

28-35-189a. Advance notification of transport of nuclear waste. (a) Prior to the transport of any nuclear waste outside the confines of the licensee's facility or any other place of use or storage, or prior to the delivery of any nuclear waste to a carrier for transport, each licensee shall provide advance notification of such transport to the governor, or the governor's designee, of each state through which the waste will be transported. For the purpose of this regulation, "nuclear waste" means any large quantity of source, by-product, or special nuclear material required to be in type B packaging while transported to, through, or across state boundaries to a disposal site, or to a collection point for transport to a disposal site.

(b) Each advance notification required by this regulation shall contain the following information:

(1) the name, address, and telephone number of the shipper, carrier and receiver of the shipment;

(2) a description of the nuclear waste contained in the shipment as required by regulation of the U.S. department of transportation 49 C.F.R. 172.202 and 172.203(d), as in effect July 1, 1984;

(3) the point of origin of the shipment and the seven day period during which departure of the shipment is estimated to occur;

(4) the seven day period during which arrival of the shipment at state boundaries is estimated to occur;

(5) the destination of the shipment, and the seven day period during which arrival of the shipment is estimated to occur; and

(6) a point of contact with a telephone number for current shipment information.

(c) The notification required by this regulation shall be made in writing to the office of each appropriate governor or the governor's designee and to the Kansas department of health and environment. A notification delivered by mail shall be postmarked at least seven days before the beginning of the seven day period during which departure of the shipment is estimated to occur. A notification delivered by messenger shall reach the office of each governor, or the governor's designee, at least four days before the beginning of the seven day period during which departure of the shipment is estimated to occur. A copy of the notification shall be retained by the licensee for one year.

(d) The licensee shall notify each appropriate governor, or the governor's designee, and the Kansas department of health and environment of any changes to the schedule information provided pursuant to this regulation. Such notification shall be by telephone to a responsible individual in the office of each appropriate governor, or to the governor's designee. The licensee shall maintain for one year a record of the name of the individual ~~contracted~~ contacted.

(e) Each licensee who cancels a nuclear waste shipment for which advance notification has been sent shall send a cancellation notice to the governor, or the governor's designee, of each appropriate state and to the Kansas department of health and environment. A copy of the notice shall be retained by the licensee for one year.

(f) ~~A list of the mailing addresses of each governor and each designee is available upon request from the director, office of state programs, U.S. nuclear regulatory commission, Washington, D.C. 20555. A list of the names and mailing addresses of the~~

governors' designees and tribal officials' designees of participating tribes is available on request from the director, division of materials safety, security, state, and tribal programs, office of nuclear material safety and safeguards, U.S. nuclear regulatory commission, Washington, D.C. 20555-0001. (Authorized by and implementing K.S.A. 1984 Supp. 48-1607; effective, T-86-37, Dec. 11, 1985; effective May 1, 1986; amended P-_____)

28-35-221b. Appendix A; determination of A₁, A₂, and B quantities. The provisions of 10 C.F.R. part 71, appendix A, as in effect on ~~July 13, 2015~~, January 1, 2021, are hereby adopted by reference, with the changes specified in this regulation.

(a) Wherever the term "commission" appears within 10 C.F.R. part 71, appendix A, that term shall be replaced with the term "department."

(b) In 10 C.F.R. part 71, appendix A, paragraph II(c) shall be replaced with the following text: "The licensee shall submit requests for prior approval, described under paragraphs II(a) and II(b) of this appendix, to the department." (Authorized by and implementing K.S.A. 48-1607; effective Sept. 20, 1993; amended Oct. 17, 1994; amended May 4, 2018; amended P-_____)

28-35-264. General requirements. The provisions of 10 C.F.R. part 35, as in effect on September 9, 2015, January 1, 2022, are hereby adopted by reference, with the changes specified in this regulation.

(a) For the purposes of part 6, "byproduct material" shall mean all radioactive material regulated by the department.

(b) All reports required by this regulation shall be submitted to the department.

