30252. Scope and Purpose.

17 CA ADC § 30252BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 1. General (Refs & Annos)

17 CCR § 30252

§ 30252. Scope and Purpose.

(a) Group 3 regulations apply to all persons who possess sources of radiation, except as exempt from the licensing and registration requirements or otherwise specifically exempted by the provisions of Group 1 and Group 2 of this subchapter.
(b) The limits in Group 3 do not apply to doses due to background radiation, to exposure of patients to radiation for the purpose of medical diagnosis or therapy, or to voluntary participation in medical research programs.
Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

HISTORY

1. Repealer and new subsection (b) filed 3-3-94 as an emergency; operative 3-3-94 (Register 94, No. 9). A Certificate of Compliance must be transmitted to OAL by 7-1-94 or emergency language will be repealed by operation of law on the following day. For prior history, see Register 87, No. 28.
2. Certificate of Compliance as to 3-3-94 order transmitted to OAL 6-7-94 and filed 7-14-94 (Register 94, No. 28).
3. Editorial correction deleting History 1 and amending and redesignating History 2 (Register 94, No. 28).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30252, 17 CA ADC § 30252

30253. Standards for Protection Against Radiation.

17 CA ADC § 30253BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 1. General (Refs & Annos)

17 CCR § 30253

§ 30253. Standards for Protection Against Radiation.

(a) The regulations governing standards for protection against radiation in title 10, Code of Federal Regulations, part 20, (10 CFR 20) sections 20.1001 through 20.2402 and Appendices A through G, (January 1, 2013) are hereby incorporated by reference with the following exceptions:

(1) Title 10, Code of Federal Regulations, sections 20.1001, 20.1002, 20.1006, 20.1007, 20.1008, 20.1009, 20.1401, 20.1402, 20.1403, 20.1404, 20.1405, 20.1406, 20.1905(g), 20.2106(d), 20.2203(c), 20.2206, 20.2302, 20.2401, and 20.2402, and Appendix D are not incorporated by reference.
(2) Any references to the United States Nuclear Regulatory Commission (NRC) or any component thereof shall be deemed to be a reference to the California Department of Public Health.
(3) The definition of the term “Byproduct material” in 10 CFR 20, section 20.1003 is replaced by the definition of the term “radioactive material” as defined in section 30100 of this regulation.
(4) The definition of the term “License” in 10 CFR 20, section 20.1003 is replaced by the definition of the term “License” as defined in section 30100 of this regulation.
(5) The definition of the term “Licensed material” in 10 CFR 20, section 20.1003 is modified to mean any radioactive material (including source material, special nuclear material, or byproduct material) received, possessed, used, transferred or disposed of under a general or specific license issued by the NRC, or by any other Agreement State or by any state that has been either provisionally or finally designated as a Licensing State by the Conference of Radiation Control Program Directors, Inc. With respect to dose limits and reporting requirements, the term “Licensed material” is to be construed broadly in context to include any source of ionizing radiation subject to the requirements of this regulation.
(6) The definition of the term “Licensee” as defined in 10 CFR 20, section 20.1003 is replaced by the definition of the term “User” as set forth in section 30100 of this regulation.
(7) The definition of the term “Person” as defined in 10 CFR 20, section 20.1003 is replaced by the definition of the term “Person” as set forth in section 114985(c) of the Health and Safety Code.
(8) The definition of the term “Radiation (ionizing radiation)” as defined in 10 CFR 20, section 20.1003 is replaced by the definition of the term “Ionizing radiation” as set forth in section 114985(b) of the Health and Safety Code.
(9) The definition of the term “Special nuclear materials” as defined in 10 CFR 20, section 20.1003 is replaced by the definition of the term “Special nuclear material” as set forth in section 114985(f) of the Health and Safety Code.
(10) Reports of transactions and inventories required in 10 CFR 20, section 20.2207 shall be submitted to the National Source Tracking System maintained by NRC as specified in section 20.2207. Methods of reporting specified in section 20.2207(f) are identified on NRC's form, referenced in section 20.2207(f)(4).
(11) Sections 30.35(g), 40.36(f), and 70.25(g), as cited in 10 CFR 20.1501(b), shall be deemed to reference section 30256(a); sections 50.75(g) and 72.30(d), as cited in 10 CFR 20.1501(b), are not incorporated by reference.
(b) The terms defined in 10 CFR 20, section 20.1003, as incorporated by reference, shall apply to this regulation, except that:
(1) The term “Act” as defined in 10 CFR 20, section 20.1003 is limited to the textual material incorporated by reference in subsection (a) above. The meaning of the term “Act” elsewhere in this regulation, is as defined in section 30100 of this regulation.
(2) The term “Department” as defined in 10 CFR 20, section 20.1003 is limited to the provisions incorporated by reference in subsection (a). The meaning of the term “Department” elsewhere in this regulation, is as defined in section 30100 of this regulation.
Note: Authority cited: Sections 114975, 115000 and 131200, Health and Safety Code. Reference: Sections 114960, 114965, 114970, 114985, 114990, 115060, 115105, 115110, 115120, 115165, 115230, 115235, 131050, 131051 and 131052, Health and Safety Code.

HISTORY

1. Repealer and new section filed 3-3-94 as an emergency; operative 3-3-94 (Register 94, No. 9). A Certificate of Compliance must be transmitted to OAL by 7-1-94 or emergency language will be repealed by operation of law on the following day. For prior history, see Register 86, No. 28.
2. Certificate of Compliance as to 3-3-94 order transmitted to OAL 6-7-94 and filed 7-14-94 (Register 94, No. 28).
3. Editorial correction deleting History 1 and amending and redesignating History 3 (Register 94, No. 28).
4. Editorial correction of section heading (Register 99, No. 8).
5. Amendment of section and Note filed 10-15-2001; operative 11-14-2001 (Register 2001, No. 42).
6. Change without regulatory effect amending subsection (a)(1) and repealing subsections (a)(10)-(12) filed 8-8-2002 pursuant to section 100, title 1, California Code of Regulations (Register 2002, No. 32).
7. Amendment filed 7-20-2006; operative 8-19-2006 (Register 2006, No. 29).
8. Amendment of subsections (a)-(a)(3) and (a)(5), new subsection (a)(10), amendment of subsections (b)(1)-(2) and amendment of Note filed 11-9-2010; operative 12-9-2010 (Register 2010, No. 46).
9. Amendment of subsection (a), new subsection (a)(11) and amendment of Note filed 12-30-2014; operative 4-1-2015 (Register 2015, No. 1).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30253, 17 CA ADC § 30253

30254. Inspection.

17 CA ADC § 30254BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 2. Notices, Instructions, and Reports to Workers; Inspections and Investigations (Refs & Annos)

17 CCR § 30254

§ 30254. Inspection.

(a) Each user shall afford to the Department or other official agency specifically designated by the Department, at all reasonable times, opportunity to inspect materials, machines, activities, facilities, premises, and records pursuant to these regulations.
(b) During an inspection, inspectors may consult privately with workers as specified below. The user may accompany inspectors during other phases of an inspection.
(1) Inspectors may consult privately with workers concerning matters of occupational radiation protection and other matters related to applicable provisions of Department regulations and licenses to the extent the inspectors deem necessary for the conduct of an effective and thorough inspection.
(2) During the course of an inspection any worker may bring privately to the attention of the inspectors, either orally or in writing, any past or present condition which he has reason to believe may have contributed to or caused any violation of the Radiation Control Law, these regulations, or license condition, or any unnecessary exposure of an individual to radiation from licensed radioactive material or a registered radiation machine under the user's control. Any such notice in writing shall comply with the requirements of subsection (h) hereof.

(3) The provision of paragraph (b)(2) of this section shall not be interpreted as authorization to disregard instructions pursuant to Section 30255(b)(1).
(c) If, at the time of inspection, an individual has been authorized by the workers to represent them during inspections, the user shall notify the inspectors of such authorization and shall give the workers' representative an opportunity to accompany the inspectors during the inspection of physical working conditions.
(d) Each worker's representative shall be routinely engaged in work under control of the user and shall have received instructions as specified in Section 30255(b)(1).
(e) Different representatives of users and workers may accompany the inspectors during different phases of an inspection if there is no resulting interference with the conduct of the inspection. However, only one workers' representative at a time may accompany the inspectors.
(f) With the approval of the user and the workers' representative, an individual who is not routinely engaged in work under control of the user, for example, a consultant to the user or to the workers' representative, shall be afforded the opportunity to accompany inspectors during the inspection of physical working conditions.
(g) Notwithstanding the other provisions of this section, inspectors are authorized to refuse to permit accompaniment by an individual who deliberately interferes with a fair and orderly inspection. With regard to any area containing proprietary information, the workers' representative for that area shall be an individual previously authorized by the user to enter that area.
(h) Any worker or representative of workers who believes that a violation of the Radiation Control Law, these regulations or license conditions exists, or has occurred in work under a license or registration with regard to radiological working conditions in which the worker is engaged, may request an inspection by giving notice of the alleged violation to the Department or other official agency specifically designated by the Department. Any such notice shall be in writing, shall set forth the specific grounds for the notice, and shall be signed by the worker or representative of the workers. A copy shall be provided to the user by the Department no later than at the time of inspection except that, upon the request of the worker giving such notice, his name and the name of individuals referred to therein shall not appear in such copy or on any record published, released, or made available by the Department except for good cause shown.
(i) If, upon receipt of such notice, the Chief, Radiologic Health Branch, of the Department, determines that the complaint meets the requirements set forth in subsection (h) hereof, and that there are reasonable grounds to believe that the alleged violation exists or has occurred, he shall cause an inspection to be made as soon as practicable, to determine if such alleged violation exists or has occurred. Inspections pursuant to this section need not be limited to matters referred to in the complaint.
(j) No user shall discharge or in any manner discriminate against any worker because such worker has filed any complaint or instituted or caused to be instituted any proceeding under these regulations or has testified or is about to testify in any such proceeding or because of the exercise by such worker on behalf of himself or others of any option afforded by this section.
(k) If the Chief, Radiologic Health Branch, of the Department, determines with respect to a complaint under subsection (h) hereof that an inspection is not warranted because there are no reasonable grounds to believe that a violation exists or has occurred, the complainant shall be notified in writing of such determination. The complainant may obtain review of such determination by submitting a written statement of position to the Director of the Department, who will provide the user with a copy of such statement by certified mail, excluding, at the request of the complainant, the name of the complainant. The user may submit an opposing written statement of position with the Director of the Department who will provide the complainant with a copy of such statement by certified mail. Upon the request of the complainant, the Director of the Department, or his designee, may hold an informal conference in which the complainant and the user may orally present their views. An informal conference may also be held at the request of the user, but disclosure of the identity of the

complainant will be made only following receipt of written authorization from the complainant. After considering all written or oral views presented, the Director of the Department shall affirm, modify, or reverse the determination of the Chief, Radiologic Health Branch, of the Department, and furnish the complainant and the user a written notification of his decision and the reason therefor.
(*l*) If the Department determines that an inspection is not warranted because the requirements of subsection (h) hereof have not been met, it shall notify the complainant in writing of such determination. Such determination shall be without prejudice to the filing of a new complaint meeting the requirements of subsection (h) hereof.
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.

