

Chapter H 57

RADIATION PROTECTION CODE

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H 57.01 Public policy. Since ionizing radiations and their sources can be instrumental in the improvement of the health and welfare of the public if properly utilized, and may be destructive or detrimental to life or health if carelessly or excessively employed or may detrimentally affect the environment of the state if improperly utilized, it is hereby declared to be the public policy of this state to encourage the constructive uses of radiation and to prohibit and prevent exposure to ionizing radiation in amounts which are or may be detrimental to health. The rules adopted in the interest of radiation safety, in general, conform to nationally accepted standards.

History: Cr. Register, January, 1966, No. 121, eff. 2-1-66.

H 57.02 Definitions. (1) **ABSORBED DOSE.** Energy imparted to matter by ionizing particles per unit mass of irradiated material at the place of interest. The unit of absorbed dose is the rad.

(2) **ACTIVITY.** The number of atoms decaying per unit of time.

(3) **ALUMINUM EQUIVALENT.** The thickness of aluminum affording the same attenuation, under specified conditions, as the material in question.

(4) **ADDED FILTER.** Filter added to the inherent filtration.

(5) **ATTENUATION.** Decrease in exposure rate of radiation caused by passage through material.

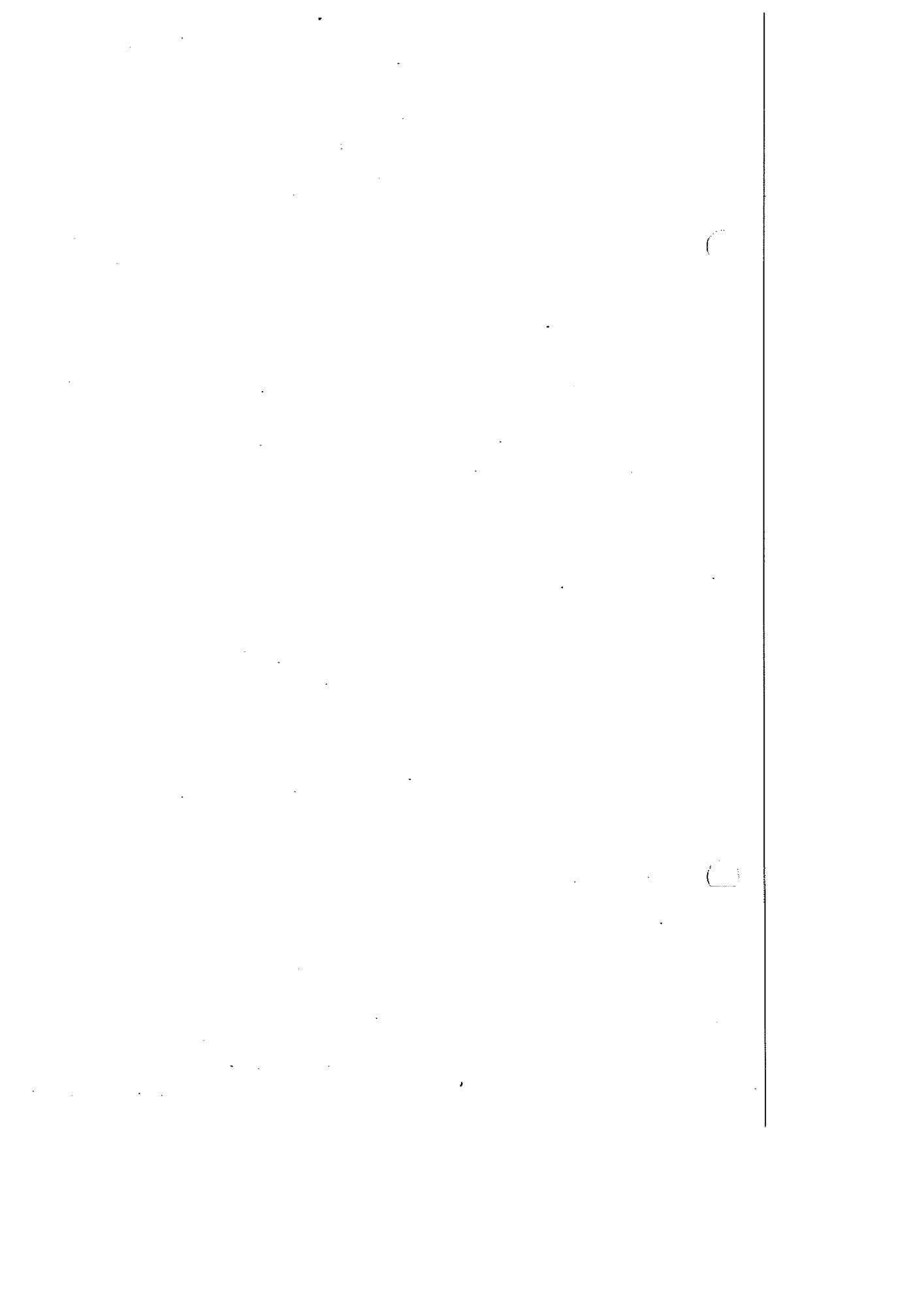
(6) **BARRIER.** See *protective barrier*.

