
OLR Bill Analysis

sHB 6499

AN ACT CONCERNING RADIATION SECURITY.

SUMMARY

This bill expands the Department of Energy and Environmental Protection (DEEP) commissioner's authority to regulate radiation sources. It does so by requiring her to adopt specific regulations on sources of ionizing radiation and radioactive materials, instead of only general regulations needed to carry out the ionizing radiation sources provisions under current law (see BACKGROUND). Under the bill, "radioactive materials" means any solid, liquid, or gas that emits ionizing radiation spontaneously.

By requiring the commissioner to adopt regulations on radioactive materials sources, the bill allows the state to pursue "agreement state status" from the U.S. Nuclear Regulatory Commission (NRC) (see BACKGROUND). The bill requires the regulations to include provisions on such things as (1) regulating ionizing radiation and radioactive materials sources; (2) planning for and responding to emergency events; (3) recognizing other state or NRC licenses; and (4) setting fees, which must be deposited into the General Fund.

The bill prohibits certain actions with respect to radioactive materials and extends existing penalties to those actions. It authorizes the commissioner to address exposure hazards and contamination from radiation and makes those responsible for the contamination liable for cleanup costs and expenses.

The bill also makes many minor, conforming, and technical changes, including several to effectuate the transition to "agreement state status" and update definitions to align with corresponding federal law (42 U.S.C. § 2014).

EFFECTIVE DATE: October 1, 2021

§§ 1-3 — DEEP REGULATORY AUTHORITY

General Regulations

The bill requires the commissioner to adopt regulations on sources of both ionizing radiation and radioactive materials. Under the bill, the regulations she must adopt are those that are:

1. needed to (a) secure “agreement state status” from NRC, pursuant to § 274 of the Atomic Energy Act of 1954, 42 U.S.C. § 2021, and (b) carry out the state radiation and radioactive materials law;
2. related to (a) constructing, operating, controlling, tracking, securing, or decommissioning ionizing radiation sources, including modifying or altering them, and (b) producing, transporting, using, storing, possessing, managing, treating, disposing of, or remediating radioactive materials;
3. related to planning for and responding to terrorist or other emergency events, or potential ones, that involve or may include radioactive materials (see “Guidelines,” below);
4. for reciprocating recognition of specific licenses that NRC or another state with “agreement state status” issues; and
5. concerning fees to license ionizing radiation sources that, with certain existing registration fees, are enough to administer, implement, and enforce an ionizing radiation program.

Licensing

Current law authorizes the commissioner to, through regulation, use general or specific licenses for ionizing radiation sources. The bill requires her to adopt regulations to license these sources, either through general or specific licenses. It allows her to (1) issue, deny, renew, modify, suspend, or revoke a license and (2) include terms and conditions in licenses as she deems necessary.

Guidelines

The bill allows the commissioner to establish radiation exposure guidelines for first responders and the public to manage emergencies involving radioactive materials, which may be based on recommendations from the federal government and the National Council on Radiation Protection and Measurements.

Outside Experts

The bill allows the commissioner, in addition to the governor as allowed under current law, to hire necessary consultants, experts, and technicians to investigate and report on matters related to implementing the state's radiation and radioactive materials law.

§§ 4 & 6 — PROHIBITED ACTS

Current law prohibits the following actions related to ionizing radiation sources unless the source is exempt or properly licensed or registered: using, manufacturing, producing, transporting, transferring, receiving, acquiring, owning, or possessing. The bill expands the prohibited actions to include constructing, operating, or decommissioning. It explicitly prohibits failing to register a source.

The bill prohibits the following actions with respect to radioactive materials, unless done in compliance with the law and any associated regulation, regulation, or license: producing, transporting, storing, possessing, managing, treating, remediating, distributing, selling, installing, repairing, or disposition.

The bill extends existing penalties for violations of the state's radioactive materials laws to these prohibited acts. By law, unchanged by the bill, the commissioner may, among other things, issue cease and desist orders. She may also, through the attorney general, seek injunctive relief related to violations or probable violations. Someone who knowingly commits certain actions or commits certain actions with criminal negligence is subject to fines, imprisonment, or both (CGS §§ 22a-158a to -158c).