HISTORY

1. Repealer and new section filed 8-19-75 as an emergency; effective upon filing (Register 75, No. 34). Approved by CAL/OSHA Standards Board 12-16-75.
2. Certificate of Compliance filed 11-28-75 (Register 75, No. 48).
3. Amendment of subsections (b)(3) and (d) filed 8-23-76; effective thirtieth day thereafter (Register 76, No. 35).
4. Amendment of subsections (h), (i) and (k) filed 6-18-87; operative 7-18-87 (Register 87, No. 28).
5. New article 2 heading and amendment of subsection (b)(3) filed 3-3-94 as an emergency; operative 3-3-94 (Register 94, No. 9). A Certificate of Compliance must be transmitted to OAL by 7-1-94 or emergency language will be repealed by operation of law on the following day.
6. Certificate of Compliance as to 3-3-94 order transmitted to OAL 6-7-94 and filed 7-14-94 (Register 94, No. 28).
7. Amendment of subsection (d) and amendment of Note filed 12-30-2014; operative 4-1-2015 (Register 2015, No. 1).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30254, 17 CA ADC § 30254

30255. Notices, Instructions, and Reports to Personnel.

17 CA ADC § 30255BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS
Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 2. Notices, Instructions, and Reports to Workers; Inspections and Investigations (Refs & Annos)

17 CCR § 30255

§ 30255. Notices, Instructions, and Reports to Personnel.

(a) This section establishes requirements for notices, instructions, and reports by users to individuals engaged in work under a license or registration and options available to such individuals in connection with Department inspections of licensees or registrants to ascertain compliance with the provisions of the Radiation Control Law and regulations, orders, and licenses issued thereunder regarding radiological working conditions. The requirements in this section apply to all persons who receive, possess, use, own or transfer material licensed by or registered with the Department.
(b) Each user shall:

(1) Inform all individuals working in or frequenting any portion of a controlled area of the storage, transfer, or use of radioactive materials or of radiation in such portions of the controlled area; instruct such individuals in the health protection problems associated with exposure to such radioactive materials or radiation, in precautions or procedures to minimize exposure, and in the purposes and functions of protective devices employed; instruct such individuals in, and instruct them to observe, to the extent within their control, the applicable provisions of Department regulations and license conditions for the protection of personnel from exposures to radiation or radioactive materials occurring in such areas; instruct such individuals of their responsibility to report promptly to the licensee or registrant any condition which may lead to or cause a violation of department regulations or license conditions or unnecessary exposure to radiation or radioactive material, and of the inspection provisions of Section 30254; instruct such individuals in the appropriate response to warnings made in the event of any unusual occurrence or malfunction that may involve exposure to radiation or radioactive materials; and advise such individuals as to the radiation exposure reports which they may request pursuant to this section. The extent of these instructions shall be commensurate with potential radiological health protection problems in the controlled area.
(2) Conspicuously post a current copy of this regulation, a copy of applicable licenses for radioactive material, and a copy of operating and emergency procedures applicable to work with sources of radiation. If posting of documents specified in this paragraph is not practicable the user may post a notice which describes the document and states where it may be examined.
(3) Conspicuously post a current copy of Department Form RH-2364 (Notice to Employees) in a sufficient number of places to permit individuals working in or frequenting any portion of a controlled area to observe a copy on the way to or from such area.
(4) Conspicuously post any notice of violation involving radiological working conditions or any order issued pursuant to the Radiation Control Law and any required response from the user. Department documents posted pursuant to this paragraph shall be posted within two working days after receipt of the documents from the Department; the user's response, if any, shall be posted within two working days after dispatch by the user. Such documents shall remain posted for a minimum of five working days or until action correcting the violation has been completed, whichever is later.
(5) Assure that documents, notices, or forms posted pursuant to this section shall appear in a sufficient number of places to permit individuals engaged in work under the license or registration to observe them on the way to or from any particular work location to which the document applies, shall be conspicuous, and shall be replaced if defaced or altered.
(6) Provide reports to any individual of their radiation exposure data and the results of any measurements, analyses, and calculations of radioactive material deposited or retained in the body of that individual as specified in this section. The information reported shall include data and results obtained pursuant to Department regulations, orders, or license conditions, as shown in records maintained by the user pursuant to Department regulations. Each notification and report shall: be in writing; include appropriate identifying data such as the name of the user, the name of the individual, the individual's Social Security number; include the individual's exposure information; and contain the following statement:
“This report is furnished to you under the provisions of the California State Department of Public Health Regulations: Standards for Protection Against Radiation. You should preserve this report for future reference.”
These reports shall be provided as follows:
(A) Each user shall advise each worker annually of the worker's dose as shown in records maintained by the user pursuant to title 10, Code of Federal Regulations, part 20, (10 CFR 20), section 20.2106 as incorporated by reference in section 30253. The user shall provide an annual report to each monitored individual pursuant to section 20.1502, incorporated by reference in section 30253, of the dose received in that monitoring year if:

1. The individual's occupational dose exceeds 100 mrem total effective dose equivalent or 100 mrem to any individual organ or tissue; or
2. The individual requests his or her annual dose report.
(B) At the request of a worker formerly engaged in work controlled by the user, the user shall furnish to the worker a report of the worker's exposure to radiation or radioactive material as shown in records maintained by the user pursuant to 10 CFR 20, section 20.2106 that has been incorporated by reference in section 30253, for each year the worker was required to be monitored pursuant to section 20.1502 and for each year the worker was required to be monitored under the monitoring requirements in effect prior to March 3, 1994. Such report shall be furnished within 30 days from the time the request is made, or within 30 days after the exposure of the individual has been determined by the user, whichever is later. This report shall cover the period of time that the worker's activities involved exposure to radiation from radioactive material licensed by, or radiation machines registered with, the Department and shall include the dates and locations of work under the license or registration in which the worker participated during this period.
(C) When a user is required pursuant to 10 CFR 20, sections 20.2202, 20.2203, or 20.2204, as incorporated by reference in section 30253, to report to the Department any exposure of an individual to radiation or radioactive material, the user shall also provide the individual a report on his exposure data included therein. Such reports shall be transmitted at a time not later than the transmittal to the Department.
(D) At the request of a worker who is terminating employment with the user that involved exposure to radiation or radioactive materials, during the current calendar quarter or the current year, each user shall provide at termination to each worker, or to the worker's designee, a written report regarding the radiation dose received by that worker from operations of the user during the current year or fraction thereof. If the most recent individual monitoring results are not available at that time, a written estimate of the dose must be provided together with a clear indication that this is an estimate.
Note: Authority cited: Sections 114975, 115000, 131051, 131052, 131055 and 131200, Health and Safety Code. Reference: Sections 114940, 114965, 115000, 115060, 115110, 115230 and 115235, Health and Safety Code.

HISTORY

1. Renumbering and amendment of former section 30280 to section 30255 filed 3-3-94 as an emergency; operative 3-3-94 (Register 94, No. 9). A Certificate of Compliance must be transmitted to OAL by 7-1-94 or emergency language will be repealed by operation of law on the following day.
2. Certificate of Compliance as to 3-3-94 order transmitted to OAL 6-7-94 and filed 7-14-94 (Register 94, No. 28).
3. Amendment of subsections (a)(6)-(a)(6)(D) and amendment of Note filed 11-9-2010; operative 12-9-2010 (Register 2010, No. 46).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30255, 17 CA ADC § 30255

30256. Vacating Installations: Records and Notice.

17 CA ADC § 30256BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS
Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 2. Notices, Instructions, and Reports to Workers; Inspections and Investigations (Refs & Annos)

§ 30256. Vacating Installations: Records and Notice.

(a) Each person granted a specific license pursuant to Group 2 of this Subchapter shall keep records of information important to the decommissioning of a facility in an identified location until the site is released for unrestricted use by the Department. Before licensed activities are transferred or assigned in accordance with 30194(c), licensees shall transfer all records described in this section to the new licensee. In this case, the new licensee shall be responsible for maintaining these records until the license is terminated. If records important to the decommissioning of a facility are kept for other purposes, reference to these records and their locations may be used. The records shall include the following information important to decommissioning:

(1) Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records shall include but not be limited to a description of any instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas, as for example, possible seepage into porous materials such as concrete. These records shall include any known information on identification of involved nuclides, quantities, forms, and concentrations.

(2) As-built drawings and modification drawings of structures and equipment in restricted areas where radioactive materials are used or stored, and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations.

(3) Except for areas containing only sealed sources (provided the sources have not leaked or no contamination remains after any leak) or any radioactive materials having only half-lives of less than 65 days, a list contained in a single document and updated every 2 years, of the following:

(A) All areas designated and formerly designated restricted areas as defined in Title 10, Code of Federal Regulations, Section 20.1003 incorporated by reference pursuant to Title 17, California Code of Regulations, Section 30253;

(B) All areas outside restricted areas that require documentation under (a)(1);

(C) All areas outside of restricted areas where current and previous wastes have been buried as documented under Title 10, Code of Federal Regulations, Section 20.2108 incorporated by reference pursuant to Title 17, California Code of Regulations, Section 30253; and

(D) All areas outside of restricted areas which contain material such that, if the license expired, the licensee would be required to either decontaminate the area to unrestricted release levels or apply for approval for disposal under Title 10, Code of Federal Regulations, Section 20.2002 incorporated by reference pursuant to Title 17, California Code of Regulations, Section 30253.