- (7) **BOARD.** The state board of health.
- (8) **BYPRODUCT MATERIAL.** Any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material.
- (9) **COMMISSION.** The industrial commission.
- (10) **CONCRETE EQUIVALENT.** The thickness of concrete based on a density of 2.35 grams per cubic centimeter (147 pounds per cubic foot) affording the same attenuation, under specified conditions, as the material in question.
- (11) **CONSTANT POTENTIAL (cp).** In radiological practice, this term is applied to a unidirectional potential (or voltage) which has little, or no, periodic variation. The periodic component is called the ripple potential (or ripple voltage).
- (12) **CONTROLLED AREA.** A defined area in which the occupational exposure of personnel to radiation or to radioactive material is under the supervision of an individual in charge of radiation protection. (This implies that a controlled area is one that requires control of access, occupancy, and working conditions for radiation protection purposes.)
- (13) **CURIE (c).** A unit of activity defined as the activity of a quantity of any radioactive nuclide in which the number of disintegrations per second is 3.700×10^{10} .
- (a) *Millicurie* is 1/1000 of a curie.
- (b) *Microcurie* is 1/1,000,000 of a curie.
- (14) **DEADMAN SWITCH.** A switch so constructed that a circuit closing contact can only be maintained by continuous pressure by the operator.
- (15) **DIAGNOSTIC-TYPE PROTECTIVE TUBE HOUSING.** A shockproof x-ray tube housing so constructed that the leakage radiation at a distance of 1 meter from the target cannot exceed 100 milliroentgens in 1 hour when the tube is operated at any of its specified ratings.
- (16) **DOSE EQUIVALENT (DE).** Dose equivalent is the product of absorbed dose D, quality factor (QF), dose distribution factor (DF), and other necessary modifying factors. $(DE) = D (QF) (DF)$.
- Note:** The term RBE dose has been used in the past, in both radiobiology and radiation protection. This term is now reserved for radiobiology only and is replaced by dose equivalent (DE) for radiation protection.
- (a) **Quality factor (QF).** The linear-energy-transfer-dependent factor by which absorbed doses are to be multiplied to obtain for radiation protection purposes, a quantity that expresses on a common scale for all ionizing radiations, the irradiation incurred by exposed persons.
- (b) **Dose distribution factor. (DF).** The factor used to express the modification of biological effect due to nonuniform distribution of internally deposited isotopes.
- (17) **EXPOSURE DOSE.** The exposure dose of X- or gamma radiation of a certain place is a measure of the radiation that is based upon its ability to produce ionization. The unit of exposure dose is the roentgen. (When the meaning is clear, this term may be shortened to "exposure".)

(18) **EXPOSURE DOSE RATE** (exposure rate, intensity). Exposure dose per unit time.

(19) **FILM BADGE**. A pack of appropriate photographic film and filters used to determine radiation exposure.

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STANDARDS FOR PROTECTION AGAINST RADIATION
APPENDIX DConcentrations in Air and Water Above Natural Background
(See notes at end of appendix)

Element (atomic number)	Isotope ¹	Table I		Table II	
		Column 1	Column 2	Column 1	Column 2
		Air (uc/ml)	Water (uc/ml)	Air (uc/ml)	Water (uc/ml)
mode other than alpha emission or spontaneous fission and with radioactive half-life less than 2 hours.....	Sub	1×10^{-4}		3×10^{-5}	
Any single radionuclide not listed above with decay mode other than alpha emission or spontaneous fission and with radioactive half-life greater than 2 hours.....		3×10^{-5}	9×10^{-5}	1×10^{-8}	3×10^{-5}
Any single radionuclide not listed above, which decays by alpha emission or spontaneous fission.....		6×10^{-9}	4×10^{-7}	2×10^{-11}	3×10^3

¹Soluble (S); Insoluble (I).²"Sub" means that values given are for submersion in a semispherical infinite cloud of airborne material.

