

CONSUMER PRODUCTS CONTAINING NEGATIVE ION TECHNOLOGY

The Division of Radiation Control (DRC) is committed to protecting public health and the environment by ensuring that human exposures to radiation are kept to levels that are as low as reasonably achievable (ALARA). The goal of radiation protection is to prevent or minimize exposures that provide no benefit.

The DRC was recently made aware that consumer products using negative ion technology were being marketed and sold in Utah. The Division has been working with the [Food and Drug Administration](#) (FDA), [Nuclear Regulatory Commission](#) (NRC) and the [Organization of Agreement States](#) (OAS) since that time to address the health and safety implications of the use of this technology in consumer products.

Negative ion technology embeds negative ions in personal products and is currently being advertised as a means to maintain health, balance energy, and improve emotional well-being. Specifically, some commercially available silicone wristbands and kinesiology tapes commonly used by athletes and the general public promote the use of negative ion technology in their products.

The DRC believes it is important for the public to understand that negative ion technology can be an alternate description for the use of radioactive material that produces negative ions. Negative ion technology can involve the use of minerals that contain a naturally occurring source of radiation such as thorium or uranium.

The NRC has determined that the levels in some of these consumer products may be subject to [radioactive materials licensing](#) requirements. Licensing serves to ensure the proper possession, use, distribution, and transfer of radioactive materials. The FDA has determined that these products do not pose a significant public health and safety concern, even for negative ion silicone wristbands that contain levels of radiation that make them subject to radioactive materials licensing requirements.

The Division of Radiation Control has been in regular contact with the NRC regarding this matter, as well as with (Endevr), a Utah company that markets and distributes negative ion silicone wristbands and kinesthesiology tape (K-Tape). Recent analytical testing by the NRC of selected silicone wristbands currently sold and distributed by Endevr show that the levels of radiation produced by these products are within a range common to upper background radiation levels—and in line with the FDA determination, do not pose a significant public health and safety concern. Based on the analytical information made available to the DRC, the levels of radiation in the wristbands currently marketed and distributed by Endevr are below levels that would require a radioactive materials license.

Earlier versions of the wristbands imported by the company probably contained naturally occurring radioactive material in quantities that would have required DRC licensing. Once informed of the possibility that these wristbands could contain higher levels of radioactivity, Endevr ceased their distribution. The company is currently storing these wristbands at its

warehouse and is arranging for their proper disposal at an approved facility. Storage and disposal of these wristbands does not present a health or safety risk to the public.

Because the levels of naturally occurring radioactivity vary in the materials used in negative ion technology, products containing these materials will emit differing levels of radiation. As with all consumer products, it is important to the public to be informed before they buy.

The NRC recently updated its consumer products [policy statement](#) to reflect its current approach to radiation protection and product licensing. Questions regarding negative ion silicone wristbands can be directed to the DRC by calling 801-536-4250.