(c) The following sections shall be deleted:

(1) 35.1, "purpose and scope";

(2) 35.2, "definitions," except that the definitions of the following terms shall be retained:

(A) "Authorized medical physicist";

(B) "authorized nuclear pharmacist";

(C) "authorized user";

(D) "medical event";

(E) "prescribed dose"; and

(F) "radiation safety officer";

(3) 35.8, "information collection requirements: OMB approval";

(4) 35.18, "license issuance";

(5) 35.19, "specific exemptions";

(6) 35.26(a)(1), "radiation protection program changes";

(7) 35.4001, "violations"; and

(8) 35.4002, "criminal penalties."

(d) Wherever the following C.F.R. references occur within 10 C.F.R. part 35, these references shall be replaced with the specified references to regulations and parts in this article:

(1) "10 CFR 19.12" shall be replaced with "K.A.R. 28-35-333, 'instructions to workers.' "

(2) "10 CFR part 20" shall be replaced with "part 4, 'standards for protection against radiation.' "

(3) "10 CFR 20.1101" shall be replaced with "K.A.R. 28-35-211d, 'radiation protection programs.' "

(4) "10 CFR 20.1301(a)(1) and 20.1301(c)" shall be replaced with "K.A.R. 28-35-214a."

(5) "10 CFR 20.1501" shall be replaced with "K.A.R. 28-35-217b, 'general monitoring requirements.' "

(6) "10 CFR part 30" shall be replaced with "part 3, 'licensing of sources of radiation.' "

(7) "10 CFR 32.72" shall be replaced with "K.A.R. 28-35-181m, 'specific licenses to manufacture and manufacture, prepare, or distribute radiopharmaceuticals containing radioactive material for medical use under group licenses,' and K.A.R. 28-35-181n, 'specific licenses to manufacture and distribute generators or reagent kits for preparation of radiopharmaceuticals containing radioactive material.' "

(8) "10 CFR 32.74" shall be replaced with "K.A.R. 28-35-181o, 'specific licenses to manufacture and distribute sources and devices for use as a calibration, transmission, or reference source or for certain medical uses.' "

(9) "10 CFR 33.13" shall be replaced with "K.A.R. 28-35-182b, 'qualifications for a type A specific license of broad scope.' "

(e) Wherever the following terms occur within 10 C.F.R. part 35, these terms shall be replaced with "department":

- (1) "Commission";
- (2) "NRC operation center"; and
- (3) "NRC regional office."

(f) The following changes shall be made to the sections specified:

- (1) 35.6(b)(1) and (c)(1) shall be replaced with the following text:

"Obtain review and approval of the research as specified in 45 CFR C.F.R. 46.111, 'criteria for IRB approval of research'; and".

- (2) 35.6(b)(2) and (c)(2) shall be replaced with the following text:

"Obtain informed consent from the human research subject as specified in 45 CFR C.F.R. 46.116, 'general requirements for informed consent.' "

- (3) 35.10, subsection (a) 35.10(a) shall be deleted.

(4) In 35.10(d), the date "October 24, 2002" shall be replaced with "the effective date of these regulations."

(5) 35.12(b)(1) shall be replaced with the following text: "submitting a form specified by the department that includes the facility diagram, equipment, and training and experience qualifications of the radiation safety officer, authorized users, authorized physicists, and authorized pharmacists."

(6) 35.12(c)(1)(i) shall be replaced with the following text: "a form specified by the department that includes the facility diagram, equipment, and training and experience

qualifications of the radiation safety officer, authorized users, authorized physicists, and authorized pharmacists."

(7) In 35.57(a)(1) and (b)(1), the date ~~"October 24, 2002"~~ "January 14, 2019" shall be replaced with "the effective date of these regulations."

~~(8) In 35.57(a)(2) and (b)(2), the date "April 29, 2005" shall be replaced with "the effective date of these regulations."~~

~~(9)~~ (8) In 35.432(a), the date "October 24, 2002" shall be replaced with "the effective date of these regulations."

~~(10)~~ (9) In 35.3045, the footnote shall be deleted, and in subsection (a) (1) the words "or any radiation-producing device" shall be added before the words "results in."

~~(11)~~ (10) 35.3047(d) shall be replaced with the following text: "The licensee shall submit a written report to the department within 15 days after discovery of a dose to the embryo or fetus, or nursing child that requires a report in paragraphs (a) or (b) in this section."