NOTE: In any case where there is a mixture in air or water of more than one radionuclide, the limiting values for purposes of this Appendix should be determined as follows:

1. If the identity and concentration of each radionuclide in the mixture are known, the limiting values should be derived as follows: Determine, for each radionuclide in the mixture, the ratio between the quantity present in the mixture and the limit otherwise established in Appendix D for the specific radionuclide when not in a mixture. The sum of such ratios for all the radionuclides in the mixture may not exceed "1" (i.e., "unity").

EXAMPLE: If radionuclides A, B, and C are present in concentrations C_A , C_B , and C_C , and if the applicable MPC's, are MPC_A , and MPC_B , and MPC_C respectively, then the concentrations shall be limited so that the following relationship exists:

$$\frac{C_A}{MPC_A} + \frac{C_B}{MPC_B} + \frac{C_C}{MPC_C} = 1$$

2. If either the identity or the concentration of any radionuclide in the mixture is not known, the limiting values for purposes of Appendix D shall be:

- For purposes of Table I, Col. 1— 6×10^{-9}
- For purposes of Table I, Col. 2— 4×10^{-7}
- For purposes of Table II, Col. 1— 2×10^{-11}
- For purposes of Table II, Col. 2— 3×10^{-5}

3. If any of the conditions specified below are met, the corresponding values specified below may be used in lieu of those specified in paragraph 2 above.

a. If the identity of each radionuclide in the mixture is known but the concentration of one or more of the radionuclides in the mixture is not known, the concentration limit for the mixture is the limit specified in Appendix D for the radionuclide in the mixture having the lowest concentration limit; or

b. If the identity of each radionuclide in the mixture is not known, but it is known that certain radionuclides specified in Appendix D are not present in the mixture, the concentration limit for the mixture is the lowest concentration limit specified in Appendix D for any radionuclide which is not known to be absent from the mixture; or

**STANDARDS FOR PROTECTION AGAINST RADIATION
APPENDIX D**

**Concentrations in Air and Water Above Natural Background
(See notes at end of appendix)**

c. Element (atomic number) and isotope	Table I		Table II	
	Column 1 Air (uc/ml)	Column 2 Water (uc/ml)	Column 1 Air (uc/ml)	Column 2 Water (uc/ml)
If it is known that Sr 90, I 125, I 126, I 129, I 131, (I 133, table II only), Pb 210, Po 210, At 211, Ra 223, Ra 224, Ra 226, Ac 227, Ra 228, Th 230, Pa 231, Th 232, Thnat, Cm 248, Cf 254, and Fm 256 are not present		9×10^{-5}		3×10^{-5}
If it is known that Sr 90, I 125, I 126, I 129, (I 131, I 133, table II only), Pb 210, Po 210, Ra 223, Ra 226, Ra 228, Pa 231, Thnat, Cm 248, Cf 254, and Fm 256 are not present		6×10^{-5}		2×10^{-5}
If it is known that Sr 90, I 129, (I 125, I 126, I 131, table II only), Pb 210, Ra 226, Ra 228, Cm 248, and Cf 254 are not present		2×10^{-5}		6×10^{-7}
If it is known that (I 129, table II only), Ra 226, and Ra 228 are not present		3×10^{-1}		1×10^{-7}
**If it is known that alpha-emitters and Sr 90, I 129, Pb 210, Ac 227, Ra 228, Pa 230, Pu 240, and Bk 249 are not present	3×10^{-9}		1×10^{-9}	
If it is known that alpha-emitters and Pb 210, Ac 227, Ra 228, and Pu 241 are not present	3×10^{-9}		1×10^{-11}	
If it is known that alpha-emitters and Ac 227 are not present	3×10^{-11}		1×10^{-12}	
If it is known that Ac 227, Th 230, Pa 231, Pu 238, Pu 239, Pu 240, Pu 242, Pu 244, Cm 248, Cf 249 and Cf 251 are not present	3×10^{-9}		1×10^{-9}	

**ERRATUM: This line should read: "210, Ac 227, Ra 228, Pa 230, Pu 241, and Bk 249 are not"

4. If the mixture of radionuclides consists of uranium and its daughter products in ore dust prior to chemical processing of the uranium ore, the values specified below may be used in lieu of those determined in accordance with paragraph 1 above or those specified in paragraphs 2 and 3 above.

a. For purposes of Table I, Col. 1— 1×10^{-9} uc/ml gross alpha activity; or 2.5×10^{-11} uc/ml natural uranium; or 76 micrograms per cubic meter of air natural uranium.

b. For purposes of Table II, Col. 1— 3×10^{-9} uc/ml gross alpha activity; or 8×10^{-9} uc/ml natural uranium; or 3 micrograms per cubic meter of air natural uranium.

