1965, and a letter from Dr. T. J. Hall to Frank Dexter of August 1, 1967. When shown a letter of November 30, 1967 from Dr. Hall to Frank Dexter, he stated that the letter probably does not refer to the Sayers Report. He says that injected Chrysotile causes cancer in rats; although in practice, it is less apt to cause the disease due to the fiber geometry and shape. At this time he was concerned that Calidria, due to its short fiber size, had a greater possibility of getting into the lungs and causing disease than other Chrysotile fibers.

Union Carbide has always been concerned about asbestos dust levels in their plants since 1947. They began air sampling in the 1960's, and they began a program for chest x-rays of employees in the 1940's. Dr. Durnehl was unaware of Union Carbide providing dust sampling services to their customers. He thought they probably did not because they did not want to intrude on their customer's businesses.

Cross examination resumed with questions by plaintiff's counsel Mike Polk. Dr. Durnehl stated that Union Carbide as a Corporation was well aware of asbestos hazards generally in 1947, that knowledge was based in part on medical literature review, and extended back to the 1930's. Union Carbide did not do in depth medical studies on the subject.

In 1947, UCC's medical knowledge regarding asbestos was solely based on the medical literature. They later obtained information independently from studies done at the Mellon Institute in 1966. Union Carbide was a founding member of the I.H.F., and Dr. Durnehl attended some IHF meetings.

In 1947 Durnehl knew asbestos could cause asbestosis and this was a progressive possibly fatal disease. In 1947 he believed asbestos was dose related regarding inhalation. The relationship or association between asbestos and lung cancer became known to him in the early 1960's. Before the early 1960's, he had no hint of an association between asbestos and lung cancer.

Dr. Durnehl believed that in 1967 there was a growing probability of a relationship between asbestos and mesothelioma. Today he believes incontrovertibly that asbestos can cause

mesothelioma, but not all mesotheliomas are caused by asbestos. This became incontrovertible in the early 1970's, based on reliable epidemiological studies showing an association between asbestos and mesothelioma. Prior to 1967 he believed no real epidemiological studies had been accomplished regarding mesothelioma.

In 1947 he understood Chrysotile could cause asbestosis. He has done no personal studies on relative toxicity. Until 1979 he was not aware of any information that Union Carbide had accomplished a study regarding relative toxicity of Chrysotile fiber versus other fibers.

He is aware of no workers' comp claims filed by Union Carbide personnel for asbestos disease prior to 1970. He is aware that after 1970 a couple of alleged asbestosis cases arose out of the Charleston, West Virginia Institute Plant during the years 1970-1979.

Bakelite was briefly discussed over objection. It is a resin used for molding fixtures, etc. He had no personal knowledge if Bakelite contained asbestos; Bakelite was sometimes sold in a granular form.

In his mind, the single purpose for the asbestos toxicology reports was to provide it to the marketing people who requested it. He didn't recall whether mesothelioma was ever mentioned in those reports. By 1967 he had an opinion that mesothelioma may occur with asbestos exposure below the threshold limit value. He also felt the Sayers Report was reasonably accurate.

Durnehl was on the Labeling Committee for Union Carbide from 1955-1978. This committee kept minutes. He doesn't recall when labeling of asbestos products was discussed. He recalls he made recommendations for cautions/warning labels. Inclusion of cancer language on the labels was discussed regarding asbestos containers. The word cancer was rejected. He believes warning labels were placed on the asbestos containers of Calidria from the first day it was sold by Union Carbide.

He recalls the average length of Calidria asbestos fibers was less than 5 microns. He recognized in the 1940's, a possibility of asbestos health problems to insulators working in the field. He believes in-place insulation does not pose a health hazard if it is not disturbed. He does not have an opinion that Chrysotile asbestos cannot cause mesothelioma. When asked whether Chrysotile asbestos could cause mesothelioma, he responded yes with sufficient exposure. He also believed that recent

epidemiological studies showed that Chrysotile asbestos can cause mesothelioma and lung cancer, and the possibility is enhanced 10 times if a person is a smoker. He believed there was a synergistic effect between cigarettes and asbestos for development of mesothelioma. He believes asbestos picks up the carcinogens from the cigarette smoke, although he could not cite the literature specifically. He also believes Chrysotile can cause peritoneal mesothelioma. He was not aware of the asbestos and cigarette synergism effect in the 1960's.