(4) Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used pursuant to Section 30195.1.

(b) Each person granted a specific license pursuant to Group 2 of this Subchapter shall, no less than 30 days before vacating any installation which may have been contaminated with radioactive material as a result of the licensee's activities, notify the department in writing of intent to vacate. This notice shall be submitted on form CDPH 5314 (06/09), entitled “Certificate of Disposition of Materials,” which is incorporated by reference herein, and shall address all requirements specified in subsection (c).

(c) If a licensee does not submit an application for license renewal under section 30194, the licensee shall on or before the expiration date specified in the license:

(1) Terminate use of radioactive material;

(2) Remove radioactive contamination to the extent practicable except for those procedures covered by Subsection (d) of this section;

(3) Dispose of radioactive material in accordance with applicable regulations;

(4) Submit a completed form CDPH 5314 (06/09), which certifies information concerning the disposition of materials; and
(5) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey, unless the licensee demonstrates that the premises are suitable for release for unrestricted use in some other manner. The licensee shall, as appropriate:
(A) Report levels of radiation in units of microrads per hour of beta and gamma radiation at one centimeter and gamma radiation at one meter from surfaces, and report levels of radioactivity, including alpha, in units of disintegrations per minute (or microcuries) per 100 square centimeters removable and fixed for surfaces, microcuries per milliliter for water, and picocuries per gram for solids such as soils or concrete; and
(B) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.
(d) In addition to the information required under Subsections (c)(4) and (5), the licensee shall submit a plan for completion of decommissioning if the procedures necessary to carry out decommissioning have not been previously approved by the Department and could increase potential health and safety impacts to workers or to the public such as in any of the following cases:
(1) Procedures would involve techniques not applied routinely during cleanup or maintenance operations; or
(2) Workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation; or
(3) Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or
(4) Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.
(e) Procedures with potential health and safety impacts shall not be carried out prior to approval of the decommissioning plan.
(f) The proposed decommissioning plan, if required by Subsection (d) of this section or by license condition, shall include:
(1) Description of planned decommissioning activities;
(2) Description of methods used to assure protection of workers and the environment against radiation hazards during decommissioning;
(3) A description of the planned final radiation survey;
(4) The information required in (a) (3) and any other information required by (a) that is considered necessary to support the adequacy of the decommissioning plan for approval; and
(5) An updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and plan for assuring the availability of adequate funds for completion of decommissioning.
(g) The proposed decommissioning plan will be approved by the Department if the Department determines that the decommissioning will be completed as soon as is reasonable and that the health and safety of workers and the public will be adequately protected.
(h) Upon approval of the decommissioning plan by the Department, the licensee shall complete decommissioning in accordance with the approved plan. As a final step in decommissioning, the licensee shall again submit the information required in subsection (c)(5) and shall certify the disposition of accumulated wastes from decommissioning by completing form CDPH 5314 (06/09).
(i) If the information submitted under subsection (c)(5) or (h) does not adequately demonstrate that the premises are suitable for release for unrestricted use, the Department shall inform the licensee of the appropriate further actions required for termination of license.
(j) Each specific license continues in effect, beyond the expiration date if necessary, with respect to possession of residual radioactive material present as contamination until the Department notifies the licensee in writing that the license is terminated. During this time, the licensee shall:

(1) Limit actions involving radioactive material to those related to decommissioning; and
(2) Continue to control entry to restricted areas until they are suitable for release for unrestricted use and the Department notifies the licensee in writing that the license is terminated.
(k) Specific licenses shall be terminated by written notice to the licensee when the Department determines that:
(1) Radioactive material has been properly disposed;
(2) Reasonable effort has been made to eliminate residual radioactive contamination, if present; and
(3) A radiation survey has been performed which demonstrates that the premises are suitable for release for unrestricted use; or other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release for unrestricted use.
Note: Authority cited: Sections 114975, 115000, 131051, 131052, 131055 and 131200, Health and Safety Code. Reference: Sections 114965, 114970, 115060, 115230 and 115235, Health and Safety Code.

HISTORY

1. Renumbering of former section 30298 to section 30256 filed 3-3-94 as an emergency; operative 3-3-94 (Register 94, No. 9). A Certificate of Compliance must be transmitted to OAL by 7-1-94 or emergency language will be repealed by operation of law on the following day.
2. Certificate of Compliance as to 3-3-94 order transmitted to OAL 6-7-94 and filed 7-14-94 (Register 94, No. 28).
3. Amendment of section heading and section filed 10-16-95 as an emergency; operative 10-16-95 (Register 95, No. 42). A Certificate of Compliance must be transmitted to OAL by 2-13-96 or emergency language will be repealed by operation of law on the following day.
4. Certificate of Compliance as to 10-16-95 order, including amendment of subsections (a), (c)(4) and (f)(3), new (f)(4) and subsection renumbering, and amendment of subsection (h) and Note, transmitted to OAL 2-9-96 and filed 3-25-96 (Register 96, No. 13).
5. Amendment of subsection (a) filed 9-9-97; operative 10-9-97 (Register 97, No. 37).
6. Amendment of subsections (b), (c)(4) and (h) and amendment of Note filed 11-9-2010; operative 12-9-2010 (Register 2010, No. 46).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30256, 17 CA ADC § 30256

30257. Bankruptcy Notification.

17 CA ADC § 30257BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 2. Notices, Instructions, and Reports to Workers; Inspections and Investigations (Refs & Annos)

17 CCR § 30257

§ 30257. Bankruptcy Notification.

(a) Each general licensee required to register pursuant to sections 30192.1(d)(1) or 30192.6(b)(1), and each specific licensee, shall notify the Department in writing immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of title 11 (Bankruptcy) of the United States Code (11 U.S.C.) by or against:

(1) The licensee;
(2) An entity (as that term is defined in 11 U.S.C. 101 (15)) controlling the licensee or listing the license or licensee as property of the estate; or
(3) An affiliate (as that term is defined in 11 U.S.C. 101 (2)) of the licensee.
(b) The notification to the Department shall indicate:
(1) The bankruptcy court in which the petition for bankruptcy was filed; and
(2) The date of the filing of the petition.
Note: Authority cited: Sections 114975, 115000 and 131200, Health and Safety Code. Reference: Sections 114965, 114970, 115060, 115175, 115205, 115230, 115235, 131050, 131051 and 131052, Health and Safety Code.

HISTORY

1. Renumbering of former section 30299 to section 30257 filed 3-3-94 as an emergency; operative 3-3-94 (Register 94, No. 9). A Certificate of Compliance must be transmitted to OAL by 7-1-94 or emergency language will be repealed by operation of law on the following day.
2. Certificate of Compliance as to 3-3-94 order transmitted to OAL 6-7-94 and filed 7-14-94 (Register 94, No. 28).
3. Amendment of section and Note filed 6-8-2011; operative 7-8-2011 (Register 2011, No. 23).
4. Amendment of subsection (a)(2) filed 12-30-2014; operative 4-1-2015 (Register 2015, No. 1).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30257, 17 CA ADC § 30257

30275. Surveys and Tests.

17 CA ADC § 30275BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 3. Surveys and Tests (Refs & Annos)

17 CCR § 30275

§ 30275. Surveys and Tests.

(a) Each user shall make or cause to be made such surveys as are necessary for compliance with all provisions of this regulation.
(b) Upon instruction from the Department or other official agency specifically designated by the Department, each user shall perform or cause to have performed, and shall permit the Department or said agency to perform, such reasonable tests as the Department or said agency deems necessary for the protection of life, health, or property, including, but not limited to, tests of:
(1) Sources of radiation.
(2) Facilities wherein sources of radiation are used or stored.
(3) Radiation detection and monitoring instruments.
(4) Other equipment and devices used in connection with utilization or storage of sources of radiation.
(c) Each sealed source other than sources listed below, shall be tested for contamination prior to initial use and for leakage at least every six months:
(1) Hydrogen-3 or krypton-85 sources.
(2) Sealed sources containing licensed radioactive material in gaseous form.
(3) Source material.

(4) Sources containing radioactive material with a half life of 30 days or less.
(5) Sources of beta- and/or gamma-emitting radioactive material with an activity of 100 microcuries or less.
(6) Sources of alpha and/or neutron-emitting radioactive material with an activity of 10 microcuries or less.
In the absence of a certificate from a transferor indicating that a test has been made prior to the transfer, the sealed source shall not be put into use until tested. If there is reason to suspect that a source might have been damaged, it shall be tested for leakage before further use. Contamination and leak tests shall be capable of determining the presence of 0.005 microcuries of removable contamination. When any contamination or leak test reveals the presence of 0.005 microcuries or more of removable contamination the user shall immediately withdraw the source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with applicable provisions of Group 2 of this subchapter. Two copies of a report shall be filed, within 5 days of the test, with the Department or other official agency specifically designated by the Department, describing the source involved, the test results, and the corrective action taken.
(d) The test sample shall be taken from the surface of the source, or source holder, or from the surface of the device in which the source is stored or mounted and on which one might expect contamination to accumulate. Where sealed sources are permanently mounted in devices or equipment, alternate tests for contamination and leakage may be approved by the Department.
(e) Tests for contamination and leakage, decontamination, and repair of sealed sources shall be performed only by persons specifically authorized by the Department to do so in accordance with provisions of Group 2 of this subchapter.
(f) Records of leak tests shall be maintained as specified in United States, title 10, Code of Federal Regulations, part 20, subpart L as incorporated by reference in section 30253..
Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25815, 25875 and 25876, Health and Safety Code.

