Methodology to Indicate Changes to DPH-16-001 – Source Material Distribution and General License Revisions

The proposed changes for comment that are the subject of this notice (15-day public comment period) are indicated as follows:

- Deletions from the proposed text presented during this 15-day public comment period are indicated by double strike-through (strike-through)
- Additions to the proposed text presented during this 15-day public comment period are indicated by double underline (<u>underline</u>).

Regulation text not subject to this 15-day public comment period are presented for the reader's convenience and are indicated as follows:

- Deleted text as initially proposed is indicated by single strike-through (strike-through).
- Additions to the regulation text as initially proposed is indicated by single underline (<u>underline</u>).

TITLE 17, California Code of Regulations Division 1, Chapter 5, Subchapter 4.0. Group 2. Licensing of Radioactive Materials Article 3. Exemptions

Amend Section 30181 to read as follows:

§ 30181. Products Containing and Quantities of Source Material.

- (a) No change to text.
- (b) A person is exempt from the requirements for a license specified in section 30190 and sections 30191 through 30237, and from Group 3 of this subchapter, 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 shall not refine or process such ore. "Unrefined and unprocessed ore" means ore in its natural form prior to any processing, such as grinding, roasting or beneficiating, or refining. Processing does not include sieving or encapsulation of ore or preparation of samples for laboratory analysis.
- (c) <u>Subject to subsection (g), aA</u> person is exempt from the requirements for a license specified in section 30190 and sections 30191 through 30237, and from Group 3 of this subchapter, to the extent that such person receives, possesses, uses, or transfers:
 - (1) The following items or materials containing thorium or uranium:
- (A) Incandescent gas mantles, vacuum tubes, welding rods, or electric lamps for illuminating purposes, which do not contain more than 50 milligrams of thorium per item;
- (B) Germicidal lamps, sunlamps, and lamps for outdoor or industrial lighting, which do not contain more than 2 grams of thorium per item;
- (C) Rare earth metals and compounds, mixtures, and products, which do not contain more than 0.25 percent by weight of thorium, uranium, or any combination of these two radioactive materials; or
- (D) Neutron-detecting dosimeters, which do not contain more than 50 milligrams of thorium per dosimeter.

- (1) 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, sunlamps, and lamps for outdoor or industrial lighting, provided that each lamp does not contain more than two grams of thorium;
- (F) Rare earth metals, compounds, mixtures, or products, provided the metal, compound, mixture or product does not contain more than 0.25 percent by weight of thorium or uranium, any combination of these; or
- (G) Personnel neutron dosimeters, provided that each dosimeter does not contain more than 50 milligrams of thorium.
 - (2) Source material contained in the following products:
- (A) Glazed ceramic tableware <u>manufactured before August 27, 2013</u>, provided that the glaze contains not more than 20 percent by weight source material;
 - (B) No change to text.
- (C) Glassware containing not more than <u>two percent by weight source material</u>, <u>or for glassware manufactured before August 27, 2013</u>, 10 percent by weight source material, but not including commercially manufactured glass brick, pane glass, ceramic tile, or other glass or ceramic used in construction;
 - (D) No change to text.
 - (3) No change to text.
 - (4) No change to text.
- (5) Subject to subsection (d), counterweights which contain uranium and which are designed for installation installed in aircraft, rockets, projectiles, and missiles, or stored or handled in connection with installation or removal of such counterweights, provided that the following requirements are met:
- (A) The counterweights or manufacture in accordance with a specific license issued by the Department;