~~(12)~~ (11) In 35.3067, the phrase "with the department" shall be inserted after the word "report" in the first sentence, and the second sentence shall be deleted. (Authorized by and implementing K.S.A. 48-1607; effective Dec. 30, 2005; amended March 18, 2011; amended May 4, 2018; amended P-_____))

28-35-284. Personnel monitoring. (a) The licensee or registrant shall not permit any individual to act as a radiographer or a radiographer's assistant unless, at all times during radiographic operations, each individual wears on the trunk of the body a personnel-monitoring device (PMD) as specified in K.A.R. 28-35-217a, a direct reading dosimeter, and an alarming ratemeter. At permanent radiographic installations where other appropriate alarming or warning devices are in routine use and during radiographic operations using radiation machines, the use of an alarming ratemeter shall not be required.

(1) Each pocket ion-chamber dosimeter shall have a range from zero to 200 mrem and shall be recharged at the start of each work shift. Electronic personal dosimeters may be used in place of only pocket ion-chamber dosimeters.

(2) Each PMD shall be assigned to and worn by only one individual.

(3) Each PMD **that requires replacement** shall be **exchanged replaced** at least monthly.

(4) After replacement, each PMD shall be returned to the supplier for processing within 14 calendar days after the end of the monitoring period, or as soon as practicable. In circumstances that make it impossible to return each PMD within 14 calendar days, these circumstances shall be documented **in writing** and available for review by the department.

(b) Direct reading dosimeters, including pocket ion-chamber dosimeters and electronic personal dosimeters, shall be read and the exposures shall be recorded at the beginning and end of each work shift, and records shall be maintained for **two three** years.

(c) All pocket ion-chamber dosimeters and electronic personal dosimeters shall be checked at least each 12 months for the proper response to and the accurate measurement of radiation, and records shall be maintained for **two three** years. An acceptable reading on each dosimeter shall be within plus or minus 30 percent of the true radiation exposure.

(d) If an individual's pocket ion-chamber dosimeter is found to be off-scale or if an electronic personal dosimeter reads greater than 200 mrem, and the possibility of radiation exposure cannot be ruled out as the cause, the individual's PMD that requires processing shall be sent for processing and evaluation within 24 hours. For personnel dosimeters that do not require processing, evaluation of the dosimeter shall be started within 24 hours. In addition, the individual shall not resume any work associated with the use of sources of radiation until a determination of the amount of individual's radiation exposure is made. This determination shall be made by the radiation safety officer or the radiation safety officer's designee. The results of this determination shall be included in the records.

(e) If an individual's PMD is lost or damaged, the individual shall cease work immediately until a replacement PMD is provided and the exposure is calculated for the time period from issuance to loss or damage of the PMD. The results of the calculated exposure and the time period during which the PMD was lost or damaged shall be included in the records.

(f) Each licensee or registrant shall ensure that each alarming ratemeter meets the following requirements:

(1) Is checked to ensure that the alarm functions properly before using at the start of each shift;

(2) is set to give an alarm signal at a preset dose rate of 500 mrem per hour, with an accuracy of plus or minus 20 percent of the true radiation dose rate;

(3) requires a special means to change the preset alarm function; and

(4) is calibrated at least each 12 months for the accurate measurement of radiation.

(g) Records of personnel-monitoring procedures. Each licensee or registrant shall maintain the following exposure records:

(1) Direct reading dosimeter readings and yearly operability checks for ~~two~~ three years after the record is made;

(2) records of alarm ratemeter calibrations for ~~two~~ three years after the record is made;

(3) PMD results ~~received from the accredited NVLAP processor~~ until the department terminates the license; and

(4) records of exposure estimates as a result of any direct reading dosimeter that reads off-scale or any lost or damaged personnel-monitoring equipment, until the department terminates the license. (Authorized by and implementing K.S.A. 48-1607; effective Jan. 1, 1970; amended Jan. 1, 1972; amended, T-85-43, Dec. 19, 1984; amended May 1, 1985; amended Sept. 20, 1993; amended Dec. 30, 2005; amended P-_____))

28-35-354. Personnel monitoring. (a) The licensee or registrant shall not permit any individual to act as a logging supervisor or to assist in the handling of sources of radiation unless each individual wears a personnel-monitoring device **(PMD)** as specified in K.A.R. 28-35-217a. Each PMD shall be assigned to and worn by only one individual. Film badges shall be replaced at least monthly, and other personnel-monitoring devices **that require replacement** shall be replaced at least quarterly. **After replacement, each film badge or PMD shall be promptly processed. All personnel dosimeters shall be evaluated at least quarterly or promptly after replacement, whichever is more frequent.**

(b) Each licensee shall provide bioassay services to individuals using licensed materials in subsurface tracer studies if required by the license.

