

March 10, 2017

800 NE Oregon Street, Suite 640 Portland, OR 97232 Voice 971-673-0490 FAX 971-673-0553

Pamela J. Henderson, Deputy Director Division of Material Safety, State, Tribal, and Rulemaking Programs Office of Nuclear Material Safety And Safeguards U.S. Nuclear Regulatory Commission T8-E18 Washington, D.C. 20555-0001

Dear Ms. Henderson:

Enclosed is a copy of Oregon Administrative Rules relating to chapter 333, division 125, Physical Protection of Byproduct Materials and division 102, Distribution of Source Materials to Exempt Persons as published with the Oregon Secretary of State.

http://arcweb.sos.state.or.us/pages/rules/oars 300/oar 333/333 tofc.html

Six comments received from the Nuclear Regulatory Commission's letter dated November 18, 2016 have been addressed with revised final rulemaking effective February 1, 2017.

Rats ID <u>Title</u> <u>State Section</u>

2013-1 Physical Protection of Byproduct Material OARs 333-125-0040 and 333-125-0120

2013-2 Distribution of Source Material to Exempt Persons OARs 333-102-0005 and 333-102-0101

We believe that the adoption of these amended rules satisfies the compatibility and health and safety categories established in the Office of Nuclear Material Safety and Safeguards procedure SA-200.

If you have any questions, please feel free to contact me at (971) 673-0500 or email at Todd.s.carpenter@state.or.us

Sincerely,

Todd S. Carpenter, Program Manager

Oregon Health Authority
Radiation Protection Services

Enclosed: Oregon Administrative Rules Revised Final

RATS 2013-1 37.23(e)

333-125-0040

#### **Background Investigations and Access Control Program: Determination Basis**

- (1) The reviewing official shall determine whether to permit, deny, unfavorably terminate, maintain, or administratively withdraw an individual's unescorted access authorization based on an evaluation of all of the information collected to meet the requirements within this division.
- (2) The reviewing official may not permit any individual to have unescorted access until the reviewing official has evaluated all of the information collected to meet the requirements of this division and determined that the individual is trustworthy and reliable. The reviewing official may deny unescorted access to any individual based on information obtained at any time during the background investigation.
- (3) The licensee shall document the basis for concluding whether or not there is reasonable assurance that an individual is trustworthy and reliable.
- (4) The reviewing official may terminate or administratively withdraw an individual's unescorted access authorization based on information obtained after the background investigation has been completed and the individual had been granted unescorted access authorization.
- (5) Licensees shall maintain a list of persons currently approved for unescorted access authorization. When a licensee determines that a person no longer requires unescorted access or has become ineligible to meet access authorization requirements, the licensee shall remove the person from the approved list as soon as possible, but no later than seven working days, and take prompt measures to ensure that the individual is unable to have unescorted access to the material.

RATS 2013-1 37.43(d)(1)

333-125-0120

# Physical Protection Requirements During Use: Security Program, Protection of Information

- (1) Licensees authorized to possess category 1 or category 2 quantities of radioactive material shall secure from public disclosure and limit access to their security and implementation plans, and the list of individuals that have been approved for unescorted access.
- (2) Efforts to limit access shall include the development, implementation, and maintenance of written policies and procedures for controlling access to, and for proper handling and protection against unauthorized disclosure of the security and implementation plans.

- (3) Before granting an individual access to the security plan or implementation plans, the licensee shall:
- (a) Evaluate an individual's need to know of the security or implementation plans; and
- (b) If the individual has not been authorized for unescorted access to category 1 or category 2 quantities of radioactive material, safeguards information, or safeguards information-modified handling, the licensee must complete a background investigation to determine the individual's trustworthiness and reliability. A trustworthiness and reliability determination shall be conducted by the reviewing official and shall include the background investigation elements contained in OAR 333-125-0060(2)(b) through (2)(e)(B).
- (4) Licensees need not subject the following individuals to the background investigation elements for protection of information:
- (a) The categories of individuals listed in OAR 333-125-0085(1)(a) through (m); or
- (b) Security service provider employees, provided written verification that the employee has been determined to be trustworthy and reliable, by the required background investigation in OAR 333-125-0060(2)(b) through (2)(e)(B) has been provided by the security service provider.
- (5) The licensee shall document the basis for concluding that an individual is trustworthy and reliable and allowed access to the security and implementation plans.
- (6) Licensees shall maintain a list of persons currently approved for access to the security and implementation plans. When a licensee determines that a person no longer needs access to the security and implementation plans, or no longer meets the access authorization requirements for access to the information, the licensee shall remove the person from the approved list as soon as possible, but no later than seven working days, and take prompt measures to ensure that the individual is unable to obtain the security plan or implementation procedures.
- (7) When not in use, the licensee shall store its security and implementation plans in a manner to prevent unauthorized access. Information stored in non-removable electronic form must be password protected.
- (8) The licensee shall retain as a record for three years after the document is no longer needed:
- (a) A copy of the information protection procedures; and
- (b) The list of individuals approved for access to the security plan or implementing procedures.

