



## **2020 REVISION SUMMARY** **TITLE 180 – CONTROL OF RADIATION**

- 180 NAC 1     General Provisions  
The changes remove duplicative statutory language from the regulations and update formatting.
- 180 NAC 2     Registration of Radiation Generating Equipment Facilities and Services  
The changes remove duplicative statutory language from the regulations and update formatting.
- 180 NAC 3     Licensing of Radioactive Material  
The changes include:
- A reference to the Radiation Control Act regarding deliberate misconduct was added.
  - A record retention requirement regarding records of transfer of radioactive material was changed from “until the Department authorizes their disposition” to “until license termination”.
  - Licensees must report to the Department the results of any test that exceeds the permissible concentration listed for radionuclide contaminants in radioactive drugs at the time of radionuclide generator elution.
  - Editorial: removal of typographical errors, incorrect references, and update formatting
- 180 NAC 4     Standards for Protection from Radiation  
The changes remove typographical errors from the regulations and update formatting.
- 180 NAC 5     Radiation Safety Requirements for Industrial Radiographic Operations Compatibility  
The changes remove the requirement that vehicles used to transport radioactive material or radiation machines for use at temporary job sites prominently display on both sides of the vehicle the city or town where the main business office is located, duplicative statutory language from the regulations, and update formatting.
- 180 NAC 6     Diagnostic X-Rays in the Healing Arts  
The changes remove duplicative statutory language from the regulations and update formatting. Other changes include:
- The requirements regarding the use of dental radiation generating equipment were placed in Chapter 6, since the chapter of the regulations specific to dental intraoral, cephalometric and panoramic equipment is to be deleted. Additionally, the requirements outlining the radiation safety attributes that hand-held dental intraoral equipment must have was added. Currently, only specific brands and models of hand-held equipment have been approved for use. By specifying the

safety attributes that must be in place, users can choose any brand or model of hand-held equipment that has those safety attributes.

- An addition of requirements specific to cone beam computed tomography equipment. Currently, users of that equipment must comply with the requirements that are applicable to all types of computed tomography equipment. The radiation output of cone beam computed tomography equipment is less than traditional types of computed tomography equipment, so the requirements specific to those units are less stringent.
- A provision allowing radiation exposure for research purposes provided that the research is approved by an institutional review board and is conducted under federal regulations for the protection of human subject in research.

#### 180 NAC 7 Medical Use of Radioactive Material

The changes remove duplicative statutory language from the regulations and update formatting. Other changes include:

- Separate misadministration definitions and reporting requirements for permanent implant brachytherapy were established.
- The definition of an ophthalmic physicist was added.
- The requirement to obtain a written attestation for an individual who is certified by a specialty board whose certification process has been recognized by the NRC or an Agreement State was removed.
- Certification boards recognized under chapter 7 prior to 2009 would again be recognized. Individuals practicing prior to 2009 as radiation safety officers, teletherapy or medical physicists, authorized medical physicists, authorized users, nuclear pharmacists, and authorized nuclear pharmacists could be added to a license for the modalities that they practiced, if they were certified by one of those previously recognized boards. Since 2009 these individuals have had to qualify by demonstrating their training and experience rather than being recognized for their board certification.
- The requirements for measuring molybdenum contamination were amended.
- A new requirement for the reporting of failed technetium and rubidium generators was added.
- Licensees will be allowed to appoint a qualified individual with expertise in certain uses of radioactive material to be named on a license to serve as an assistant radiation safety officer.
- Licensees will be allowed to use either the Department form or equivalent to submit applications or amendments.

#### 180 NAC 8 Radiation Safety Requirements for Non-Healing Arts Radiation Generating Devices

The changes remove typographical errors from the regulations and update formatting.

Other changes include:

- The name of the chapter was changed from “Radiation Safety Requirements for Analytical X-Ray equipment” to “Radiation Safety Requirements for Non-Healing Arts Radiation Generating Devices” to more accurately reflect what types of equipment and uses are covered by this chapter.
- Regulations governing the use of cabinet x-ray systems were moved from 180 NAC 5 (Industrial Radiography) to this chapter as the majority of the requirements in chapter 5 were not applicable to these devices.

