

3701:1-46-41 Ice detection devices containing strontium-90: quality assurance; prohibition of transfer.

- (A) Each person licensed under rule 3701:1-46-40 of the Administrative Code shall visually inspect each device and shall reject any which has an observable physical defect that could affect containment of the strontium-90.
- (B) Each person licensed under rule 3701:1-46-40 of the Administrative Code shall test each device for possible loss of strontium-90 or for contamination by wiping with filter paper an area of at least one hundred square centimeters on the outside surface of the device, or by wiping the entire surface area if it is less than one hundred square centimeters. The detection on the filter paper of more than two thousand two hundred disintegrations per minute of radioactive material per one hundred square centimeters of surface wiped shall be cause for rejection of the tested device.
- (C) Each person licensed under rule 3701:1-46-40 of the Administrative Code shall :
 - (1) Maintain quality assurance systems in the manufacture of the ice detection device containing strontium-90 in a manner sufficient to provide reasonable assurance that the safety-related components of the distributed devices are capable of performing their intended functions; and
 - (2) Subject inspection lots to acceptance sampling procedures, by procedures specified in paragraph (D) of this rule and in a license issued under the rule 3701:1-46-40 of the Administrative Code, to provide at least ninety five per cent confidence that the lot tolerance per cent defective of five per cent will not be exceeded.
- (D) Each person licensed under rule 3701:1-46-40 of the Administrative Code shall subject each inspection lot to:
 - (1) Tests that adequately take into account the individual, aggregate, and cumulative effects of environmental conditions expected in service that could possibly affect the effective containment of strontium-90, such as absolute pressure and water immersion.
 - (2) Inspection for evidence of physical damage, containment failure, or for loss of strontium-90 after each stage of testing, using methods of inspection adequate to determine compliance with the following criteria for defective: a leak resulting in a loss of 0.1 per cent or more of the original amount of strontium-90 from the device and any other criteria specified in the license issued under rule 3701:1-46-40 of the Administrative Code.
- (E) No person licensed under rule 3701:1-46-40 of the Administrative Code shall transfer to persons generally licensed under rule 3701:1-46-10 of the Administrative Code, or under an equivalent general license of an agreement state or the United States nuclear regulatory commission:
 - (1) Any ice detection device containing strontium-90 tested and found defective under the criteria specified in a license issued under rule 3701:1-46-40 of the Administrative Code, unless the defective ice detection device has been repaired or reworked, retested, and determined by an independent inspector to meet the

applicable acceptance criteria; or

- (2) Any ice detection device containing strontium-90 contained within any lot that has been sampled and rejected as a result of the procedures in paragraph (C)(2) of this rule, unless:
 - (a) A procedure for defining sub-lot size, independence, and additional testing procedures is contained in the license issued under rule 3701:1-46-40 of the Administrative Code; and
 - (b) Each individual sub-lot is sampled, tested, and accepted in accordance with paragraphs (C)(2) and (E)(2)(a) of this rule and any other criteria as may be required as a condition of the license issued under rule 3701:1-46-40 of the Administrative Code.

Replaces: 3701:1-46-41

Effective: 11/08/2015

Five Year Review (FYR) Dates: 11/01/2020

CERTIFIED ELECTRONICALLY

Certification

10/29/2015

Date

Promulgated Under: 119.03
Statutory Authority: 3748.01
Rule Amplifies: 3748.01
Prior Effective Dates: 10/20/2002, 1/20/08