When the decision was made not to include cancer on the warning labels, he believed that only the long fibered asbestos, and not our asbestos caused disease. Over the years the language on our asbestos products has become more serious, based on our increasing medical and scientific knowledge. Cancer was not included on the labels because we believed our short fiber was different and did not necessarily produce the same diseases as the longer fibers. He believes this issue has not been totally resolved even today. He knows that it is still a questionable issue as to whether Chrysotile causes mesothelioma at all. He believes a preponderance of evidence suggests today that under massive exposures to Chrysotile, mesothelioma can develop.

This is where the deposition ended on cross-examination. I met with the doctor and prepared him for his direct examination which continued on Wednesday, March 15, and I feel like we got some helpful information out of him. I will set forth below what my poor notes reflect as to his testimony. We really need to look at the transcript to determine what was said, because I'm not kidding when I say my notes are very skimpy.

I began the direct examination of Dr. Durnehl with his background. He does not claim to be an expert on fiber types, epidemiology, or etiology of asbestos diseases, although in his work as an occupational medicine doctor he was familiar with all of those. We reviewed his age, and the fact that the passage of time has not improved his memory.

In his work at Union Carbide, he was responsible for about 750 to 800 marketable chemicals. They prepared toxicology reports on hundreds of these chemicals. The toxicology report program was begun around 1956. Toxicology reports were prepared on all of their relevant marketable chemicals and sent to Union Carbide's customers and anyone else who asked.

Dr. Durnehl described Calidria as coming from a unique, rich, large deposit in California. It was a unique short fibered type asbestos, the average fiber length being less than 5 microns

in size, and the deposit being free of impurities found in other asbestos deposits. The short fibered nature of the Calidria presented several considerations, including an enhanced ability to be discharged from the body or dissolved by the body, in what was believed to be a lower potential carcinogenicity.

In 1947 Dr. Durnehl knew that asbestos in general could cause asbestosis. He did not know then whether such a short fibered asbestos fiber as Calidria could. In the 1960's, he first learned of an association between asbestos and lung cancer. Part of the early focus was on fiber length, and the unique short nature of our fiber rendered it different in his opinion. In the 1960's, he believed there was no demonstrated causal relationship or association between our type of Calidria Chrysotile asbestos and lung cancer. That's why no warning label addressing this appeared on our Calidria product. He believed that for lung cancer to develop, there must first be significant enough exposure to long fibered asbestos as is necessary to cause asbestosis. He believed that it was asbestosis and not asbestos exposure alone that predisposed to cancer.

In 1967, he knew there was growing evidence of an association between asbestos and mesothelioma. This was not with Chrysotile asbestos however. It was in any event not with the short fibered Chrysotile asbestos as composes Calidria. The same was true with respect to the epidemiological studies regarding mesothelioma in the early 1970's. There was no causal relationship established between pure short fibered Chrysotile asbestos and mesothelioma at the time of the early 70's. At that time there was the possibility of an association. He did believe that for other types of asbestos, an association had been achieved. He did not recall any epidemiological studies showing a causal relationship between short fiber Chrysotile and mesothelioma. Further, mesothelioma is caused by things other than asbestos. He believes the issue is not resolved today as to whether our pure uniquely short-fibered asbestos is in any way associated with mesothelioma.

When chest x-rays were done at the King City, California plant, it was for protection of the employees. At that time it was known asbestos could cause asbestosis, and eventually it was known that asbestos was associated with lung cancer and mesothelioma. There was no evidence associating our Calidria asbestos with the lung cancer and mesothelioma. This is supported by the current absence of disease in the Union Carbide personnel working at the King City plant. As of 1979 when he retired, no King City employees had developed asbestosis, asbestos related lung cancer, or mesothelioma.