HISTORY

1. Repealer of article 4 and new article 4 (sections 30275 through 30281) filed 11-29-65; effective thirtieth day thereafter (Register 65, No. 23). For former article 4, see Register 62, No. 1.
2. Change without regulatory effect adding NOTE (Register 87, No. 11).
3. Amendment filed 11-4-91; operative 12-4-91 (Register 92, No. 5).
4. Editorial correction of printing error restoring inadvertantly deleted article heading (Register 92, No. 34).
5. Repealer of article heading and amendment of subsection (f) filed 3-3-94 as an emergency; operative 3-3-94 (Register 94, No. 9). A Certificate of Compliance must be transmitted to OAL by 7-1-94 or emergency language will be repealed by operation of law on the following day.
6. Certificate of Compliance as to 3-3-94 order transmitted to OAL 6-7-94 and filed 7-14-94 (Register 94, No. 28).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30275, 17 CA ADC § 30275

30278.1. Removal of Caution Labels from Empty Containers.

17 CA ADC § 30278.1BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS
Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation

Article 3. Surveys and Tests (Refs & Annos)

17 CCR § 30278.1

§ 30278.1. Removal of Caution Labels from Empty Containers.

Each user shall, prior to disposal of an empty uncontaminated container to unrestricted areas, remove or deface the radioactive material label or otherwise clearly indicate that the container no longer contains radioactive materials.

Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811, 25815, 25875 and 25876, Health and Safety Code; and 10 CFR 20. 203 (f)(4) (43 FR 22171).

HISTORY

1. New section filed 3-6-87; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 87, No. 10).

This database is current through 2/16/18 Register 2018, No. 7

30293. Records.

17 CA ADC § 30293BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 3.1. Records and Notification (Refs & Annos)

17 CCR § 30293

§ 30293. Records.

(a) Each user shall keep records showing the receipt, transfer, and disposal of each source of radiation which is subject to licensure or registration pursuant to groups 1.5 and 2 of this subchapter as follows:

(1) The user shall retain each record of receipt of a source of radiation as long as the source of radiation is possessed and for three years following transfer or disposal of the source of radiation.

(2) The user who transferred the source of radiation shall retain each record of transfer for three years after each transfer unless a specific requirement in another part of the regulations in this subchapter dictates otherwise.

(3) The user who disposed of the radioactive material shall retain each record of disposal of the radioactive material until the Department terminates each license that authorizes disposal of the radioactive material.

(b) The user shall retain each record that is required by the regulations in this subchapter or by license condition for the period specified by the appropriate regulation or license condition. If a retention period is not otherwise specified by regulation or license condition, the record shall be retained until the Department terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

(c) Records which shall be maintained pursuant to this subchapter may be the original or a reproduced copy or microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by department regulations. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention

period. Records such as letters, drawings, specifications, shall include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.
(d) If there is a conflict between the Department's regulations in this subchapter, license condition, or other written Department approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this subchapter for such records shall apply unless the Department, pursuant to 30104, has granted a specific exemption from the record retention requirements specified in the regulations in this subchapter.
(e) Prior to license termination, each licensee authorized to possess radioactive material with a half-life greater than 120 days, in an unsealed form, shall, if requested by the Department, forward the following records to the Department:
(1) Records of disposal of licensed material made under Title 10, Code of Federal Regulations, sections 20.2002, 20.2003, 20.2004, 20.2005, incorporated by reference in section 30253; and
(2) Records required by Title 10, Code of Federal Regulations section 20.2103(b)(4), incorporated by reference in section 30253.
(f) If licensed activities are transferred or assigned in accordance with section 30194(c), each licensee authorized to possess radioactive material, with a half-life greater than 120 days, in an unsealed form, shall transfer the following records to the new licensee and the new licensee will be responsible for maintaining these records until the license is terminated:
(1) Records of disposal of licensed material made under Title 10, Code of Federal Regulations, sections 20.2002, 20.2003, 20.2004, 20.2005, incorporated by reference in section 30253; and
(2) Records required by Title 10, Code of Federal Regulations, section 20.2103(b)(4), incorporated by reference in section 30243.
(g) Prior to license termination, each licensee shall, if requested by the Department, forward the records required by section 30256(a) to the Department.
Note: Authority cited: Sections 100275 and 115000, Health and Safety Code. Reference: Sections 114965, 114970, 115105, 115110, and 115235, Health and Safety Code.

HISTORY

1. New article 3.1 (sections 30293 and 30295) and section filed 9-9-97; operative 10-9-97 (Register 97, No. 37). For prior history, see Register 94, No. 28.
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30293, 17 CA ADC § 30293

30295. Notification of Incidents.

17 CA ADC § 30295BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 3.1. Records and Notification (Refs & Annos)

17 CCR § 30295

§ 30295. Notification of Incidents.

(a) Each user shall notify the Department as soon as possible but not later than four hours after the discovery of an event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits.

(b) Each user shall notify the Department within 24 hours after the discovery of any of the following events involving radiation or radioactive materials:
(1) An unplanned contamination event involving licensed radioactive material that:
(A) Requires access to the contaminated area by workers or the public, to be restricted for more than 24 hours by imposing additional radiological controls or by prohibiting entry into the area;
(B) Involves a quantity of material greater than five times the lowest annual limit on intake specified in Appendix B of Title 10, Code of Federal Regulations, part 20, incorporated by reference in section 30253 for the material; and
(C) Has access to the area restricted for a reason other than to allow isotopes with a half-life of less than 24 hours to decay prior to decontamination.
(2) An event in which equipment is disabled or fails to function as designed when:
(A) The equipment is required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident;
(B) The equipment is required to be available and operable when it is disabled or fails to function; and
(C) No redundant equipment is available and operable to perform the required safety function.
(3) An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.
(4) An unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material when:
(A) The quantity of material involved is greater than five times the lowest annual limit on intake specified in Appendix B of Title 10, Code of Federal Regulations, part 20, incorporated by reference in section 30253 for the material; and
(B) The damage affects the integrity of the licensed material or its container.
(c) Reports made by users in response to the requirements of this section shall be made as follows: Each user shall make reports required by subsections (a) and (b) by telephone to the Department. To the extent that the information is available at the time of notification, the information provided in these reports shall include:
(1) The caller's name and call back telephone number;
(2) A description of the event, including date and time;
(3) The exact location of the event;
(4) The isotopes, quantities, and chemical and physical form of the licensed material involved; and
(5) Any personnel radiation exposure data available.
(d) Each user who makes a report required by this section shall submit a written follow-up report within 30 days of the initial report. These written reports shall be sent to the Department and include:
(1) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
(2) The exact location of the event;
(3) The isotopes, quantities, and chemical and physical form of the licensed material involved;
(4) Date and time of the event;
(5) Corrective actions taken or planned and the results of any evaluation or assessment; and
(6) The extent of exposure of individuals to radiation or to radioactive materials without identification of individuals by name.
Note: Authority cited: Sections 114975, 115000, 131050, 131051 and 131200, Health and Safety Code. Reference: Sections 114965, 114970, 115105, 115110, and 115235, Health and Safety Code.

HISTORY

1. New section filed 9-9-97; operative 10-9-97 (Register 97, No. 37). For prior history, see Register 94, No. 28.
2. Amendment of section and Note filed 4-11-2008; operative 5-11-2008 (Register 2008, No. 15).

This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30295, 17 CA ADC § 30295

30305. General Provisions.

17 CA ADC § 30305BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30305

§ 30305. General Provisions.

(a)(1) This article pertains to use of X-rays in medicine, dentistry, osteopathy, chiropractic, podiatry, and veterinary medicine. The provisions of this article are in addition to, and not in substitution for, other applicable provisions of this regulation and of Group 1 of this subchapter.
(2) Any existing machine or installation need not be replaced or substantially modified to conform to the requirements of this regulation provided that the user demonstrates to the Department's satisfaction achievement of equivalent protection through other means.
(3) No person shall make, sell, lease, transfer, lend, or install X-ray or fluoroscopic equipment or the supplies used in connection with such equipment unless such supplies and equipment, when properly placed in operation or properly used, will meet the requirements of this regulation. This includes responsibility for the delivery of cones or collimators, filters, adequate timers and fluoroscopic shutters (where applicable).
(4) For X-ray equipment manufactured after July 31, 1974, the user shall provide sufficient maintenance to keep the equipment in compliance with all applicable radiation protection sections of the Code of Federal Regulations, Title 21, Chapter 1, Subchapter J, Part 1020, Sections 1020.30, 1020.31, and 1020.32.
(5) Each installation shall be provided with such primary barriers and/or secondary barriers as are necessary to ensure compliance with title 10, Code of Federal Regulations, part 20, (10 CFR 20) subparts C and D incorporated by reference in section 30253. Special requirements are contained in title 24, California Code of Regulations, Part 2, Chapter 31C, sections 3101C through 3104C.
(b) Use.
(1) The user shall assure that all X-ray equipment under his jurisdiction is operated only by persons adequately instructed in safe operating procedures and competent in safe use of the equipment.
(2) The user shall provide safety rules to each individual operating X-ray equipment under his control, including any restrictions of the operating technique required for the safe operation of the particular X-ray apparatus, and require that the operator demonstrate familiarity with these rules.
(3) No user shall operate or permit the operation of X-ray equipment unless the equipment and installation meet the applicable requirements of these regulations and are appropriate for the procedures to be performed.
(4) Deliberate exposure of an individual to the useful beam for training or demonstration purposes shall not be permitted unless there is also a medical or dental indication for the exposure and the exposure is prescribed by a physician or dentist.
(c) Areas or rooms that contain permanently installed X-ray machines as the only source of radiation shall be posted with a sign or signs

CAUTION

in lieu of other signs required by the United States, title 10, Code of Federal Regulations, part 20, section 20.1902 as incorporated by reference in section 30253.
(d) High radiation areas caused by radiographic and fluoroscopic machines used solely in the healing arts and which are in compliance with the access control and signal requirements of title 24, California Code of Regulations, Part 2, Chapter 31C, sections 3101C through 3104C shall be exempt from the access control and signal requirements of 10 CFR 20, section 20.1601 as incorporated by reference in section 30253.
Note: Authority cited: Sections 100275, 114975, 115000, 131051, 131052, 131055 and 131200, Health and Safety Code. Reference: Sections 114965, 114970, 115000 and 115060, Health and Safety Code.