The bill also makes someone liable to the state for reasonable costs if

they negligently or knowingly violate the radiation and radioactive materials law's prohibited acts; requirements for registration, licensing, and record keeping; or requirements tied to the new regulations, including any associated regulation or order. This includes costs to (1) detect, investigate, control, and abate the violation and (2) restore natural resources to their former condition, if practicable and reasonable. If restoration is not practicable or reasonable, the person is liable for damage caused by the violation. By law, a lawsuit to recover damages, costs, and expenses, does not prevent other remedies.

§ 5 — RADIATION CONTAMINATION REMEDIATION

Commissioner Actions

The bill authorizes the DEEP commissioner to take actions she deems necessary to protect human health and the environment if someone (1) causes or is responsible for certain exposures or contamination related to radioactive material and (2) does not immediately act to prevent, stop, or remedy it to the commissioner's satisfaction. She may investigate, monitor, abate, contain, mitigate, or remove the hazard, pollution, contamination, or potential hazard, pollution, or contamination. The bill allows her to contract with anyone to address the hazards, pollution, or contamination.

This applies to the following:

1. an exposure hazard, or potential one, from radioactive materials, radioactive waste, or an ionizing radiation source or
2. pollution, contamination, or potential pollution or contamination of natural resources (e.g., land, air, water) due to a discharge, spill, uncontrolled loss, release, leak, seep, or filtration of radioactive material or radioactive waste.

The bill allows the commissioner to take the same actions if the responsible person is unknown and the hazard, pollution, or contamination (or potential ones) is not being addressed by the federal government, a state agency, a municipality, or a regional or interstate authority.

Liability

To the State. The bill makes anyone who causes or is responsible for the exposure hazards, pollution, or contamination (or potential ones) described above, liable for the costs and expenses incurred by the commissioner to address the situation. It includes the costs and expenses for restoring the natural resources, attorney's fees, court costs, and other legal expenses. The bill allows the commissioner to seek additional compensation or other relief from the court, including punitive damages.

Under the bill, if the hazard, pollution, or contamination (or potential ones) is due to more than one person's action or failure to act, each person is jointly and severally liable. If the commissioner requests it, the bill requires the attorney general to bring a civil action to recover costs and expenses, including those from related contractual obligations, from the responsible person.

If the responsible party is unknown, the bill requires the commissioner to ask the federal government to assume the contractual obligations to the extent allowed under federal law.

To an Individual. Under certain circumstances, the bill entitles individuals who prevent, abate, contain, remove, or mitigate an exposure hazard, pollution, or contamination (or potential ones), as described above, to reimbursement of the reasonable costs they incur or spend for their actions. This applies when the exposure, pollution, or contamination (or potential ones) was due to someone's negligent, reckless, knowing, or intentional action or failing to act. If more than one person is responsible, each person is jointly severally liable.

BACKGROUND**Agreement State Status**

"Agreement state status" authorizes states to assume NRC responsibility for regulating and licensing byproduct materials (radioisotopes), source materials (uranium and thorium), and certain amounts of special nuclear materials. Among other things, to become an agreement state, there must be an agreement between the governor

of the state and the NRC chairman and supporting legislation and regulations. Governor Lamont submitted a letter of intent to become an agreement state to the NRC in December 2020.

Under federal law, NRC is responsible for regulating nuclear power plants (e.g., Millstone); uses of nuclear material, such as in nuclear medicine; and nuclear waste.

Ionizing Radiation

Ionizing radiation includes gamma rays, x-rays, alpha and beta particles, neutrons, protons, high-speed electrons, and other atomic or nuclear particles, but not sound or radio waves, or visible, infrared, or ultraviolet light.

COMMITTEE ACTION

Environment Committee

Joint Favorable Substitute

Yea 24 Nay 8 (03/12/2021)