Stat. Auth.: ORS 453.635

Stats. Implemented: ORS 453.635

Hist.: PH 19-2015, f. 9-30-15, cert. ef. 10-1-15; PH 25-2016, f. 8-26-16, cert. ef. 9-1-16; PH 4-

2017, f. 1-26-17, cert. ef. 2-1-17

RATS 2013-2 40.13(e)(7)

#### **Exemptions**

333-102-0005

#### **Exemptions: Unimportant Quantities of Source Material**

- (1) Any person is exempt from this division to the extent that such person receives, possesses, uses, owns or transfers source material in any chemical mixture, compound, solution or alloy in which the source material is by weight less than 1/20 of one percent (0.05 percent) of the mixture, compound, solution or alloy.
- (2) Any person is exempt from this division to the extent that such person receives, possesses, uses or transfers unrefined and unprocessed ore containing source material; provided that, except as authorized in a specific license, such person must not refine or process such ore.
- (3) Any person is exempt from this division and divisions 111 and 120 to the extent that such person receives, possesses, uses or transfers:
- (a) Any quantities of thorium contained in:
- (A) Incandescent gas mantles;
- (B) Vacuum tubes;
- (C) Welding rods;
- (D) Electric lamps for illuminating purposes provided that each lamp does not contain more than 50 milligrams of thorium;
- (E) Germicidal lamps, sun lamps and lamps for outdoor or industrial lighting provided that each lamp does not contain more than two grams of thorium;
- (F) Rare earth metals and compounds, mixtures and products containing not more than 0.25 percent by weight thorium, uranium or any combination of these; or
- (G) Personnel neutron dosimeters, provided that each dosimeter does not contain more than 50 milligrams of thorium.
- (b) Source material contained in the following products:
- (A) Glazed ceramic tableware manufactured before August 27, 2013, provided that the glaze contains not more than 20 percent by weight source material;
- (B) Piezoelectric ceramic containing not more than two percent by weight source material;

- (C) Glassware containing more than two percent by weight source material or, for glassware manufactured before August 27, 2013, not more than ten percent by weight source material; but not including commercially manufactured glass brick, pane glass, ceramic tile or other glass or ceramic used in construction; or
- (D) Glass enamel or glass enamel frit containing not more than ten percent by weight source material imported or ordered for importation into the United States, or initially distributed by manufacturers in the United States, before July 25, 1983.
- (c) Photographic film, negatives and prints containing uranium or thorium;
- (d) Any finished product or part fabricated of, or containing tungsten-thorium or magnesium-thorium alloys, provided that the thorium content of the alloy does not exceed four percent by weight and that this exemption must not be deemed to authorize the chemical, physical or metallurgical treatment or processing of any such product or part;
- (e) Uranium contained in counterweights installed in aircraft, rockets, projectiles and missiles or stored or handled in connection with installation or removal of such counterweights, provided that:
- (A) Each counterweight has been impressed with the following legend clearly legible through any plating or other covering: "DEPLETED URANIUM";
- **NOTE:** The requirements specified in paragraphs (3)(e)(A) and (3)(e)(B) of this rule need not be met by counterweights manufactured prior to December 31, 1969 provided, that such counterweights were manufactured under a specific license issued by the Atomic Energy Commission and are impressed with the legend required by paragraph (3)(e)(B) of this rule in effect on June 30, 1969.
- (B) Each counterweight is durably and legibly labeled or marked with the identification of the manufacturer and the statement: "UNAUTHORIZED ALTERATIONS PROHIBITED"; and
- (C) This exemption must not be deemed to authorize the chemical, physical or metallurgical treatment or processing of any such counterweights other than repair or restoration of any plating or other covering.
- (f) Natural or depleted uranium metal used as shielding constituting part of any shipping container, provided that:
- (A) The shipping container is conspicuously and legibly impressed with the legend "CAUTION RADIOACTIVE SHIELDING URANIUM"; and
- (B) The uranium metal is encased in mild steel or equally fire resistant metal of minimum wall thickness of 1/8 inch (3.2 mm).