HISTORY

1. Amendment filed 3-5-71; effective thirtieth day thereafter. Approved by State Building Standards Commission 2-26-71. (Register 71, No. 10).
2. Renumbering and amendment filed 9-4-73 as an emergency; effective upon filing (Register 73, No. 36). Approved by State Building Standards Commission 11-30-73.
3. Certificate of Compliance filed 12-28-73 (Register 73, No. 52).
4. Amendment filed 6-24-80; effective thirtieth day thereafter (Register 80, No. 26).
5. New subsection (a)(5) and repealer of subsection (c) filed 6-18-87; operative 7-18-87 (Register 87, No. 28).
6. Amendment of article heading and new subsections (c) and (d) filed 3-3-94 as an emergency; operative 3-3-94 (Register 94, No. 9). A Certificate of Compliance must be transmitted to OAL by 7-1-94 or emergency language will be repealed by operation of law on the following day.
7. Certificate of Compliance as to 3-3-94 order transmitted to OAL 6-7-94 and filed 7-14-94 (Register 94, No. 28).
8. Change without regulatory effect amending subsections (a)(5) and (d) and amending Note filed 11-12-2009 pursuant to section 100, title 1, California Code of Regulations (Register 2009, No. 46).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30305, 17 CA ADC § 30305

30305.1. Quality Assurance General Provisions.

17 CA ADC § 30305.1BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30305.1

§ 30305.1. Quality Assurance General Provisions.

(a) Each user subject to this article, as specified in section 30305(a)(1), who performs radiography shall assure that:
(1) Radiographic films are stored, handled, and processed in accordance with manufacturers' recommendations. Expired film may not be used for clinical purposes.
(2) Intensifying screens, grids, viewers, film processing equipment, chemicals, and solutions are stored, used, and maintained in accordance with manufacturers' recommendations.
(3) For each X-ray machine, a technique chart is provided which establishes for each view commonly performed:

(A) Patient size versus selectable exposure factors;
(B) Source-to-Image distance (if not fixed);
(C) Grid data;
(D) Film/Screen combination; and
(E) Patient shielding (if appropriate).
Note: Authority cited: Sections 114975, 115000, 115060, 115061, 131051, 131052, 131055 and 131200, Health and Safety Code. Reference: Sections 114965, 114970, 115000, 115060 and 115061, Health and Safety Code.

HISTORY

1. New section filed 9-4-2012; operative 10-4-2012 (Register 2012, No. 36).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30305.1, 17 CA ADC § 30305.1

30306. Definitions.

17 CA ADC § 30306BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30306

§ 30306. Definitions.

(a) “Automatic exposure control” means a device which automatically controls one or more technique factors in order to obtain at a preselected location(s) a required quantity of radiation.
(b) “Cineradiography” means the making of a motion picture record of the successive images appearing on a fluorescent screen.
(c) “Contact therapy” means irradiation of accessible lesions usually employing a very short source-skin distance and potentials of 40-50 KV.
(d) “Dead-man switch” means a switch so constructed that a circuit-closing contact can only be maintained by continuous pressure by the operator.
(e) “Diagnostic-type tube housing” means an X-ray tube housing so constructed that the leakage radiation measured at a distance of 1 meter from the source cannot exceed 100 milliroentgens in 1 hour when the tube is operated at its maximum continuous rate of current for the maximum rated tube potential.
(f) “Filter” means material placed in the useful beam to absorb preferentially the less penetrating radiations.
(g) “Interlock” means a device for precluding access to an area of radiation hazard either by preventing entry or by automatically removing the hazard.
(h) “Leakage radiation” means all radiation coming from within the tube housing except the useful beam.
(i) “Protective barrier” means a barrier of attenuating materials used to reduce radiation exposure.
(j) “Primary protective barrier” means a barrier sufficient to attenuate the useful beam to the required degree.
(k) “Scattered radiation” means radiation that, during passage through matter, has been deviated in direction.

(l “Secondary protective barrier” means a barrier sufficient to attenuate stray radiation to the required degree.
(m) “Shutter” means a device, generally of lead, fixed to an X-ray tube housing to intercept the useful beam.
(n) “Stray radiation” means radiation not serving any useful purpose. It includes leakage and scattered radiation.
(o) “Therapeutic-type tube housing” means,
(1) For X-ray therapy equipment not capable of operating at 500 kVp or above, an X-ray tube housing so constructed that the leakage radiation at a distance of 1 meter from the source does not exceed 1 roentgen in an hour when the tube is operated at its maximum rated continuous current for the maximum rated tube potential.
(2) For X-ray therapy equipment capable of operating at 500 kVp or above, an X-ray tube housing so constructed that the leakage radiation at a distance of 1 meter from the source does not exceed either 1 roentgen in an hour or 0.1 percent of the useful beam dose rate at 1 meter from the source, whichever is greater, when the machine is operated at its maximum rated continuous current for the maximum rated accelerating potential.
(3) In either case, small areas of reduced protection are acceptable provided the average reading over any 100 square centimeters area at 1 meter distance from the source does not exceed the values given above.
(p) “Useful beam” means that part of the radiation which passes through the window, aperture, cone, or other collimating device of the tube housing. (T17-30306-T24).
Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

HISTORY

1. Renumbering and amendment filed 9-4-73 as an emergency; effective upon filing (Register 73, No. 36). Approved by State Building Standards Commission 11-30-73.
2. Certificate of Compliance filed 12-28-73 (Register 73, No. 52).
3. Amendment of subsection (e) filed 6-18-87; operative 7-18-87 (Register 87, No. 28).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30306, 17 CA ADC § 30306

30307. Fluoroscopic Installations

17 CA ADC § 30307BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30307

§ 30307. Fluoroscopic Installations

(a) Equipment.
(1) The tube housing shall be of diagnostic type.
(2) The target-to-panel or target-to-table top distance should not be less than 18 inches and shall not be less than 12 inches.

(3) The total filtration permanently in the useful beam shall not be less than 2.5 millimeters aluminum equivalent. This requirement may be assumed to have been met if the half-value layer is not less than 2.5 millimeters aluminum at normal operating voltages.
(4) The equipment shall be so constructed that the entire cross-section of the useful beam is attenuated by a primary barrier. This barrier is usual ly the viewing device, either a conventional fluoroscopic screen or an image intensification mechanism.
(A) The lead equivalent of the barrier of conventional fluoroscopes shall be at least 1.5 millimeters for equipment capable of operating up to 100 kVp, at least 1.8 millimeters for equipment whose maximum operating potential is greater than 100 kVp and less than 125 kVp, and at least 2.0 millimeters for equipment whose maximum operating potential is 125 kVp or greater. Special attention must be paid to the shielding of image intensifiers so that neither the useful beam nor scattered radiation from the intensifier can produce a radiation hazard to the operator or personnel. With the fluorescent screen 14 inches (35 cm) from the panel or table top, the exposure rate 2 inches 5 cm) beyond the viewing surface of the screen shall not exceed 30 mR/hr for each R per minute at the table top with the screen in the useful beam without a patient and with the fluoroscope operating at the highest potential employed.
(B) Collimators shall be provided to restrict the size of the useful beam to less than the area of the barrier. For conventional fluoroscopes this requirement is met if, when the adjustable diaphragm is opened to its fullest extent, an unilluminated margin is left at all edges of the fluorescent screen with the screen centered in the beam at a distance of 35 cm (14 inches) from the panel or table top.
For image intensified fluoroscopy, shutters shall be provided which can be adjusted to restrict the X-ray field to the visible portion of the image receptor during fluoroscopy. For systems employing rectangular X-ray fields and circular image receptors, this requirement is met if the collimated beam forms a square which circumscribes, and is tangent to, the circular margin of the image receptor.
(C) The tube mounting and the carrier shall be so linked together that the carrier always intercepts the entire useful beam. The X-ray exposure shall automatically terminate when the carrier is removed from the useful beam.
(D) Collimators and adjustable diaphragms or shutters to restrict the size of the useful beam shall provide the same degree of protection as is required of the tube housing.
(5) The exposure switch shall be of the dead-man type.
(6) Each fluoroscopic unit shall be equipped with a manual-reset cumulative timing device, activated by the exposure switch, which will either indicate elapsed exposure time by a signal audible to the fluorocopist or turn off the apparatus when the total exposure exceeds a predetermined limit not exceeding five minutes in one or a series of exposures.
(7) Useful beam exposure rate.
(A) All fluoroscopic equipment. For routine fluoroscopy, the exposure rate measured at the point where the center of the useful beam enters a typical patient shall be as low as is practicable and shall not exceed 5 roentgens per minute under the conditions specified herein. This limit shall not apply during magnification procedures or the recording of fluoroscopic images where higher exposure rates are required. Compliance with this paragraph shall be determined using the measuring specifications of Section 30307(a)(7)(D), plus the following procedures when the automatic exposure rate control is used:
1. The useful beam exposure rate shall be measured with a phantom equivalent to 9 inches of water or 7 7/8 inches of lucite, intercepting the entire useful beam.
2. If the X-ray source is below the table, the X-ray exposure rate shall be measured with the nearest part of the imaging assembly located at 14 inches above the table top.
3. The field size at the point of exposure rate measurement shall be at least 6 1/4 square inches in area in the plane perpendicular to the central ray.
(B) Fluoroscopic equipment manufactured after August 1, 1974, and equipped with automatic exposure rate controls. Fluoroscopic equipment which is provided with automatic exposure rate

