

S T A T E O F N E W Y O R K

11019

I N A S S E M B L Y

May 10, 2010

Introduced by M. of A. MAISEL, SPANO, ENGLEBRIGHT, COLTON -- read once
and referred to the Committee on Environmental Conservation

AN ACT to direct the commissioner of environmental conservation to examine, evaluate and make recommendations on the potential harm and contamination caused by the disposal of smoke detectors

THE PEOPLE OF THE STATE OF NEW YORK, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

1 Section 1. The legislature hereby finds that there are two types of
2 smoke detectors, those being ionization detectors and photoelectric
3 detectors. Ionization detectors contain a source of ionizing radiation
4 which is a minute quantity (approximately one-five thousandths of a
5 gram) of americium-241, an alpha particle emitter with a half-life of
6 432.7 years. Americium is a man-made metal produced when plutonium atoms
7 absorb neutrons in nuclear reactors. The largest use of americium-241 is
8 as a component in household and industrial smoke detectors.
9 When americium-241 enters the human body, it tends to concentrate in
10 the bones, liver and muscles, and can remain in the body for decades
11 continuing to expose the surrounding tissues to radiation. Americium-241
12 poses a significant risk if ingested, exposing tissue to both alpha and
13 gamma radiation, thereby increasing the risk of developing cancer.
14 The Nuclear Regulatory Commission regulates the radioactive materials
15 in smoke detectors. Because the amount of americium-241 in these devices
16 is so small, the Nuclear Regulatory Commission's regulations exempt
17 those individuals who purchase smoke detectors from the licensing
18 requirements for radioactive materials, including those relating to the
19 disposal of such materials. The public can dispose of single, household
20 smoke detectors as ordinary trash.
21 The legislature finds that of particular concern is the concentration
22 of smoke detectors that might be disposed of as solid waste in landfills
23 over the lifetime of such landfills.
24 S 2. The commissioner of environmental conservation, in cooperation
25 with the department of health, shall examine and evaluate all available
26 data and studies relating to the dangers posed by the disposal of smoke
27 detectors, and shall provide independent analysis and report upon the

EXPLANATION--Matter in *ITALICS* (underscored) is new; matter in brackets
[] is old law to be omitted.

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1 potential harm and contamination posed by the disposal of millions of
2 smoke detectors in this state. Such analysis and report shall take into
3 account the quantity of smoke detectors that have entered and will
4 continue to enter the solid waste stream, the concentration of smoke
5 detectors in specific landfill locations, and the potential exposure of
6 landfill and sanitation workers, firefighters, workers who manufacture
7 smoke detectors, as well as the general public to americium-241.
8 S 3. The commissioner of environmental conservation shall, within one
9 year of the effective date of this act, report his or her findings and
10 make recommendations to the governor and the legislature. Such report
11 shall specifically make recommendations relating to the continued sale
12 of ionization smoke detectors and the regulation of the disposal of
13 ionization smoke detectors as hazardous waste.
14 S 4. This act shall take effect immediately.