Several studies were accomplished of Union Carbide Calidria asbestos. These studies were accomplished based on samples provided by Union Carbide. To his knowledge Union Carbide never refused to provide any researchers who requested samples with amounts of their Calidria asbestos.

Union Carbide commissioned at least two studies of Calidria asbestos at the Mellon Institute. Among the purposes were to try to answer unresolved questions about potential asbestos hazards of Calidria asbestos. No studies had directly implicated pure short fibered Chrysotile asbestos such as Calidria in the medical literature. He recalled that there were two studies, both of them were reviewed with the doctor. Neither lung cancer nor mesothelioma was the focus of either of these studies.

In his mind pelletizing significantly reduced dust levels from handling Calidria. It did not eliminate all the dust. One of the purposes was to reduce the level of dust to that below the threshold limit value. He believed the pelletizing was successful in that regard. He explained the threshold limit value was important because it was the safe working level for asbestos exposure.

We reviewed the asbestos toxicology report of May 8, 1969 affirmatively. He states it was communicated to customers, and reflected a cautious attitude on the part of Union Carbide in marketing their products. They were provided to the marketing personnel because they were the ones in primary contact with the customers. Additionally, he and others directly sent copies of the asbestos toxicology reports or even prepared them on request from customers and others.

All in all, I thought the direct examination of Dr. Durnehl went well. I have had some further thoughts on questions that should be asked of him or considered if he is deposed again. I would emphasize with him in another deposition, after preparing him on the issue that neither he nor Union Carbide had any reason to suspect that the threshold limit values were not being observed by end users out in the field. This was one of the reasons why Union Carbide provided dust sampling and dust study services to its customers. I would also like to hear his thoughts on Dr. Irving J. Selikoff, and whether Dr. Selikoff's views were immediately and unconditionally accepted by the medical and scientific community when presented. We've had many comments from other expert witnesses and corporate witnesses that Dr. Selikoff's opinions were initially held at arm's length in many respects because of the "firebrand" nature of his presentations. Additionally, I think we need to re-educate Dr. Durnehl on the

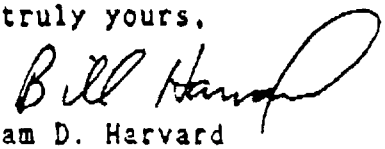
significance of the impurities in the Canadian asbestos as opposed to the pure nature of our Calidria asbestos. When I discussed the matter with him he was too weak in his recollection to affirmatively testify about either Tremolite, Amphiboles, or other impurities. In fact, he did not even remember what Amosite or Crocidolite asbestos fibers were.

All in all, I felt we lost some ground with the deposition of Dr. Durnehl. Much of what he said I believe he simply is remembering incorrectly. If he is going to be re-deposed at some point in the future, I would suggest someone spending a couple of days or at least a full day with him to go through a comprehensive approach of Union Carbide's strategy, positions, and concerns with respect to matters on which he could be expected to testify. I think this would be most helpful. Additionally, I would have whoever does that also be prepared to conduct a direct examination perhaps covering new matters raised in further depositions, or addressing some of the concerns which I have mentioned in this letter.

We appreciate the opportunity to be of service to Union Carbide in this case. Plase let Henry or me know if there is anything further we can do in this regard. I look forward to receiving a copy from you, Allen, of the documents produced at the Joyce Hill deposition and document production. I felt the deposition of Joyce Hill went reasonably well. As we expected, there were some problems because of the nature of the file system that has been set up at your offices, rather than strictly through Union Carbide employees. I thought Joyce handled the matter well. Please let me know what we can do.

With kindest regards, I am

Very truly yours,



William D. Harvard

WDH:bja:7272H

cc: Mr. Terry McGeever