- (g) Thorium or uranium contained in or on finished optical lenses and mirrors, provided that each lens does not contain more than 10 percent by weight of thorium or uranium or, for lenses manufactured before August 27, 2013, 30 percent by weight of thorium; and that this exemption must not be deemed to authorize either:
- (A) The shaping, grinding or polishing of such lens or mirrors or manufacturing processes other than the assembly of such lens or mirror into optical systems and devices without any alteration of the lens or mirror; or
- (B) The receipt, possession, use or transfer of uranium or thorium contained in contact lenses, or in spectacles, or in eyepieces in binoculars or other optical instruments.
- (h) Thorium contained in any finished aircraft engine part containing nickel-thoria alloy, provided that:
- (A) The thorium is dispersed in the nickel-thoria alloy in the form of finely divided thoria (thorium dioxide); and
- (B) The thorium content in the nickel-thoria alloy does not exceed four percent by weight.
- (4) The exemptions in section (3) of this rule do not authorize the manufacture of any of the products described.
- (5) No person may initially transfer for sale or distribution a product containing source material to persons exempt under this rule, U.S. Nuclear Regulatory Commission or equivalent regulations of an Agreement State, unless authorized by a license issued under OAR 333-102-0300 and 333-102-0305 to initially transfer such products for sale or distribution.
- (a) Persons initially distributing source material in products covered by the exemptions in this rule before August 27, 2013, without specific authorization may continue such distribution for one year beyond this date. Initial distribution may also be continued until the Authority takes final action on a pending application for license or license amendment to specifically authorize distribution submitted no later than one year beyond this date.
- (b) Persons authorized to manufacture, process, or produce these materials or products containing source material by an Agreement State, and persons who import finished products or parts, for sale or distribution must be authorized by a license issued under OAR 333-102-0300 and 333-102-0305 for distribution only and are exempt from the requirements of divisions 111 and 120 of this chapter, and OAR 333-102-0200(2) and (3).

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 453.635, 453.665

Stats. Implemented: ORS 453.605 - 453.807

Hist.: HD 4-1985, f. & ef. 3-20-85; HD 10-1987, f. & ef. 7-28-87; HD 1-1991, f. & cert. ef. 1-8-91; HD 1-1995, f. & cert. ef. 4-26-95; PH 3-2003, f. & cert. ef. 3-27-03; PH 31-2004(Temp), f.

& cert. ef. 10-8-04 thru 4-5-05; PH 36-2004, f. & cert. ef. 12-1-04; PH 12-2006, f. & cert. ef. 6-16-06; PH 4-2007, f. & cert. ef. 3-1-07; PH 19-2015, f. 9-30-15, cert. ef. 10-1-15; PH 25-2016, f. 8-26-16, cert. ef. 9-1-16; PH 4-2017, f. 1-26-17, cert. ef. 2-1-17

RATS 2013-2 40.22(a)(1) and (e) 40.22(b)(3) 40.22(e)

333-102-0101

## General Licenses — Small Quantities of Source Material

- (1) A general license is hereby issued authorizing commercial and industrial firms, research, educational and medical institutions, and state and local government agencies to use and transfer uranium and thorium, in their natural isotopic concentrations and in the form of depleted uranium, for research, development, educational, commercial, or operations purposes in the following forms and quantities:
- (a) No more than 1.5 kg (3.3 lb) of uranium and thorium in dispersible forms such as gaseous, liquid, or powder, at any one time. Any material processed by the general licensee that alters the chemical or physical form of the material containing source material must be accounted for as a dispersible form. A person authorized to possess, use, and transfer source material under this paragraph may not receive more than a total of 7 kg (15.4 lb) of uranium and thorium in any one calendar year. Persons possessing source material in excess of these limits as of August 27, 2013, may continue to possess up to 7 kg (15.4 lb) of uranium and thorium at any one time for one year beyond this date, or until the Authority takes final action on a pending application submitted on or before August 27, 2014, for a specific license for such material; and receive up to 70 kg (154 lb) of uranium or thorium in any one calendar year until December 31, 2014, or until the Authority takes final action on a pending application submitted on or before August 27, 2014, for a specific license for such material; and
- (b) No more than a total of 7 kg (15.4 lb) of uranium and thorium at any one time. A person authorized to possess, use, and transfer source material under this section may not receive more than a total of 70 kg (154 lb) of uranium and thorium in any one calendar year. A person may not alter the chemical or physical form of the source material possessed under this section unless it is accounted for under the limits of subsection (1)(a) of this rule; or
- (c) No more than 7 kg (15.4 lb) of uranium, removed during the treatment of drinking water, at any one time. A person may not remove more than 70 kg (154 lb) of uranium from drinking water during a calendar year under this section; or
- (d) No more than 7 kg (15.4 lb) of uranium and thorium at laboratories for the purpose of determining the concentration of uranium and thorium contained within the material being analyzed at any one time. A person authorized to possess, use, and transfer source material under

this section may not receive more than a total of 70 kg (154 lb) of source material in any one calendar year.

