§ 20.1302 Compliance with dose limits for individual members of the public.

(a) The licensee shall make or cause to be made, as appropriate, surveys of radiation levels in unrestricted and controlled areas and radioactive materials in effluents released to unrestricted and controlled areas to demonstrate compliance with the dose limits for individual members of the public in §20.1301.

(b) A licensee shall show compliance with the annual dose limit in §20.1301 by—

(1) Demonstrating by measurement or calculation that the total effective dose equivalent to the individual likely to receive the highest dose from licensed operation does not exceed the annual dose limit; or

(2) Demonstrating that—

(i) The annual average concentrations of radioactive material released in gaseous and liquid effluents at the boundary of the unrestricted area do not exceed the values specified in table 2 of appendix B to part 20; and

(ii) If an individual were continuously present in an unrestricted area, the dose from external sources would not exceed 0.002 rem (0.02 mSv) in an hour and 0.05 rem (0.5 mSv) in a year.

(c) Upon approval from the Commission, the licensee may adjust the effluent concentration values in appendix B to part 20, table 2, for members of the public, to take into account the actual physical and chemical characteristics of the effluents (e.g., aerosol size distribution, solubility, density, radioactive decay equilibrium, chemical form).


Subpart E—Radiological Criteria for License Termination

SOURCE: 62 FR 39088, July 21, 1997, unless otherwise noted.

§ 20.1401 General provisions and scope.

(a) The criteria in this subpart apply to the decommissioning of facilities licensed under parts 30, 40, 50, 60, 61, 70, and 72 of this chapter, as well as other facilities subject to the Commission’s jurisdiction under the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended. For high-level and low-level waste disposal facilities (10 CFR parts 60 and 61), the criteria apply only to ancillary surface facilities that support radioactive waste disposal activities. The criteria do not apply to uranium and thorium recovery facilities already subject to appendix A to 10 CFR part 40 or to uranium solution extraction facilities.

(b) The criteria in this subpart do not apply to sites which:

(1) Have been decommissioned prior to the effective date of the rule in accordance with criteria identified in the Site Decommissioning Management Plan (SDMP) Action Plan of April 16, 1992 (57 FR 13389);

(2) Have previously submitted and received Commission approval on a license termination plan (LTP) or decommissioning plan that is compatible with the SDMP Action Plan criteria; or

(3) Submit a sufficient LTP or decommissioning plan before August 20, 1998 and such LTP or decommissioning plan is approved by the Commission before August 20, 1999 and in accordance with the criteria identified in the SDMP Action Plan, except that if an EIS is required in the submittal, there will be a provision for day-for-day extension.

(c) After a site has been decommissioned and the license terminated in accordance with the criteria in this subpart, the Commission will require additional cleanup only if based on new information, it determines that the criteria of this subpart were not met and residual activity remaining at the site could result in significant threat to public health and safety.

(d) When calculating TEDE to the average member of the critical group the licensee shall determine the peak annual TEDE dose expected within the first 1000 years after decommissioning.

§ 20.1402 Radiological criteria for unrestricted use.

A site will be considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from
background radiation results in a
TEDE to an average member of the
critical group that does not exceed 25
mrem (0.25 mSv) per year, including
that from groundwater sources of
drinking water, and that the residual
radioactivity has been reduced to lev-
els that are as low as reasonably
achievable (ALARA). Determination
of the levels which are ALARA must take
into account consideration of any det-
riments, such as deaths from transpor-
tation accidents, expected to poten-
tially result from decontamination and
waste disposal.

§ 20.1403 Criteria for license termi-
nation under restricted conditions.

A site will be considered acceptable
for license termination under re-
stricted conditions if:
(a) The licensee can demonstrate
that further reductions in residual ra-
dioactivity necessary to comply with
the provisions of §20.1402 would result
in net public or environmental harm or
were not being made because the resid-
ual levels associated with restricted
conditions are ALARA. Determination
of the levels which are ALARA must take
into account consideration of any det-
riments, such as traffic accidents,
expected to potentially result from de-
contamination and waste disposal;
(b) The licensee has made provisions
for legally enforceable institutional
controls that provide reasonable assur-
ance that the TEDE from residual ra-
dioactivity distinguishable from
background to the average member of
the critical group will not exceed 25
mrem (0.25 mSv) per year;
(c) The licensee has provided suffi-
cient financial assurance to enable an
independent third party, including a
governmental custodian of a site, to as-
sume and carry out responsibilities for
any necessary control and maintenance
of the site. Acceptable financial assur-
ance mechanisms are—
(1) Funds placed into an account seg-
regated from the licensee's assets and
outside the licensee's administrative
control as described in §30.35(f)(1) of
this chapter;
(2) Surety method, insurance, or
other guarantee method as described in
§30.35(f)(2) of this chapter;
(3) A statement of intent in the case
of Federal, State, or local Government
licensees, as described in §30.35(f)(4) of
this chapter; or
(4) When a government entity is as-
suming custody and ownership of a
site, an arrangement that is deemed
acceptable by such governmental enti-
ty.
(d) The licensee has submitted a de-
commissioning plan or License Termi-
nation Plan (LTP) to the Commission
indicating the licensee's intent to de-
commission in accordance with
§§30.36(d), 40.42(d), 50.82 (a) and (b),
70.38(d), or 72.54 of this chapter, and
specifying that the licensee intends to
decommission by restricting use of the
site. The licensee shall document in
the LTP or decommissioning plan how
the advice of individuals and institu-
tions in the community who may be af-
fected by the decommissioning has
been sought and incorporated, as ap-
propriate, following analysis of that
advice.
(1) Licensees proposing to decommis-
sion by restricting use of the site shall
seek advice from such affected parties
regarding the following matters con-
cerning the proposed decommis-
sioning—
(i) Whether provisions for institu-
tional controls proposed by the li-
censee:
(A) Will provide reasonable assurance
that the TEDE from residual radioac-
tivity distinguishable from background
to the average member of the critical
group will not exceed 25 mrem (0.25
mSv) TEDE per year;
(B) Will be enforceable; and
(C) Will not impose undue burdens on
the local community or other affected
parties.
(ii) Whether the licensee has provided
sufficient financial assurance to enable an
independent third party, including a
governmental custodian of a site, to as-
sume and carry out responsibilities for
any necessary control and maintenance
of the site;
(2) In seeking advice on the issues
identified in §20.1403(d)(1), the licensee
shall provide for:
(i) Participation by representatives of
a broad cross section of community in-
terests who may be affected by the de-
commissioning;
§ 20.1404 Alternate criteria for license termination.