(c) Personnel monitoring and bioassay results records shall be maintained for inspection until the secretary authorizes the disposition of these records. (Authorized by and implementing K.S.A. 48-1607; effective Sept. 20, 1993; amended Dec. 30, 2005; amended P-_____)

28-35-505. Quality assurance requirements. The following provisions of 10 C.F.R. part 71 subpart H, ~~as in effect on~~ dated January 1, ~~2019~~ 2020, are hereby adopted by reference, with the changes specified in this regulation.

(a) The following sections shall be deleted:

(1) 71.101(c)(2), (d), and (e);

(2) 71.107;

(3) 71.109;

(4) 71.111;

(5) 71.113;

(6) 71.115;

(7) 71.117;

(8) 71.119;

(9) 71.121;

(10) 71.123;

(11) 71.125;

(b) The changes specified in this subsection shall be made wherever the following text occurs within the portions of 10 C.F.R. part 71 adopted in this regulation:

(1) “ATTN: Document Control Desk, Director, Division of Fuel Management, Office of Nuclear Material Safety and Safeguards” shall be replaced with “the department”;

(2) “NRC Form 3” shall be replaced with “department form RH-3”;

(3) “subpart H of this part” or “§§ 71.101 through 71.137” shall be replaced with “K.A.R. 28-35-505”;

(4) “This chapter” shall be replaced with “10 C.F.R.”;

(c) Wherever the following terms occur within the portions of 10 C.F.R. part 71 adopted in this regulation, these terms shall be replaced with “department”:

- (1) “Administrator of the appropriate Regional Office”;
- (2) “commission”;
- (3) “NRC”;
- (4) “Nuclear Regulatory Commission”; and
- (5) “United States Nuclear Regulatory Commission.”

(d) The following changes shall be made to the sections specified:

(1) In 10 C.F.R. 71.101(a), the sentence “Each certificate holder and applicant for a package approval is responsible for satisfying the quality assurance requirements that apply to design, fabrication, testing, and modification of packaging subject to this subpart.”

(2) In 10 C.F.R. 71.101(f), the sentence “The licensee, certificate holder, and applicant for a CoC shall identify the program by date of submittal to the Commission, Docket Number, and date of Commission approval” and the phrase “in accordance with §71.1” shall be deleted.

(3) 10 C.F.R. 71.101(g) shall be replaced by the following text: “Each program for transport container inspection and maintenance that is limited to radiographic exposure devices, source changers, or any package transporting these devices or changers and that meets the requirements of K.A.R. 28-35-282a or equivalent NRC or agreement state requirements shall be deemed to meet the requirement specified in K.A.R. 28-35-500(b).”

(e) The terms “certificate of compliance, certificate holder or applicant” apply to the NRC as they are the sole authority for issuing a package certificate of compliance.

(f) Each submittal required by this regulation shall be submitted to the department, with the exception of a certificate of compliance. (Authorized by and implementing K.S.A. 48-1607; effective Dec. 30, 2005; amended P-_____)

28-35-505. Quality assurance requirements. The provisions of 10 C.F.R. part 71, subpart H, dated January 1, ~~2019~~ 2020, are hereby adopted by reference, with the changes specified in this regulation.

(a) The following sections shall be deleted:

(1) 71.101(c)(2), (d), and (e);

(2) 71.107;

(3) 71.109;

(4) 71.111;

(5) 71.113;

(6) 71.115;

(7) 71.117;

(8) 71.119;

(9) 71.121;

(10) 71.123; and

(11) 71.125.