- (B)(A) Each counterweight manufactured on or after December 31, 1969-has been impressed with the following legend clearly legible through any plating or other covering: "Depleted Uranium";
- (C)(B) Each counterweight manufactured on or after December 31, 1969 is durably and legibly labeled or marked with the identification of the manufacturer, and the statement: "Unauthorized Alterations Prohibited";
- (C) The requirements specified in paragraphs (A) and (B) 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 were impressed with the legend required pursuant to section 13(c)(5)(ii) in title 10, Code of Federal Regulations, Part 40 (10 CFR 40) in effect on June 30, 1969.
 - (6) No change to text.
- (7) Subject to subsection (e), finished optical lenses <u>and mirrors</u> containing thorium <u>or uranium</u>, provided that each lens <u>or mirror</u> does not contain more than <u>10</u> <u>percent by weight thorium or uranium, or for lenses manufactured before August 27, 2013, 30 percent by weight of thorium.</u>
 - (8) No change to text.
 - (d) No change to text.
- (e) The exemption contained in subsection (c)(7) shall not be deemed to authorize either:
- (1) The shaping, grinding or polishing of such lens <u>or mirrors</u> or manufacturing processes, other than the assembly of such lens <u>or mirrors</u> into optical systems and devices without any alteration of the lens<u>or mirrors</u>; or
- (2) The receipt, possession, use, or transfer, of thorium contained in contact lenses, or in spectacles, or in eyepieces in binoculars or other optical instruments.
 - (f) No change to text.
- (g) A person is exempt from the requirements for a license specified in section 30190 and sections 30191 through 30237, and from Group 3 of this subchapter, to the

extent that such person receives, possesses, uses, or transfers detector heads, used in fire detection units, which contain uranium, provided that each detector head contains not more than 0.005 microcurie of uranium. This exemption does not authorize the manufacture of any detector head containing uranium.

- (g) Except as provided in paragraphs (1) and (2), a person may not initially transfer for sale or distribution a product containing source material to persons exempt under subsection (c), or equivalent Nuclear Regulatory Commission (NRC) or Agreement State provisions, unless authorized by a specific license issued by the NRC under 10 CFR 40.52 to initially transfer such products for sale or distribution. Nothing in this subsection may be construed to incorporate by reference 10 CFR 40.52.
- (1) Persons initially distributing source material in products specified in subsection (c), without a specific license issued by the NRC under 10 CFR 40.52 before [effective date of these regulations to be entered by Office of Administrative Law] may continue such distributions for one year beyond this date. These initial distributions may be continued until the NRC takes final action on a pending application, for a specific license or amendment authorizing distribution, submitted no later than one year beyond this date.
- (2) Persons approved by the Department under section 30194 to manufacture, process, or produce, for sale or distribution any product specified in subsection (c) shall also be authorized by a specific license issued by NRC under 10 CFR 40.52 to distribute these products.

Note: Authority cited: Sections 114975, 115000 and 131200, Health and Safety Code. Reference: Sections 114965, 114970, 115000, 115060, 115165, 115230, 115235, 131050, 131051 and 131052, Health and Safety Code.

Article 4. Licenses

Amend Section 30191 to read as follows:

§ 30191 General Licenses — Source Material

- (a) A general license is hereby issued to commercial firms, educational institutions, and medical institutions and government agencies, authorizing the possession, use, and transfer of not more than 15 pounds of source material at any one time for research, development, educational, commercial or operational purposes. Persons authorized to possess, use, or transfer source material pursuant to this general license may not receive more than a total of 150 pounds of source material in any one calendar year. With respect to such source material, any person shall be exempt from the provisions of Group 3 of this subchapter, except for sections 30254 and 30293(a), unless such person also possesses source material under a specific license.
- (a) A general license is hereby issued to commercial and industrial firms, to research, educational, and medical institutions, and to government agencies, authorizing the receipt, possession, use, and transfer of uranium and thorium, in their natural isotopic concentrations and in the form of depleted uranium, for research, development, educational, commercial, or operational purposes, in the following forms and quantities:
- (1) No more than 1.5 kilograms (kg) (3.3 lb.) of uranium and thorium in dispersible forms (e.g., gaseous, liquid, powder, etc.) at any one time. Any material processed by a 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 [effective date of these regulations to be entered by Office of Administrative Law] may continue to possess up to 7 kg of uranium and thorium at any one time for one year beyond this date, or until the Department takes final action on a pending application submitted on or before [one year after the effective date of these regulations to be entered by Office of Administrative Law] for a specific license for such material; and may continue to receive up to 70 kg (154 lb) of uranium or thorium in any one calendar year until [last day of the calendar year following the effective date of these regulations to be entered by Office of Administrative Law] or until the Department takes final action on a pending application