control shall not be operable at any combination of tube potential and current which will result in an exposure rate in excess of 10 roentgens per minute at the point where the center of the useful beam enters the patient, except during recording of fluoroscopicimages, or when an optional high level control is provided. When so provided, the equipment shall not be operable at any combination of tube potential and current which will result in an exposure rate in excess of 5 roentgens per minute at the point where the center of the useful beam enters the patient unless the high level control is activated. Special means of activation of high level controls shall be required. The high level control shall only be operable when continuous manual activation is provided by the operator. A continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed.
(C) Fluoroscopic equipment manufactured after August 1, 1974, without automatic exposure rate controls. Fluoroscopic equipment which is not provided with automatic exposure rate control shall not be operable at any combination of tube potential and current which will result in an exposure rate in excess of 5 roentgens per minute at the point where the center of the useful beam enters the patient, except during recording of fluoroscopic images, or when an optional high level control is activated. Special means of activation of high level controls shall be required. The high level control shall only be operable when continuous manual activation is provided by the operator. A continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed.
(D) Measuring useful beam exposure rate compliance.
1. If the X-ray tube is below the table, the exposure rate shall be measured 1 centimeter above the tabletop or cradle.
2. If the X-ray tube is above the table, the exposure rate shall be measured at 30 centimeters above the tabletop with the end of the beam-limiting device or spacer positioned as closely as possible to the point of measurement.
3. In a C-arm type of fluoroscope, the exposure rate shall be measured at 30 centimeters from the input surface of the fluoroscopic imaging assembly.
(8) Mobile fluoroscopic equipment shall meet the requirements of this section where applicable, except that:
(A) Inherent provisions shall be made so that the machine is not operated at a source-skin distance of less than 30 cm (12 inches).
(B) Image intensification shall always be provided. Conventional fluoroscopic screens shall not be used.
(C) It shall be impossible to operate a machine when the collimating cone or diaphragm is not in place.
(D) It shall be impossible to energize the useful beam of a mobile fluoroscope unless the entire useful beam is intercepted by the image receptor.
(9) Devices which indicate the X-ray tube potential and current shall be provided, and should be located in such a manner that the operator may monitor the tube potential and current during fluoroscopy.
(10) A shielding device of at least 0.25 millimeters lead equivalent shall be provided for covering the bucky-slot during fluoroscopy.
(11) Whenever practicable, protective drapes, or hinged or sliding panels, of at least 0.25 millimeters lead equivalent shall be provided between the patient and the fluoroscopist to intercept scattered radiation which would otherwise reach the fluoroscopist and others near the machine. Such devices shall not substitute for wearing of a protective apron.
(b) Operating Procedures.
(1) Protective aprons of at least 0.25 mm lead equivalent shall be worn in the fluoroscopy room by each person, except the patient, whose body is likely to be exposed to 5 mR/hr or more.
(2) On fluoroscopes with automatic exposure controls the operator shall monitor the tube current and potential at least once each week to ascertain that they are in their usual ranges for a given set of operating parameters. This requirement may be met by adjusting the controls to usual settings for

fluoroscoping an average patient, and using a phantom of any suitable material with attenuation roughly equivalent to six to ten inches of water. Whenever the monitored tube current or potential vary in a way which could increase the patient X-ray exposure rate by more than 25% over the latest exposure rate measurement required by Section 30307(b)(3), the cause(s) for the change shall be determined promptly and the patient exposure rate shall be remeasured. On fluoroscopes with manual exposure control only, the operator shall monitor the tube current and potential at least once each day during use to ascertain that they are within the normal ranges used by the facility. A written log shall be kept of all monitored readings and shall include at least the tube current and potential, the date, identification of the fluoroscope, and name of the person who did the monitoring. Records of all monitored readings shall be preserved at the facility for at least three years.
(3) Measurements of the table top or patient exposure rate shall be made at least once each year for units with automatic exposure control, and at least once each 3 years for units without automatic exposure control, and immediately following alteration or replacement of a major component, such as the X-ray tube, the exposure controls, the imaging assembly, and the power source.
(4) On cineradiography equipment, the exposure rates to which patients are normally subjected shall be determined at least once each year, and immediately following alterations or replacement of a major component, such as the X-ray tube, the exposure controls, the imaging assembly, and the power source.
Note: Authority cited: Sections 102, 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

HISTORY

1. Renumbering and amendment filed 9-4-73 as an emergency; effective upon filing (Register 73, No. 36). Approved by State Building Standards Commission 11-30-73.
2. Certificate of Compliance filed 12-28-73 (Register 73, No. 52).
3. Amendment filed 6-24-80; effective thirtieth day thereafter (Register 80, No. 26).
4. Amendment filed 6-18-87; operative 7-18-87 (Register 87, No. 28).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30307, 17 CA ADC § 30307

30308. Radiographic Installations (Other Than Dental and Veterinary Medicine).
17 CA ADC § 30308BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30308

§ 30308. Radiographic Installations (Other Than Dental and Veterinary Medicine).

(a) Equipment.
(1) The tube housing shall be of diagnostic type.
(2) Suitable devices (diaphragms, cones, adjustable collimators), capable of restricting the useful beam to the area of clinical interest shall be provided to define the beam and shall provide the same degree of attenuation as that required of the tube housing. Such devices shall be calibrated in terms of the size of the projected useful beam at specified source-film distances. For chest photofluorographic equipment, the collimator shall restrict the beam to dimensions no greater than

those of the fluorographic screen. The field size indication on adjustable collimators shall be accurate to within 2 percent of the source-film distance. The light field shall be aligned with the X-ray field with the same degree of accuracy.

(3) For equipment manufactured prior to August 1, 1974, the aluminum equivalent of the total filtration in the useful beam shall be not less than that shown in Table 1:

Table 1

	Minimum Total Filter
Operating kVp	(Inherent plus added)
Below 50 kVp	0.5 mm aluminum
50-70 kVp	1.5 mm aluminum
Above 70 kVp	2.5 mm aluminum

For equipment manufactured on or after August 1, 1974, the half-value layer (HVL) of the useful beam for a given X-ray tube potential shall not be less than the appropriate value specified in Table 2.

Table 2

X-ray tube voltage (kilovolt peak)	
Designed	Measured
Operating Range	Minimum HVL
Below 50	30
	40
	49
50 to 70	50
	60
	70
Above 70	70
	80
	90
	100
	110
	120
	130
	140
	150

(4) A device shall be provided to terminate the exposure after a pre-set time or exposure.

(5) A dead-man type of exposure switch shall be provided and so arranged that it cannot be conveniently operated outside a shielded area, except that exposure switches for “spot film” devices used in conjunction with fluoroscopic tables are excepted from this shielding requirement.

(6) The control panel shall include a device (usually a milliammeter) to give positive indication of the production of X-rays whenever the X-ray tube is energized.

(7) The control panel shall include devices (labeled control settings and/or meters) indicating the physical factors (such as kVp, mA, exposure time, or whether timing is automatic) used for the exposure.

(8) Machines equipped with beryllium window X-ray tubes shall contain keyed filter interlock switches in the tube housing and suitable indication on the control panel of the added filter in the useful beam if

the total filtration permanently in the useful beam is less than 0.5 mm aluminum equivalent. The total filtration permanently in the useful beam shall be clearly indicated on the tube housing.
(9) The aluminum equivalent of the table top when a cassette tray is used under the table top, or the aluminum equivalent of the front panel of the vertical cassette holder, shall not be more than 1 mm at 100 kVp.
(b) Operating Procedures.
(1) No individual occupationally exposed to radiation shall be permitted to hold patients during exposures except during emergencies, nor shall any individual be regularly used for this service. If the patient must be held by an individual, that individual shall be protected with appropriate shielding devices such as protective gloves and apron and he shall be so positioned that no part of his body will be struck by the useful beam.
(2) Only individuals required for the radiographic procedure shall be in the radiographic room during exposure; and, except for the patient, all such persons shall be equipped with appropriate protective devices.
(3) The radiographic field shall be restricted to the area of clinical interest.
(4) Gonadal shielding of not less than 0.5 mm lead equivalent shall be used for patients who have not passed the reproductive age during radiographic procedures in which the gonads are in the direct beam, except for cases in which this would interfere with the diagnostic procedure.
(5) The operator shall stand behind the barrier provided for his protection during radiographic exposures.
Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

HISTORY

1. Renumbering and amendment filed 9-4-73 as an emergency; effective upon filing (Register 73, No. 36). Approved by State Building Standards Commission 11-30-73.
2. Certificate of Compliance filed 12-28-73 (Register 73, No. 52).
3. Amendment filed 6-18-87; operative 7-18-87 (Register 87, No. 28).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30308, 17 CA ADC § 30308

30308.1. Quality Assurance for Radiographic Installations (Other Than Mammography, Dental, an...

17 CA ADC § 30308.1BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30308.1

§ 30308.1. Quality Assurance for Radiographic Installations (Other Than Mammography, Dental, and Veterinary Medicine)

(a) Each user subject to this article, as specified in section 30305(a)(1), who develops clinical radiographs for diagnostic purposes with automatic film processors for other than mammographic, dental, or veterinary use, shall assure all of the following:
(1) Each processor used to develop clinical radiographs is adjusted and maintained to meet the manufacturer's processing specifications for the highest speed radiographic film used clinically.

(2) Measurements are performed each day before clinical radiographs are processed, so as to determine that the processor is operating within the following limits:
(A) The base-plus-fog density is within plus 0.05 of the operating level established with the highest speed radiographic film used clinically;
(B) The mid-density is within plus or minus 0.15 of the operating level established with the highest speed radiographic film used clinically; and
(C) The density-difference is within plus or minus 0.15 of the operating level established with the highest speed radiographic film used clinically.
(3) Tests are performed at intervals not to exceed three months to determine that the residual fixer level retained in clinical radiographic films is not more than 5.0 micrograms per square centimeter.
(4) Tests are performed at intervals not to exceed six months to determine that the optical density attributable to darkroom fog is not more than 0.05 when the highest speed of each type radiographic film used clinically, which has a mid-density of no less than 1.20 optical density, is exposed on the counter top for one minute under typical darkroom conditions with the safelight on.
(5) For any test result falling outside the criteria specified in this section, the problem is identified and corrective action is taken before clinical radiographs are processed.
(6) Records of the tests specified in this section, including the problems detected, corrective actions taken, and the effectiveness of those corrective actions, are maintained for at least one year from the date the test was performed.
Note: Authority cited: Sections 114975, 115000, 115060, 115061, 131051, 131052, 131055 and 131200, Health and Safety Code. Reference: Sections 114965, 114970, 115000, 115060 and 115061, Health and Safety Code.

HISTORY

1. New section filed 9-4-2012; operative 10-4-2012 (Register 2012, No. 36).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30308.1, 17 CA ADC § 30308.1

30309. Special Requirements for Mobile Radiographic Equipment.

17 CA ADC § 30309BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30309

§ 30309. Special Requirements for Mobile Radiographic Equipment.

(a) Equipment.
(1) All requirements of Section 30308(a) apply except 30308 (a)(5) and 30308 (a)(9).
(2) The exposure control switch shall be of the dead-man type and shall be so arranged that the operator can stand at least 6 feet from the patient and well away from the useful beam.
(3) Inherent provisions shall be made so that the equipment is not operated at source-skin distances of less than 12 inches.
(b) Operating Procedures.
(1) All provisions of Section 30308(b) apply except 30308(b)(5).
(2) The target-to-skin distance shall be not less than 12 inches.

