

FILE NAME: General Dynamics (GED)

DATE: 0000

DOC#: GED001

DOCUMENT DESCRIPTION: Legal - BC Notes on Company Knowledge

I. General Dynamics / Electric Boat Company Knowledge

General Dynamics was an owner and controller of Asbestos Corporation Limited, a Canadian asbestos fiber mine, for many years. For more information about Asbestos Corporation Limited and its awareness of asbestos hazards which would have been available to General Dynamics, please see Chapter 9 of my book Asbestos: Medical and Legal Aspects (5th Edition) and all referenced documents.

I also have information that Mr. William H. Ray of General Atomics (a division of General Dynamics) was a member of the American Industrial Hygiene Association (AIHA) in 1958. The AIHA published an Industrial Hygiene Guide on Asbestos in its journal in April 1958 in which asbestosis and lung cancer were noted.

General Dynamics / Electric Boat ("GD/EB") hired Dr. Archibald MacDougall as its Supervisor of Health starting in 1950. Two years later he was promoted to Medical Director and continued in that capacity until at least 1979. Dr. MacDougall was deposed on November 19, 1979 where he testified about his knowledge about asbestos hazards from various sources. He admitted to attending a 1958 conference where he claims he first learned that asbestos was a known toxin to humans. However, Dr. MacDougall also admitted to being a member of the American Medical Association since 1945, and as a result he received the "Journal of the American Medical Association" ("JAMA"). As discussed in my book Asbestos: Medical and Legal Aspects (5th Edition), there were numerous publications in JAMA discussing asbestos related diseases including lung cancer and mesothelioma that were available to Dr. MacDougall during these years. These included "Industrial Management and Occupational Cancer" by Hueper, JAMA (1946), "Asbestosis and Cancer of the Lung" by Hueper, JAMA (1949), and "Asbestos Exposure and Neoplasia" by Selikoff et al., JAMA (April 6, 1964) amongst others. For a more detailed explanation of these articles that were available to Dr. MacDougall and GD/EB please see Chapter 2 of my book.

Dr. MacDougall also testified to maintaining GD/EB's medical library which included various publications dealing with occupational health including "Diseases of Occupation" by Hunter, "Occupational Diseases" by Johnstone, and "Asbestos and Diseases" by Selikoff amongst others. He further admits to being aware of the Threshold Limit Values (TLVs) for asbestos (which were 5 million particles per cubic feet of air) by 1955. For a more detailed explanation of TLVs for asbestos please see Chapter 4 of my book.

Mr. Robert Secor worked as a chemist at GD/EB starting in 1958 and was later promoted to Chief of Environmental Controls. He was deposed on November 5, 1979 and testified about GD/EB's and his own knowledge about asbestos hazards from various sources. He also maintained a library of publications including "Industrial Hygiene and Toxicology" by Patty amongst others. Mr. Secor personally admitted that he first learned about asbestos causing lung cancer and mesothelioma in 1968 when he attended a meeting involving Dr. Selikoff.

Mr. Secor further testified to maintaining a bound log book which contained industrial hygiene asbestos dust measurements taken by GD/EB while insulation was being installed and removed aboard submarines. I have been provided a copy of this industrial hygiene asbestos dust study log book. The log book shows very high levels of exposure to asbestos to insulation workers and bystanders to that work.

Mr. Bradford Heil is currently the Manager of International Programs and Business Development, and has been employed with Electric Boat since 1977. He testified on March 27, 2015 in this case as the Person Most Knowledgeable of GD/EB. He admits that GD/EB had industrial hygienists on staff starting in the 1950s. It is my opinion that based on the above information that GD/EB had extensive knowledge about the hazards of asbestos at its disposal dating back to the 1950s or earlier. As a result, and given its vast resources, GD/EB was more than capable of taking asbestos dust measurements dating back to the 1950s and implementing safety precautions to reduce or eliminate asbestos exposures to workers at its shipyard. Despite this, GD/EB did not perform any industrial hygiene tests for asbestos dust until the early 1970s even though it was well aware that asbestos containing insulation was used in the manufacture of submarines at its shipyard. In fact, the first known industrial hygiene test for asbestos dust taken at the GD/EB shipyard was performed by the Connecticut State Department of Health in 1965. At that time, the threshold limit value for asbestos was 5 million particles per cubic foot of air, and the test results showed 288 million particles per cubic foot of air (more than 57 times the limit).

Since GD/EB had ample information about asbestos hazards available to it dating back to the 1950s or earlier, there is no question that it should have taken precautions to protect workers from asbestos dust as soon as that knowledge was learned.