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Asbestos in Hairdryers

In March of 1979, public controversy arose over the common use of asbestos in the barrels and as support for heating coils of hairdryers. The asbestos paper lining the barrels was used to insulate the plastic barrel against the heat of the air blowing through it. This use of asbestos did not rely on any special property of asbestos, such as tensile strength, that accounted for its use in other applications. Patents existed for the use of both asbestos and mica in hair dryers, and when asbestos became controversial, the manufacturers who had used asbestos switched to mica or other readily available alternative materials and designs.

I was involved in actions on other asbestos products before the Consumer Product Safety Commission (CPSC) in 1976-77, leading to bans on asbestos in drywall patching compounds and fake fireplace ash sold with natural gas fireplace units. CPSC continued to look into other consumer asbestos hazards, but a Commission review as of November, 1978 did not refer to hairdryers. This use in hairdryers was an unlabeled use of asbestos. It came to the attention of the Environmental Defense Fund, a group I consulted with, in late 1978 or 1979. A Washington television station, WRC, approached CPSC and then ran a news story on March 27, 1979. At this time, it was estimated that 8-12.5 million asbestos-containing, hand-held hairdryers were in the hands of consumers (*Asbestos in Hand-Held Hair Dryers*, Hearing before Subcommittee for Consumers, Senate Committee on Commerce, Science, and Transportation, Apr. 2, 1979, pp. 40, 42).

I suspect that a major reason this did not come to public attention earlier was that almost all of these products were manufactured in Asia. In the US, OSHA and EPA asbestos regulations applied, and workers, consumer groups, and the media were increasingly aware of and concerned about asbestos hazards. Firms that did manufacture these products here would have been subject to the above regulations and should have consequently been aware of the potential harm that deterioration of these products might cause for consumers and hair stylists like Ms. Giero, who regularly used such devices. The US hairdryer manufacturer ("one of the few left") that WRC visited used mica board, not asbestos. A CPSC consultant, surveying the use of asbestos in consumer products, in 1978 identified only US manufacturer of asbestos-containing hairdryers; and that firm was planning to stop using asbestos (*Asbestos in Hand-Held Hair Dryers*, Hearing before Subcommittee for Consumers, Senate Committee on Commerce, Science, and Transportation, Apr. 2, 1979, p. 26). Other firms may have been aware of the regulatory costs and risks of publicity from using asbestos in hairdryers made in the US and chose to have the products made in Hong Kong, Singapore, Korea, Japan, etc.

The Environmental Defense Fund (EDF) reported on hairdryers tested for asbestos release at the laboratories of EMV Associates (for WRC), with analyses confirming that asbestos release was occurring from the use of these devices. On the basis of this, EDF petitioned for CPSC to ban asbestos in these products, noting that alternative designs could obviate the need for liner materials, and that where liners were used, alternatives such as mica and metal were available (Mar. 29, 1979). EDF petitioned CPSC to issue a ban on sales and order manufacturers, distributors, and retailers to repair, replace, or repurchase the asbestos products. In the face of the publicity that accompanied this, it appears that all the major manufacturers agreed to voluntarily accept the asbestos products back and replace them.

In announcing hairdryer asbestos release test results of a study done by the National Institute for Occupational Safety and Health (NIOSH) for CPSC, and analyzed by Dr. William Nicholson of the Mt. Sinai School of Medicine in New York, the Consumer Product Safety Commission concluded that "asbestos fibers emitted from hair dryers may pose a significant health threat to consumers." Dr. Nicholson said, "It is clear that asbestos fibers are released during the operation of most hair dryers tested, in some cases in considerable quantities." (NEWS from CPSC, Nov. 2, 1979) In his report to CPSC, Nicholson said, "The fiber concentrations in the effluent of some dryers exceeded the highest we have measured in eight years of surveillance of environmental asbestos contamination." ("Review of NIOSH Testing of 30 Hand Held and Standing Hair Dryers for Asbestos Release") Release of asbestos, in a concentration of 0.011 f/ml, was also confirmed by Gillette Medical Evaluation Laboratories (M. Roddy, "Asbestos in Gillette Hair Dryers," interoffice memo to L. Hardy, Apr. 25, 1979)

Previous regulation of asbestos in consumer products had occurred in 1972, when the Food and Drug Administration banned the use of asbestos in general-use garments (*Federal Reg.* Feb. 18, 1972). This followed the discovery that women's coats from Italy contained 8 percent asbestos, with attendant publicity ("Coats with Asbestos in Fabrics Termed Hazardous," *New York Times* May 4, 1971). The government decided that this presented an "unwarranted hazard of toxicity" to the public, as would happen with asbestos in hairdryers in 1979.