(b) The changes specified in this subsection shall be made wherever the following text occurs within the portions of 10 C.F.R. part 71 adopted in this regulation:

(1) "ATTN: Document Control Desk, Director, Division of Fuel Management, Office of Nuclear Material Safety and Safeguards" shall be replaced with "the department."

(2) "NRC Form 3" shall be replaced with "department form RH-3."

(3) "Subpart H of this part" and "§§71.010 through 71.137" shall be replaced with "K.A.R. 28-35-505."

(4) "This chapter" shall be replaced with "10 C.F.R."

(c) Wherever the following terms occur within the portions of 10 C.F.R. part 71 adopted in this regulation, these terms shall be replaced with "department":

(1) "Administrator of the appropriate Regional Office";

(2) "commission";

(3) "NRC";

(4) "Nuclear Regulatory Commission"; and

(5) "United States Nuclear Regulatory Commission."

(d) The following changes shall be made to the sections specified:

(1) In 10 C.F.R. 71.101(a), the following sentence shall be deleted: "Each certificate holder and applicant for a package approval is responsible for satisfying the quality assurance requirements that apply to design, fabrication, testing, and modification of packaging subject to this subpart."

(2) In 10 C.F.R. 71.101(f), the sentence "The licensee, certificate holder, and applicant for a CoC shall identify the program by date of submittal to the Commission, Docket Number, and date of Commission approval" and the phrase "in accordance with §71.1" shall be deleted.

(3) 10 C.F.R. 71.101(g) shall be replaced by the following text:

"Each program for transport container inspection and maintenance that is limited to radiographic exposure devices, source changers, or any package transporting these devices or changers and that meets the requirements of K.A.R. 28-35-282a or equivalent NRC or agreement state requirements shall be deemed to meet the requirement specified in K.A.R. 28-35-500(b)."

(e) The terms "certificate of compliance," "certificate holder," and "applicant" shall apply to the NRC as the sole authority for issuing a package certificate of compliance.

(f) Each submittal required by this regulation shall be submitted to the department, with the exception of a certificate of compliance. (Authorized by and implementing K.S.A. 48-1607; effective Dec. 30, 2005; amended April 1, 2022.)

28-35-700. General requirements. The provisions of 10 C.F.R. part 37, ~~dated January 1, 2019~~ as in effect on January 1, 2022, are hereby adopted by reference, with the changes specified in this regulation.

(a) The following sections or portions of sections in 10 C.F.R. part 37 shall be deleted:

- (1) 37.1;
- (2) 37.3;
- (3) 37.7;
- (4) 37.9;
- (5) 37.11(a) and (b);
- (6) 37.13;
- (7) in 37.8l(g), the third sentence;
- (8) 37.105;
- (9) 37.107; and
- (10) 37.109.

(b) In 10 C.F.R. 37.5, the following terms and the definition of each of these terms shall be deleted:

- (1) "Act";
- (2) "agreement state";
- (3) "becquerel";
- (4) "byproduct material";
- (5) "commission";
- (6) "curie";
- (7) "government agency";

(8) "license";

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(9) "lost or missing licensed material";

(10) "person";

(11) "state"; and

(12) "United States."

(c) Wherever the following terms and phrases occur within the portions of 10 C.F.R. part 37 adopted in this regulation, these terms and phrases shall be replaced with "department":

(1) "Appropriate NRC regional office listed in §30.6(a)(2) of this chapter";

(2) "commission," except secs. 37.5, 37.27(a) and (c), 37.29(a), and 37.71;

(3) "NRC," except secs. 37.25(c), 37.27(c), 37.29(a), and 37.71;

(4) "NRC regional office specified in §30.6 of this chapter";

(5) "NRC's Operations Center"; and

(6) "NRC's Operations Center (301-816-5100)."

(d) The following changes shall be made wherever the following text occurs within the portions of 10 C.F.R. part 37 adopted in this regulation:

(1) "Part 73 of this chapter" shall be replaced with "10 C.F.R. Part 73."

(2) "71.97(b) of this chapter" and "71.97 of this chapter" shall be replaced with "K.A.R 28-35-504(b)."

(3) "Governor's designee" shall be replaced with "division of emergency management of the office of the adjutant general." (Authorized by and implementing K.S.A. 48-1607; effective May 4, 2018; amended P-_____.)