

for dusty jobs men who are past the age of 40 and not young men just taking up a trade.

All workers engaged in harmful dusty operations should be periodically thoroughly re-examined, including X-ray tests. Particular emphasis should be placed on any indication of shortness of breath and chest pains

Regulations should be enforced concerning the time limitation of work of any employees involved in a dust producing operation. Such Company regulations concerning sandblasting calling for a fixed six-month maximum period on such work, after which a minimum six-month period away from dust producing work should be followed more closely.

For protection from a legal angle, the worker should be given a final thorough examination including X-ray before being permanently transferred to some other type of work, laid off or discharged.

CONCLUSION

There is still a tremendous amount to be learned about pneumoconiosis and dust-producing operations. One thing, however, is certain -there is a very definite tendency to require compensation for industrial or occupational diseases. If these compensation costs are to be kept to a minimum and the health and safety of workman are to be promoted it will be necessary to make further studies and to promptly adopt adequate precautionary measures. Many of these are now in effect, the others should be put in force as soon as possible. After years of study and direct contact with the Dust Problem, Mr. Dan Harrington, Chief, Health and Safety Branch, United States Bureau of Mines, has come to this conclusion (Eng. & Min. Jour. March 1937 pps. 119-21) with which we are heartily in accord

"In the maze of uncertainties connected with almost all phases of the causation and diagnosis of dust disease, about the only really well-determined fact available is that breathing large quantities of dust (or possibly of certain dust) over extended periods is likely under some conditions to be harmful to health and that subsequent alleviation or cure is difficult or impossible. Therefore, it would seem to be logical to try to prevent dust formation thus preventing it from harming workers through respiration or otherwise. Here is a real job for the engineer, and little or no help can be expected in these vital functions from any agency except the engineers and operating officials.

"The most harmful of the ordinary dusts to breath is probably silica dust, but, on the other hand, not even free silica, supposedly the most detrimental of the silica dusts, is harmful unless it is breathed, in considerable quantities and over extended periods. No human being ever lived any considerable time on this earth of ours without breathing silica dust (free silica dust), yet by no means all of the people of the world have or have had silicosis. In other words, the quantity of dust taken into the respiratory organs is a controlling factor in dust respiratory harmfulness.

"One common-sense answer is that any atmosphere in which dust is visible to the naked eye is certainly too dusty to be breathed with safety by human beings, and the wise, farsighted, human employer will immediately start to decrease the dust content in any atmosphere where dust is visible. After he has eliminated visible dust, there may