5. For purposes of this note, a radionuclide may be considered as not present in a mixture if (a) the ratio of the concentration of that radionuclide in the mixture (CA) to the concentration limit for that radionuclide specified in Table II of Appendix D (MPCA) does not exceed 1/10,

(i.e. $\frac{CA}{MPCA} = 1$) and (b) the sum of such ratios for all the radionuclides considered as

not present in the mixture does not exceed $\frac{1}{10}$ i.e.

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$$\frac{C_A}{MPC_A} + \frac{C_B}{MPC_B} + \dots + W.$$

History: Cr. Register, September, 1971, No. 189, eff. 10-1-71.

H 57.16 Definitions as used in sections H 57.17 through H 57.28.

(1) "CONTAMINANT" means any physical, chemical, biological or radiological substance or matter in water.

(2) "MAXIMUM CONTAMINANT LEVEL" means the maximum permissible level of a contaminant in water which is delivered to the consumer service outlet of the ultimate user of a public water system, except in the case of turbidity where the maximum permissible level is measured at the point of entry to the distribution system. Contaminants added to the water under circumstances controlled by the user, except those resulting from corrosion of piping and plumbing caused by water quality, are excluded from this definition.

(3) "PERSON" means an individual, corporation, company, association, cooperative, trust, institution, partnership, state, municipality or federal agency.

(4) "PUBLIC WATER SYSTEM" means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such system includes:

(a) Any collection, treatment, storage and distribution facilities under control of the operator of such system and used primarily in connection with such system, and

(b) Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. A public water system is either a "community water system" or a "non-community water system."

1. "Community water system" means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

2. "Non-community water system" means a public water system that is not a community water system.

(5) "SUPPLIER OF WATER" means any person who owns or operates a public water system.

(6) "DOSE EQUIVALENT" means the product of the absorbed dose from ionizing radiation and such factors as account for differences in biological effectiveness due to the type of radiation and its distribution in the body as specified by the international commission on radiological units and measurements (ICRU).

(7) "REM" means the unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system. A millirem (mrem) is 1/1000 of a rem.

(8) "PICOCURIE" (pCi) means that quantity of radioactive material producing 2.22 nuclear transformations per minute.

(9) "GROSS ALPHA PARTICLE ACTIVITY" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

(10) "MAN-MADE BETA PARTICLE AND PHOTON EMITTERS" means all radionuclides emitting beta particles and/or photons listed in "Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," NBS Handbook 69, except the daughter products of thorium-232, uranium-235 and uranium-238.

(11) "GROSS BETA PARTICLE ACTIVITY" means the total radioactivity due to beta particle emission as inferred from measurements on a dry sample.

(12) "DEPARTMENT" means the department of health and social services.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.17 Applicability. The provisions of sections H 57.16 through H 57.28 establish radioactivity regulations which apply to each community water system, unless the community water system meets all of the following conditions:

- (1) Consists only of distribution and storage facilities (and does not have any collection and treatment facilities); and
- (2) Obtains all of its water from, but is not owned or operated by, a public water system to which such regulations apply; and
- (3) Does not sell water to any person; and
- (4) Is not a carrier which conveys passengers in interstate commerce.

History: Cr. Register, February 1978, No. 266, eff. 3-1-78.

H 57.18 Maximum contaminant levels for radium-226, radium-228 and gross alpha particle radioactivity in community water systems. The following are the maximum contaminant levels for radium-226, radium-228 and gross alpha particle radioactivity:

- (1) Combined radium-226 and radium-228 — 5 pCi/l.
- (2) Gross alpha particle activity (including radium-226 but excluding radon and uranium) — 15 pCi/l.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.19 Maximum contaminant levels for beta particle and photon radioactivity from man-made radionuclides in community water systems.

(1) The average annual concentration of beta particle and photon radioactivity from man-made radionuclides in drinking water shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem/year.

(2) Except for the radionuclides listed in Table A, the concentration of man-made radionuclides causing 4 mrem total body or organ dose equivalents shall be calculated on the basis of a 2 liter per day drinking water intake using the 168 hour data listed in "Maximum Permissible

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Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," NBS Handbook 69, as amended August 1963, U.S. department of commerce. If 2 or more radionuclides are present, the sum of their annual dose equivalent to the total body or to any organ shall not exceed 4 millirem/year.