(a) The Commission may terminate a license using alternate criteria greater than the dose criterion of §§20.1402, 20.1403(b), and 20.1403(d)(1)(i)(A), if the licensee—

(1) Provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man-made sources combined, other than medical, would be more than the 1 mSv/y (100 mrem/y) limit of subpart D, by submitting an analysis of possible sources of exposure; 

(2) Has employed to the extent practicable restrictions on site use according to the provisions of §20.1403 in minimizing exposures at the site; and

(3) Reduces doses to ALARA levels, taking into consideration any detriments such as traffic accidents expected to potentially result from decontamination and waste disposal.

(4) Has submitted a decommissioning plan or License Termination Plan (LTP) to the Commission indicating the licensee's intent to decommission in accordance with §§30.36(d), 40.42(d), 50.82 (a) and (b), 70.38(d), or 72.54 of this chapter, and specifying that the licensee proposes to decommission by use of alternate criteria. The licensee shall document in the decommissioning plan or LTP how the advice of individuals and institutions in the community who may be affected by the decommissioning has been sought and addressed, as appropriate, following analysis of that advice. In seeking such advice, the licensee shall provide for:

(i) Participation by representatives of a broad cross section of community interests who may be affected by the decommissioning;

(ii) An opportunity for a comprehensive, collective discussion on the issues by the participants represented; and

(iii) A publicly available summary of the results of all such discussions, including a description of the individual viewpoints of the participants on the issues and the extent of agreement or disagreement among the participants on the issues;

(b) The use of alternate criteria to terminate a license requires the approval of the Commission after consideration of the NRC staff's recommendations that will address any comments provided by the Environmental Protection Agency and any public comments submitted pursuant to §20.1405.

§ 20.1405 Public notification and public participation.

Upon the receipt of an LTP or decommissioning plan from the licensee, or a proposal by the licensee for release of a site pursuant to §§20.1403 or 20.1404, or
whenever the Commission deems such notice to be in the public interest, the Commission shall:

(a) Notify and solicit comments from:
(1) Local and State governments in the vicinity of the site and any Indian Nation or other indigenous people that have treaty or statutory rights that could be affected by the decommissioning; and
(2) The Environmental Protection Agency for cases where the licensee proposes to release a site pursuant to §20.1404.

(b) Publish a notice in the Federal Register and in a forum, such as local newspapers, letters to State of local organizations, or other appropriate forum, that is readily accessible to individuals in the vicinity of the site, and solicit comments from affected parties.

§ 20.1406 Minimization of contamination.

Applicants for licenses, other than renewals, after August 20, 1997, shall describe in the application how facility design and procedures for operation will minimize, to the extent practicable, contamination of the facility and the environment, facilitate eventual decommissioning, and minimize, to the extent practicable, the generation of radioactive waste.

§ 20.1502 Conditions requiring individual monitoring of external and internal occupational dose.

Each licensee shall monitor exposures to radiation and radioactive material at levels sufficient to demonstrate compliance with the occupational dose limits of this part. As a minimum—

(a) Each licensee shall monitor occupational exposure to radiation from licensed and unlicensed radiation sources under the control of the licensee and shall supply and require the use of individual monitoring devices by—

(1) Adults likely to receive, in 1 year from sources external to the body, a dose in excess of 10 percent of the limits in §20.1201(a),

(2) Minors likely to receive, in 1 year, from radiation sources external to the body, a deep dose equivalent in excess of 0.1 rem (1 mSv), a lens dose equivalent in excess of 0.15 rem (1.5 mSv), or a shallow dose equivalent to the skin or to the extremities in excess of 0.5 rem (5 mSv);