submitted on or before [one year after the effective date of these regulations to be entered by Office of Administrative Law] for a specific license for such material; and

- (2) No more than a total of 7 kg of uranium and thorium at any one time. A person authorized to possess, use, and transfer source material under this paragraph may not receive more than a total of 70 kg 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 paragraph unless it is accounted for under the limits of paragraph (1); or
- (3) No more than 7 kg of uranium, removed during the treatment of drinking water, at any one time. A person may not remove more than 70 kg of uranium from drinking water during a calendar year under this paragraph; or
- (4) No more than 7 kg 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 paragraph may not receive more than a total of 70 kg of source material in any one calendar year.
- (b) A general license described in subsection (a) shall not authorize human use, or the use in any device or article which is intended to be placed on or in the human body, or the use of any instrument or apparatus (including component parts and accessories thereto) intended for human use.
- (b) Any person who receives, possesses, uses, or transfers source material in accordance with the general license in subsection (a):
- (1) Is prohibited from administering source material, or the radiation therefrom, either externally or internally, to human beings except as may be authorized by a specific license for medical use under section 30195.
- (2) 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 nondispersible 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 specific license under this Article to the extent that 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 section 30194; or

- (B) In accordance with section 2001 in title 10, Code of Federal Regulations, Part 20 (10 CFR 20), incorporated by reference in section 30253.
- (3) Is subject to the requirements in sections 30105, 30190(d), 30205, 30210, 30254(a), 30275, 30293, and 30295.
- (4) Shall not export such source material except in accordance with an export license issued by Nuclear Regulatory Commission (NRC) pursuant to 10 CFR 110.

 This requirement may not be construed to incorporate by reference 10 CFR 110.
- (c) Any person who receives, possesses, uses, or transfers source material in accordance with the general license in subsection (a) 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 Department about such contamination, shall consult with the Department as to appropriate sampling and restoration activities, and shall-ensure that, with respect to any contamination or residual source material remaining at the site, reasonable effort is made to eliminate the contamination or residual source materialcomply with paragraphs (1), (2) and (3) of subsection (k) of section 30256.
- (d) Any person who receives, possesses, uses, or transfers source material in accordance with the general license in subsection (a) is exempt from the requirements in Articles 1, 2, and 3 of Group 3 of this subchapter, except as specified in subsection (b), to the extent that such receipt, possession, use, transfer, and disposal are within the terms of this general license, except that such person shall comply with the provisions of 10 CFR 20.2001, incorporated by reference in section 30253, and section 30256(k) to the extent necessary to meet the provisions of subsections (b)(2) and (c) of this section.

However, this exemption does not apply to any person who also holds a specific license issued under section 30194.

(e) No person may initially transfer or distribute source material to persons generally licensed under this section or equivalent NRC or Agreement State provisions, unless authorized by a specific license issued in accordance with section 30202. 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 under this section before [effective date of these regulations to be entered by Office of Administrative Law] without specific authorization, may continue for one year beyond this date. Distribution may also be continued until the Department takes final action on a pending application for license or license amendment to specifically authorize distribution, submitted on or before [one year after the effective date of these regulations to be entered by Office of Administrative Law].

Note: Authority cited: Sections 114975, 115000 and 131200, Health and Safety Code. Reference: Sections 114965, 114970, 114985(g), 115000, 115060, 115165, 115230, 115235, 131050, 131051 and 131052, Health and Safety Code.