(3) Personnel monitoring shall be required for all individuals operating mobile X-ray equipment.
Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

HISTORY

1. Amendment filed 3-5-71; effective thirtieth day thereafter. Approved by State Building Standards Commission 2-26-71. (Register 71, No. 10).
2. Renumbering and amendment filed 9-4-73 as an emergency; effective upon filing (Register 73, No. 36). Approved by State Building Standards Commission 11-30-73.
3. Certificate of Compliance filed 12-28-73 (Register 73, No. 52).
4. Amendment of subsection (b)(1) filed 6-18-87; operative 7-18-87 (Register 87, No. 28).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30309, 17 CA ADC § 30309

30310. Special Requirements for Chest Photofluorographic Installations.

17 CA ADC § 30310BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30310

§ 30310. Special Requirements for Chest Photofluorographic Installations.

(a) Equipment.
(1) All provisions of Section 30308 (a) apply.
(2) A collimator shall restrict the useful beam to the area of the photofluorographic screen.
(3) The incident X-ray exposure where the central ray enters the patient shall not exceed 200 milliroentgens per radiograph for the average patient, and should not exceed 100 milliroentgens per radiograph.
(b) Operating Procedures.
(1) All provisions of Section 30308(b) apply.
Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

HISTORY

1. Amendment filed 3-5-71; effective thirtieth day thereafter. Approved by State Building Standards Commission 2-26-71 (Register 71, No. 10).
2. Renumbering and amendment filed 9-4-73 as an emergency; effective upon filing (Register 73, No. 36). Approved by State Building Standards Commission 11-30-73.
3. Certificate of Compliance filed 12-28-73 (Register 73, No. 52).
4. Amendment filed 6-18-87; operative 7-18-87 (Register 87, No. 28).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30310, 17 CA ADC § 30310

30311. Dental Radiographic Installations.

17 CA ADC § 30311BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

17 CCR § 30311

§ 30311. Dental Radiographic Installations.

(a) Equipment.
(1) The tube housing shall be of diagnostic type.
(2) Diaphragms or cones shall be used for collimating the useful beam and shall provide the same degree of protection as the housing.
(A) For intra-oral radiography the useful beam shall be restricted to a diameter of not more than 7 cm (2.75 inches) at the surface of the skin.
(3) For intra-oral film exposures a cone or spacer frame shall provide a target-to-skin distance of not less than 18 cm (7 inches) with apparatus operating above 50 kVp or 10 cm (4 inches) with apparatus operating at 50 kVp or below.
(4) The total filtration permanently in the useful beam shall be equivalent to at least 0.5 millimeters of aluminum for equipment operating below 50 kVp, equivalent to at least 1.5 millimeters of aluminum for equipment operating from 50 kVp through 70 kVp, and equivalent to at least 2.5 millimeters of aluminum for equipment operating above 70 kVp.
(5) A device shall be provided to terminate the exposure after a pre-set time or exposure.
(6) The exposure control switch shall be of the dead-man type. If a recycling timer is employed it shall not be possible to make a repeat exposure without release of the exposure switch to reset the timer.
(7) Each installation shall be provided with a protective barrier for the operator or shall be so arranged that the operator can stand at least 6 feet from the patient and well away from the useful beam.
(8) Mechanical support of the tube head and cone shall maintainthe exposure position without drift or vibration.
(9) Panoramic installations. This part applies to those installations which consist of a tube head with a collimator providing a narrow useful beam and an extra oral film carrier which are interlocked in their motion about the patient.
(A) All provisions of Section 30311 (a) apply except 30311 (a)(2)(A), 30311 (a)(3), 30311 (a)(10).
(10) Cephalometric installations.
(A) All provisions of Section 30311 (a) apply except 30311 (a)(2)(A), 30311 (a)(3), and 30311 (a)(9).
(B) The radiographic field shall be restricted to the area of the image receptor.
(11) The X-ray control panel shall include means for indicating X-ray tube voltage (kVp), tube current (mA), and exposure duration. The tube voltage and current shall be indicated by meters or by control settings. A milliammeter, a light or other device shall give clear and distinct visual or audible indication to the operator when X-rays are being produced.
(b) Operating Procedures.
(1) No individual occupationally exposed to radiation shall be permitted to hold patients or films during exposure, nor shall any individual be regularly used for this service.
(2) During each exposure, the operator shall stand at least 6 feet from the patient or behind a protective barrier.
(3) Only the patient shall be in the useful beam.
(4) Neither the tube housing nor the position indicating device (cone, cylinder) shall be hand-held during exposure.

(5) Fluoroscopy shall not be used in dental examinations.
(6) Each patient undergoing dental radiography shall be draped with a protective apron of not less than 0.25 millimeter lead-equivalent to cover the gonadal area.
(7) For intra-oral and cephalometric radiography the X-ray beam and the film shall be aligned very carefully with the area to be radiographed.
(8) Only persons required for the radiographic procedure shall be in the radiographic room during exposures.
Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

HISTORY

1. Renumbering and amendment filed 9-4-73 as an emergency; effective upon filing (Register 73, No. 36). Approved by State Building Standards Commission 11-30-73.
2. Certificate of Compliance filed 12-28-73 (Register 73, No. 52).
3. Editorial correction (Register 74, No. 6).
4. Amendment filed 6-24-80; effective thirtieth day thereafter (Register 80, No. 26).
5. Amendment filed 6-18-87; operative 7-18-87 (Register 87, No. 28).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30311, 17 CA ADC § 30311

30311.1. Quality Assurance for Dental Radiography.

17 CA ADC § 30311.1BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30311.1

§ 30311.1. Quality Assurance for Dental Radiography.

(a) Each user subject to this article, as specified in section 30305(a)(1), using intra-oral film for dental radiography of human beings shall assure all of the following:
(1) A reference film meeting the interpreting dentists' criteria for image density, contrast, sharpness and overall quality is selected for use in daily comparisons of dental radiographs.
(2) For each day dental radiographs are processed, clinical radiographs are compared to the selected reference film for density, contrast, sharpness, and overall image quality.
(3) Corrective action is taken when observable changes occur in clinical radiographic image density, contrast, sharpness and overall quality.
(4) Records of the corrective actions taken, and the effectiveness of those corrective actions, are maintained for a minimum of one year from the date the corrective action was taken.
(5) Corrective action, as directed by the Department, is taken if the entrance exposure to an adult patient for a routine intraoral bitewing exam is found by the Department to be outside the ranges specified in the following table.

Tube Potential[1]	*"D" Speed*	*"E c*
(kVp)[2]	*Film (mR)*[3]	*Film*
50	425-575	220-
55	350-500	190-

60	310-440	165-
65	270-400	140-
70	240-350	120-
75	170-260	100-
80	150-230	90-1
85	130-200	80-1
90	120-180	70-
95	110-160	60-
100	100-140	50-

[1] Linear extrapolation or interpolation shall be used for an x-ray tube potential (kVp) not listed in the table.
[2] The kVp shall be measured to determine the correct exposure limit to be applied.
[3] Exposures values are specified as free-in-air exposures without backscatter.
Note: Authority cited: Sections 114975, 115000, 115060, 115061, 131051, 131052, 131055 and 131200, Health and Safety Code. Reference: Sections 114965, 114970, 115000, 115060 and 115061, Health and Safety Code.

HISTORY

1. New section filed 9-4-2012; operative 10-4-2012 (Register 2012, No. 36).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30311.1, 17 CA ADC § 30311.1

30312. Therapeutic X-Ray Installations.

17 CA ADC § 30312BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS
Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30312

§ 30312. Therapeutic X-Ray Installations.

(a) Equipment.
(1) The tube housing shall be of therapeutic type.
(2) For equipment installed on or before August 1, 1979, permanent diaphragms or cones used for collimating the useful beam shall afford the same degree of protection as the housing. Adjustable or removable beam-defining diaphragms or cones shall transmit not more than 5 percent of the useful beam obtained at the maximum kilovoltage and with maximum treatment filter.
(3) For equipment installed after August 1, 1979, permanent beam-defining devices or diaphragms shall afford the same degree of protection as the housing. Adjustable or interchangeable beam-defining devices shall transmit no more than 2 percent of the useful beam for the portion of the useful beam which is to be attenuated by the beam limiting device. Measurements shall be averaged over an area up to but not exceeding 100 square centimeters at the normal treatment distance.
(4) Filters shall be secured in place to prevent them from dropping out during treatment. A filter indication system shall be used on all therapy machines using interchangeable filters. It shall indicate, from the control panel, or from the control station, the presence or absence of any filter except