Manufacturing corporations of many kinds had reason to be concerned about asbestos, when the OSHA asbestos standard, the subject of a report in the *Wall Street Journal* (June 8, 1972), was issued. This rule established that maintenance of thermal insulation in their factories could cause violations of the permissible ceiling exposure limit for asbestos in air. Their processing of asbestos or friable asbestos products was likely to make them subject to the regulations. Sprayed asbestos fireproofing used in construction was the subject of widespread news reports, and legislators enacted bans in cities around the country in the beginning of the 1970s, presaging EPA regulations in 1973. An official of Gillette, the nation's largest producer of hairdryers, was recorded in a WRC report as saying they stopped using asbestos in hairdryers in 1973: "The conclusion we came to was that if there was an alternative material that could be used, which was just as good, why run the risk of having asbestos fibers?" WRC reporter Lea Thompson found that alternative materials used by some manufacturers were no more expensive than asbestos, and they appear to have been readily available (*Asbestos in Hand-Held Hair Dryers*, Hearing before Subcommittee for Consumers, Senate Committee on Commerce, Science, and Transportation, Apr. 2, 1979, pp. 5, 10).

The controversial use of asbestos was not the first time that hairdryer manufacturers were contacted by the CPSC. In 1974, CPSC had investigated hand-held hairdryers for short-circuiting of heating coils. Burns and electrical hazards were well recognized dangers from these products.

It is remarkable that none of the companies selling these millions of asbestos products rose to defend their use as safe or necessary. In contrast, asbestos-containing drywall compounds were defended by business interests in protracted regulatory proceedings in 1976-77. No manufacturer I'm aware of could even resist the public pressure to replace these deadly products

for free and get them out of people's homes and workplaces. This unusual and complete capitulation by a whole industry suggests strongly that the use of asbestos in hair dryers was simply indefensible. This was as true in 1969 as it was in 1979; but there was no EPA, OSHA, NIOSH, or CPSC, and a lot less public awareness about asbestos, in 1969.

It is my opinion that the manufacturers of such products should have been aware of the hazards of asbestos in these products and the potential harm that significant asbestos exposure could cause in the large population at risk, millions of consumers and especially workers constantly using these products as hair stylists, well before the years of Ms. Giero's exposure, 1975-1982.

Hairdryer manufacturer General Electric Company, in particular, had longstanding knowledge of the lethality of asbestos. The archives of Dr. Alice Hamilton at Harvard University and the GE Museum in Schenectady, New York, contain letters exchanged between Dr. Hamilton and GE management including GE President Gerard Swope, showing health concerns about GE's use of asbestos materials in the early 1930s. GE employed prominent occupational health professionals, engineered safeguards for asbestos in its York, Pennsylvania plant, and had regular access to new information on asbestos hazards through its involvement in the National Safety Council and Industrial Hygiene Foundation in the 1930s and 1940s and thereafter. GE continued to use a number of asbestos products in its production facilities through at least the 1970s (See B. Castleman, "General Electric," in *Asbestos: Medical and Legal Aspects* 5th Ed., 2005, pp. 584-588). GE had good reason and excellent capability to remain knowledgeable about the emerging literature on asbestos hazards during these decades.

Defendant

~~Hairdryer manufacturer~~ Proctor & Gamble was a member of the Industrial Hygiene Foundation from 1937-1965, and like General Electric (1947-1977 or later) received the *Industrial Hygiene Digest* monthly, with abstracts (summaries) of articles published in hundreds of medical and scientific journals around the world. There were dozens of abstracts of articles that discussed the hazards of asbestos. P&G men were officers in committees of the Chemical Section, National Safety Council, at least as early as 1942. NSC published reports, a magazine, and held annual meetings where asbestos hazards and control were periodic topics covered starting in the early 1930s. P&G had a chemical division starting 1918 to formalize new product research; a drug products division was created in 1943. So this was a company that was in a good position to know how deadly asbestos had been reported to be, by the 1970s.