- (2) Any person who receives, possesses, uses, or transfers source material in accordance with the general license in section (1) of this rule:
- (a) Is prohibited from administering source material, or the radiation therefrom, either externally or internally, to human beings except as may be authorized by the Authority in a specific license.
- (b) Shall not abandon such source material. Source material may be disposed of as follows:
- (A) A cumulative total of 0.5 kg (1.1 lb) of source material in a solid, non-dispersible form may be transferred each calendar year, by a person authorized to receive, possess, use, and transfer source material under this general license to persons receiving the material for permanent disposal. The recipient of source material transferred under the provisions of this paragraph is exempt from the requirements to obtain a license under this rule to the extent the source material is permanently disposed. This provision does not apply to any person who is in possession of source material under a specific license issued under this chapter; or
- (B) In accordance with OAR 333-120-0500, Waste Disposal General Requirements.
- (c) Is subject to the provisions in OAR 333-100-0005, 333-100-0015, 333-100-0035, 333-100-0045, 333-100-0055, 333-100-0060, 333-100-0065, 333-100-0080, 333-102-0001, 333-102-0075, 333-102-0203, 333-102-0305, 333-102-0330, 333-102-0335, 333-102-0350, and 333-102-0355.
- (d) Shall not export such source materials except in accordance with 10 CFR Part 110.
- (3) Any person who receives, possesses, uses, or transfers source material in accordance with section (1) of this rule shall conduct activities so as to minimize contamination of the facility and the environment. When activities involving such source material are permanently ceased at any site, if evidence of significant contamination is identified, the general licensee shall notify the Authority about such contamination and may consult with the Authority as to the appropriateness of sampling and restoration activities to ensure that any contamination or residual source material remaining at the site where source material was used under this general license is not likely to result in exposures that exceed the limits in 10 CFR Parts 20.1402.
- (4) Any person who receives, possesses, uses, or transfers source material in accordance with the general license granted in section (1) of this rule is exempt from the provisions of division 111 and 120 of this chapter and 10 CFR Part 21 to the extent that such receipt, possession, use, and transfer are within the terms of this general license, except that such person shall comply with the provisions of CFR 10 Parts 20.1402 and 20.2001 to the extent necessary to meet the provisions of subsection (2)(b) and section (3) of this rule. However, this exemption does not apply to any person who also holds a specific license issued under this division.

- (5) No person may initially transfer or distribute source material to persons generally licensed under subsection (1)(a) or section (2) of this rule, or equivalent regulations of the NRC or an Agreement State, unless authorized by a specific license issued in accordance with OAR 333-102-0102 or equivalent provisions of the NRC or an Agreement State. This prohibition does not apply to analytical laboratories returning processed samples to the client who initially provided the sample. Initial distribution of source material to persons generally licensed by section (1) of this rule before August 27, 2013 without specific authorization may continue for one year beyond this date. Distribution may also be continued until the Authority takes final action on a pending application for license or license amendment to specifically authorize distribution submitted on or before August 27, 2014.
- (6) A general license is hereby granted authorizing the receipt of title to source material without regard to quantity. This general license does not authorize any person to receive, possess, use or transfer source material.
- (7) Persons who receive, acquire, possess or use source material pursuant to the general license granted by section (1) of this rule must develop and maintain procedures to establish physical control over the source material and prevent transfer of such source material to persons not authorized to receive the source material.
- (8) A person who receives, acquires, possesses or uses source material pursuant to the general license granted by section (1) of this rule:
- (a) Must not introduce such source material, in any form, into a chemical, physical, or metallurgical treatment or process;
- (b) Must not abandon such source material; and
- (c) Must transfer or dispose of such source material only by transfer in accordance with the provisions of OAR 333-102-0330 or 333-120-0500.

Stat. Auth.: ORS 453.635, 453.665

Stats. Implemented: ORS 453.605 - 453.807

Hist.: HD 4-1985, f. & ef. 3-20-85; HD 10-1987, f. & ef. 7-28-87; HD 1-1991, f. & cert. ef. 1-8-91; HD 15-1994, f. & cert. ef. 5-6-94; PH 3-2003, f. & cert. ef. 3-27-03; PH 31-2004(Temp), f. & cert. ef. 10-8-04 thru 4-5-05; PH 36-2004, f. & cert. ef. 12-1-04; PH 12-2006, f. & cert. ef. 6-16-06; PH 4-2007, f. & cert. ef. 3-1-07; PH 19-2015, f. 9-30-15, cert. ef. 10-1-15; PH 4-2017, f. 1-26-17, cert. ef. 2-1-17