

Combustion Engineering Knew of Health Hazards of Asbestos

1.	1919-1983 , C-E publishes <i>Combustion</i> magazine.	- In 1936, Combustion (Vol. 7 No. 7, Jan. 1936) recommended <i>Dust</i>, by S. Cyril Blacktin. "<i>Dust</i> is recommended as an authoritative reference work for research engineers, plant managers, health officials and all who have to deal with the dust problem in manufacturing, science and disease." (p.42)
2.	1930-1939 , C-E receives <i>Engineering</i> and <i>The Engineer</i> .	Both engineering magazines discuss the hazards of asbestos. C-E advertises in magazine and has articles about C-E product developments in magazine.
3.	1934-1939 , C-E receives <i>Mechanical Engineering</i> as part of its membership in the American Society of Mechanical Engineers (ASME).	<i>Mechanical Engineering</i>, published by ASME, carried articles on toxic dust, which included asbestos. The magazine also published Philip Drinkers; <i>Uses and Limitations of Respiratory Protection</i>. C-E executives were members and officers of ASME and attended their meetings.
?	1930-1963 , C-E and future subsidiaries are members of American Ceramics Society and receive <i>The Bulletin, Ceramic Abstracts</i> , which contain many articles on asbestos related diseases and preventative measures.	- In 1931, E.R.A. Merewether's article on "Effects of Asbestos Dust on the Lungs and Dust Suppression in the Asbestos Industry," abstracted. - Dozens of articles on the health hazards of asbestos were abstracted over the years.
?	1934 , Refractories & Insulation (R&I becomes C-E subsidiary 1963) begins making asbestos containing pipe insulation, block insulation and insulating cement.	- R&I was sued in 1963 by Marie Vichelich, the widow of an insulator who died of asbestos caused lung cancer. - This case was discussed in C-E's negotiations with the company and the sale agreement mentions the case. C-E paid \$25,000 on the claim. (scan in document and link here)
6.	1949 , C-E member in American Petroleum Institute; Foster Wheeler was also a member of the API .	- Access to work of Dr. Phillip Drinker and Roy Bonsib, chief safety expert for Standard Oil, later (Esso) Exxon. - In 1949, experts at Exxon knew that asbestos caused cancer and that the exposures of bricklayers, insulators and others put them at risk. - Used Dr. Drinker to lobby ACIGH for lower TLVs - Despite their knowledge of TLVs (however corrupted by the industry), C-E stated that they never advised workers of such threshold limit values or relied on them. Quote: "Sept. 30, 1970 Potter and Borel interrogatories. Q: "Have you ever advised those using your products of your so-called threshold limits?" A: "This defendant has no so-called 'threshold limits' of its own for any product it manufactures or sells."
7.	1963 , C-E/R&I plant dust study by Pennsylvania.	Jan Lieben, MD, Director of the division of Occupational Health, Commonwealth of Pennsylvania made recommendations to the plant manager of the C-E/R&I plant regarding asbestos dust abatement and industrial hygiene.

8.	1966, 91 Plant workers Chest X-rays positive for asbestos. 1969, workers were tested again and at least one worker who had asbestosis in 1966, had died of lung cancer in 1969.	- Through their own study of plant workers, C-E knew that their own workers were dying of lung cancer from asbestos exposure. - C-E also received recommendations to institute an industrial hygiene program to abate the asbestos dust problem and protect workers from breathing the deadly dust.
9.	Dec. 23, 1966 Claude Tomplait v. Combustion Engineering, Inc. (1967 USDC TX)	C-E was sued and answered interrogatories in this case in 1968. In these, they said that they had not warned workers about the hazards of asbestos because it was "not dangerous." Moreover, they did not warn workers that respirators gave them a "false sense of security."
10.	1969, C-E placed began to place a label on some of the asbestos products it made. As the Borel case proved, this label was inadequate for warning workers of the hazards of asbestos.	Acting on the advice of industry spokespeople, C-E placed a "cautionary" label on some of the asbestos products it manufactured. According to their ATI in Potter (March 30, 1970) ⟨ They did not, however, place "cautionary" labels on the asbestos-containing materials that they manufactured for Kaiser, even though it was the same product.
11.	1972, C-E begins reformulation of its products to become asbestos-free.	They began this reformulation in response to worries about the future of asbestos products.