- Interlock testing frequency for cabinet x-ray systems was reduced from 6 months to 12 months.
- All requirements for devices that use radioactive material as the source of radiation were removed from this chapter.
- Open-beam hand-held radiation generating device safety requirements were added to this chapter. Previously, these types of devices were only allowed after getting Department approval.
- General safety requirements governing the use of fluoroscopes used in shielded rooms, bomb detection devices, x-ray gauges, irradiators and electron beam welders were added to this chapter. Previously there were not specific regulations regarding the safe use of these types of devices and registrants were confused about what regulations applied.

- 180 NAC 9     Radiation Safety Requirements for Non-Human Use Particle Accelerators  
The changes remove duplicative statutory language from the regulations and update formatting.
- 180 NAC 10    Notices, Instructions and Reports to Workers: Inspections  
The changes remove duplicative statutory language from the regulations and update formatting.
- 180 NAC 12    Licensing Requirements for Management of Radioactive Waste  
These regulations have been REPEALED in their entirety as they are unnecessary due to there being no current or planned low level radioactive waste facilities in Nebraska.
- 180 NAC 13    Transportation of Radioactive Material  
The changes remove duplicative statutory language from the regulations, correct typographical errors and incorrect references, and update formatting. 180 NAC 13-007.03(B) was changed to specify what U.S. Nuclear Regulatory Commission requirements need to be met for certain shipments, such as those containing fissile material.
- 180 NAC 14    Radiation Safety Requirements for Well Logging and Subsurface Tractor Studies  
The changes remove duplicative statutory language from the regulations and update formatting.
- 180 NAC 15    Training and Experience Requirements for Use of Radiation Sources  
The changes remove duplicative statutory language from the regulations and update formatting. Training requirements for persons installing or repairing radiation generating equipment have been modified to make it easier for those individuals to demonstrate that they meet the requirements
- 180 NAC 16    Licensure of Persons Performing Medical Radiography  
Deletion of Chapter 16 is proposed as the practice of medical radiography is now regulated under the Uniform Credentialing Act and regulations are being developed under Title 172.
- 180 NAC 17    Enforcement of Radiation Control Act and Rights to Hearing Procedures for Licensees and Registrants; Penalties

These regulations have been REPEALED in their entirety they are duplicative of statutory language contained in the Radiation Control Act and the Administrative Procedures Act and are unnecessary.

180 NAC 18 Fees for Certificates of Registration, Radioactive Material Licenses, Environmental Surveillance, Emergency Response and Other Regulatory Services  
Additional updates will be coming in the future on this site.

180 NAC 19 Licenses and Radiation Safety Requirements for Irradiators  
The changes remove duplicative statutory language and unnecessary language from the regulations and update formatting.

180 NAC 20 Therapeutic Radiation Machines for Human Use  
The changes remove unnecessary language from the regulations and update formatting. In addition, the regulations remove unnecessary requirements:

- Several unnecessary definitions were removed.
- The requirement that the Department review and approve of an external beam radiation therapy user's training prior to being allowed to work was removed from 180 NAC 20-003.03(2)(d) and (e). The qualifications of the user will be reviewed on inspection.
- The requirements for a visiting authorized user were removed from 180 NAC 20-003.11, as they must meet the same requirements as a permanent user.
- The requirement to report to the Department the results of external beam radiation therapy surveys and measurements within 30 days of their completion was removed from 180 NAC 20-004.04. The results of the surveys and measurements will be reviewed on inspection.
- The requirement that users of therapeutic radiation machines of less than 500 kV possess a survey instrument has been removed from 180 NAC 20-006.018G as it is unnecessary.
- The requirement that registrants notify the equipment manufacturer if a patient has a medical emergency, suffers injury or dies has been removed from 180 NAC 20-011.08I. This is covered by U.S. Food and Drug Administration regulations.

180 NAC 21 Dental Radiographic Equipment  
These regulations have been REPEALED in their entirety as the regulations are unnecessary as they repeat requirements from other chapters.

180 NAC 22 Shipping of High Level Radioactive or Transuranic Waste  
The changes remove duplicative statutory language and unnecessary language from the regulations and update formatting.

180 NAC 23 Fluoroscopic Education and Training for Certified Registered Nurse Anesthetists  
The changes remove duplicative statutory language and unnecessary language from the regulations and update formatting.

180 NAC 24 Physical Protection of Radioactive Material  
The changes correct any typographical errors and update formatting.