compensating filters, and it shall be designed to permit easy identification of the filter in place. The filter slot shall be so constructed that the radiation escaping through it does not exceed 1 roentgen per hour at 1 meter, or, if the patient is likely to be exposed to radiation escaping from the slot, 30 roentgens per hour at 5 centimeters from the external opening. Each interchangeable filter shall be marked with its thickness and material.
(5) The X-ray tube shall be so mounted that it cannot turn or slide with respect to the aperture.
(6) Means shall be provided to immobilize the tube housing during stationary portal treatment.
(7) A suitable exposure control device such as an automatic timer, exposure meter, or dose meter shall be provided to terminate the exposure after a preset time interval or preset exposure or dose limit. A timer shall be provided to terminate the exposure after a preset time regardless of what other exposure limiting devices are present. Means shall be provided for the operator to terminate the exposure at any time.
(8) Equipment utilizing shutters to control the useful beam shall have a shutter position indicator on the control.
(9) An easily discernible indicator which shows whether or not X-rays are being produced shall be on the control panel.
(10) Mechanical and/or electrical stops shall be provided on X-ray machines capable of operating at 150 kVp or above to insure that the useful beam is oriented only toward primary barriers.
(11) When the relationship between the beam interceptor (when present) and the useful beam is not permanently fixed, mechanical or electrical stops shall be provided to insure that the beam is oriented only toward primary barriers.
(b) Operating Procedures.
(1) When a patient must be held in position for radiation therapy, mechanical supporting or restraining devices shall be used.
(2) No patient other than the one being treated shall be in the treatment room during exposure.
(3) No person other than the patient shall be in the treatment room when the tube is operated at potentials exceeding 150 kVp. At operating potentials of 150 kVp or below, persons other than the patient and operator may be in the treatment room for good reason but only if they are adequately protected and their radiation exposure is appropriately monitored.
(4) A calibration of the output of each radiation therapy system shall be performed before the system is first used for irradiation of a patient, and thereafter at intervals not to exceed 24 months. Therapy equipment shall not be used for any therapy treatments except at those combinations of effective energy, field size, and treatment distance for which the equipment has been calibrated. The calibration shall be performed by or under the direct supervision of a person who has been determined by the Department to have adequate training, experience and knowledge in radiation therapy physics, and who shall be present at the facility during such calibration. After any change which might significantly alter the output, spatial distribution, or other characteristics of the therapy beam, the parameters which might be affected shall be measured.
(A) For therapy systems operating at potentials above 500 kVp, the determinations included in the calibration shall be provided in sufficient detail so that the absorbed dose in tissue in the useful beam may be calculated to within 5 percent. The calibration shall include, but shall not be limited to, the following determinations:
1. Verification that the equipment is operating in compliance with the design specifications concerning the light localizer, the side light and back-pointer alignment with the isocenter when these specifications are known and applicable, variation in the axis of rotation for the table, gantry and jaw system, and beam flatness and symmetry at specified depths.
2. The relative dose at various depths in a tissue equivalent phantom for each effective energy and the ranges of field sizes and treatment distances used for radiation therapy.
3. The congruence between the radiation field and the field indicated by the localizing device.
4. The uniformity of the radiation field and its dependency upon the direction of the useful beam.

5. The absolute dose per unit time and dose per monitor setting.
(B) For therapy systems operating at potentials between 150 kVp and 500 kVp inclusive, the calibration shall include, but shall not be limited to, the following determinations:
1. The exposure rates and/or dose rates for each combination of field size, technique factors, filter, and treatment distance used.
2. The degree of congruence between the radiation field and the field indicated by the localizing device if such device is present.
3. An evaluation of the uniformity of the radiation field symmetry for the field sizes used, and any dependence upon tube housing assembly orientation.
(5) All new installations and existing installations not previously surveyed shall have a radiation protection survey performed by or under the direction of a person determined by the Department to have adequate knowledge and training to advise regarding radiation protection needs, to measure ionizing radiation and to evaluate safety techniques. If the survey shows that supplementary shielding is required a resurvey shall be performed after its installation. In addition, a resurvey shall be made after every change which might decrease radiation protection significantly. The surveyor shall report his findings in writing to the user. The report shall indicate whether or not the installation is in compliance with all applicable radiation protection requirements of this section. The user shall report the findings of the survey in writing to the Department within 15 days of his receipt of the survey report.
(6) The exposure rate or dose rate of the useful beam and the size and shape of the useful beam shall be known with reasonable certainty at all times during operation of the radiation therapy apparatus for medical purposes.
(7) Spot checks shall be performed at least once each week for therapy systems operating at potentials above 500 kVp, and at least once each month for therapy systems operating at 500 kVp or below.
(A) The measurements taken during spot checks shall demonstrate the degree of consistency of the operating characteristics which can affect the radiation output of the system or the radiation delivered to a patient during a therapy procedure.
(B) For systems in which the calibrating person believes beam quality can vary significantly, spot checks shall include beam quality checks.
(C) The spot check procedures shall be in writing and shall have been developed or approved by the individual who made the most recent calibration of the system pursuant to Section 30312(b)(4). The written spot check procedures shall specify when measurements and determinations indicate an inconsistency or potential change in radiation output. When more than the minimum frequency of spot checking is necessary, the spot check procedures shall specify the frequency at which spot checks are to be performed.
(D) When spot check results are erratic or inconsistent with calibration data, the person who designed the spot check procedures, or a person of equivalent competence, shall be consulted immediately and the reason(s) for the inconsistency corrected before the system is used for patient irradiation.
(8) Calibration of the therapy beam shall be performed with a measurement instrument which has been calibrated within the preceding two years directly, or through no more than one exchange, at the National Institute of Standards and Technology, or facility determined acceptable by the Department. In addition, indirect spot checks or intercomparisons of measurement instruments with secondary standards shall be made at least each six months.
(9) Reports of each radiation safety survey spot check and calibration performed pursuant to this section shall be maintained at the facility for at least three years. A copy of the treatment data developed from the latest calibration shall be available for use by the operator at the treatment control station.
Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

HISTORY

1. Renumbering and amendment filed 9-4-73 as an emergency; effective upon filing (Register 73, No. 36). Approved by State Building Standards Commission 11-30-73.
2. Certificate of Compliance filed 12-28-73 (Register 73, No. 52).
3. Amendment of subsection (c)(5) filed 12-12-75; effective thirtieth day thereafter (Register 75, No. 50).
4. Amendment filed 6-24-80; effective thirtieth day thereafter (Register 80, No. 26).
5. Amendment filed 6-18-87; operative 7-18-87 (Register 87, No. 28).
6. Change without regulatory effect amending subsection (b)(7)(C) and (b)(8) filed 11-1-91 pursuant to section 100, title 1, California Code of Regulations (Register 92, No. 5).

This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30312, 17 CA ADC § 30312

30313. Special Requirements for X-Ray Therapy Equipment Operated at Potentials of 50 kV and B...

17 CA ADC § 30313BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

Barclays Official California Code of Regulations Currentness
Title 17. Public Health
Division 1. State Department of Health Services
Chapter 5. Sanitation (Environmental)
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts (Refs & Annos)

17 CCR § 30313

§ 30313. Special Requirements for X-Ray Therapy Equipment Operated at Potentials of 50 kV and Below.

(a) Equipment.
(1) All provisions of Section 30312(a) apply.
(2) A therapeutic-type protective tube housing shall be used. Contact therapy machines shall meet the additional requirement that the leakage radiation at 2 inches from the surface of the housing not exceed 0.1 R/hr.
(3) Automatic timers shall be provided which will permit accurate presetting and determination of exposures as short as one second.
(b) Operating Procedures.
(1) All provisions of Section 30312(b) apply except 30312(b)(1) and 30312(b)(7).
(2) In the therapeutic application of apparatus constructed with beryllium or other low-filtration windows adequate shielding shall be required to protect against unnecessary exposure from the useful beam, and special safeguards are essential to avoid accidental exposures to the useful beam. There shall be on the control panel some easily discernible device which will give positive information as to whether or not the tube is energized.
(3) Machines having an output of more than 1,000 roentgens per minute at any accessible place shall not be left unattended without the power being shut off at the primary disconnecting source.
(4) If the X-ray tube of a contact therapy machine is hand-held during irradiation, the operator shall wear protective gloves and apron.
Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

HISTORY

1. Amendment filed 3-5-71; effective thirtieth day thereafter. Approved by State Building Standards Commission 2-26-71 (Register 71, No. 10).
2. Renumbering and amendment filed 9-4-73 as an emergency; effective upon filing (Register 73, No. 36). Approved by State Building Standards Commission 11-30-73.
3. Certificate of Compliance filed 12-28-73 (Register 73, No. 52).
4. Amendment of subsections (a)(1), (b)(1) and (b)(4) filed 6-18-87; operative 7-18-87 (Register 87, No. 28).
5. Change without regulatory effect amending subsection (b)(3) filed 11-1-91 pursuant to section 100, title 1, California Code of Regulations (Register 92, No. 5).
6. Amendment of section heading filed 3-3-94 as an emergency; operative 3-3-94 (Register 94, No. 9). A Certificate of Compliance must be transmitted to OAL by 7-1-94 or emergency language will be repealed by operation of law on the following day.
7. Certificate of Compliance as to 3-3-94 order transmitted to OAL 6-7-94 and filed 7-14-94 (Register 94, No. 28).
This database is current through 2/16/18 Register 2018, No. 7
17 CCR § 30313, 17 CA ADC § 30313

30314. Veterinary Medicine Radiographic Installations.

17 CCR § 30314

§ 30314. Veterinary Medicine Radiographic Installations.

(a) Equipment.
(1) The tube housing shall be of diagnostic type.
(2) Diaphragms or cones shall be provided for collimating the useful beam to the area of clinical interest and shall provide the same degree of protection as is required of the housing.
(3) The total filtration permanently in the useful beam shall not be less than 1.5 millimeters aluminum-equivalent for equipment operating up to 70 kvp and 2.0 millimeters aluminum-equivalent for machines operated in excess of 70 kvp.
(4) A device shall be provided to terminate the exposure after a pre-set time or exposure.
(5) A dead-man type of exposure switch shall be provided, together with an electrical cord of sufficient length so that the operator can stand out of the useful beam and at least 6 feet from the animal during all X-ray exposures.
(b) Operating Procedures.
(1) The operator shall stand well away from the tube housing and the animal during radiographic exposures. The operator shall not stand in the useful beam. If film must be held, it shall be held by individuals not occupationally exposed to radiation. Hand-held fluoroscopic screens shall not be used. The tube housing shall not be held by the operator. No individuals other than the operator shall be in the X-ray room while exposures are being made unless such person's assistance is required.
(2) In any application in which the operator is not located behind a protective barrier, clothing consisting of a protective apron having a lead-equivalent of not less than 0.25 millimeter shall be worn by the operator and any other individuals in the room during exposures.

(3) No individual shall be regularly employed to hold or support animals during radiation exposures. Operating personnel shall not perform this service except very infrequently and then only in cases in which no other method is available. Any individual holding or supporting an animal during radiation exposure shall wear protective gloves and apron having a lead-equivalent of not less than 0.25 millimeter.

Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

HISTORY

1. Amendment filed 3-5-71; effective thirtieth day thereafter. Approved by State Building Standards Commission 2-26-71. (Register 71, No. 10).
2. Renumbering filed 9-4-73 as an emergency; effective upon filing (Register 73, No. 36). Approved by State Building Standards Commission 11-30-73.
3. Certificate of Compliance filed 12-28-73 (Register 73, No. 52).
4. Amendment filed 6-18-87; operative 7-18-87 (Register 87, No. 28).