Table A - Average annual concentrations assumed to produce a total body or organ dose of 4 mrem/year

Radionuclide	Critical Organ	pCi per liter
Tritium	Total body	20,000
Strontium-90	Bone marrow	8

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.20 Analytical methods for radioactivity. (1) The methods specified in Interim Radiochemical Methodology for Drinking Water, Environmental Monitoring and Support Laboratory, EPA-600/4-75-008, USEPA, Cincinnati, Ohio 45268, or those listed below, are to be used to determine compliance with sections H 57.18 and H 57.19 except in cases where alternative methods have been approved in accordance with section H 57.22.

(a) Gross Alpha and Beta — Method 302 "Gross Alpha and Beta in Water" Standard Methods for the Examination of Water and Wastewater, 13th edition American Public Health Association, New York, New York, 1971.

(b) Total Radium — Method 304 "Radium in Water by Precipitation" *ibid.*

(c) Radium-226 — Method 305 "Radium-226 by Radon in Water" *ibid.*

(d) Strontium-89, 90 — Method 303 "Total Strontium and Strontium-90 in Water" *ibid.*

(e) Tritium — Method 306 "Tritium in Water" *ibid.*

(f) Cesium-134 — ASTM D-2459 "Gamma Spectrometry in Water," 1975 Annual Book of ASTM Standards, Water and Atmospheric Analysis, Part 31, American Society for Testing and Materials, Philadelphia, PA (1975).

(g) Uranium — ASTM D-2907 "Microquantities of Uranium in Water by Fluorometry," *ibid.*

(2) When the identification and measurement of radionuclides other than those listed in subsection (1) is required, the following references are to be used, except in cases where alternative methods have been approved in accordance with section H 57.22.

(a) Procedures for Radiochemical Analysis of Nuclear Reactor Aqueous Solutions, H. L. Krieger and S. Gold, EPA-R4-73-014. USEPA, Cincinnati, Ohio, May 1973.

(b) HASL Procedure Manual, Edited by John H. Harley, HASL 300, ERDA Health and Safety Laboratory, New York, New York, 1973.

(3) For the purpose of monitoring radioactivity concentrations in drinking water, the required sensitivity of the radioanalysis is defined in terms of a detection limit. The detection limit shall be that concentration which can be counted with a precision of plus or minus 100% at the 95% confidence level (1.96σ where σ is the standard deviation of the net counting rate of the sample).

(a) To determine compliance with section H 57.18 (1) the detection limit shall not exceed 1 pCi/1. To determine compliance with subsection H 57.18(2), the detection limits shall not exceed 3 pCi/1.

(b) To determine compliance with section H 57.19 the detection limits shall not exceed the concentrations listed in Table B.

Table B

Detection Limits for Man-Made Beta Particle and Photon Emitters

Radionuclide	Detection Limit
Tritium	1,000 pCi/1
Strontium-89	10 pCi/1
Strontium-90	2 pCi/1
Iodine-131	1 pCi/1
Cesium-134	10 pCi/1
Gross beta	4 pCi/1
Other radionuclides	1/10 of the applicable limit

(4) To judge compliance with the maximum contaminant levels listed in sections H 57.18 and H 57.19 averages of data shall be used and shall be rounded to the same number of significant figures as the maximum contaminant level for the substance in question.

(5) The publications referred to in this section are available for inspection at the office of the department of health and social services, the secretary of state's office and the office of the revisor of statutes.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.21 Monitoring frequency for radioactivity in community water systems. (1) MONITORING requirements for gross alpha particle activity, radium-226 and radium-228. (a) Initial sampling to determine compliance with section H 57.18 shall begin by June 24, 1979 and the analysis shall be completed by June 24, 1980. Compliance shall be based on the analysis of an annual composite of four consecutive quarterly samples or the average of the analyses of 4 samples obtained at quarterly intervals.

1. A gross alpha particle activity measurement may be substituted for the required radium-226 and radium-228 analysis provided that the measured gross alpha particle activity does not exceed 5 pCi/1 at a confidence level of 95% (1.96σ where σ is the standard deviation of the net counting rate of the sample). In localities where radium-228 may be present in drinking water, the department may require radium-226 and/or radium-228 analyses when the gross alpha particle activity exceeds 2 pCi/1.

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2. When the gross alpha particle activity exceeds 5 pCi/l, the same or an equivalent sample shall be analyzed for radium-226. If the concentration of radium-226 exceeds 3 pCi/l, the same or an equivalent sample shall be analyzed for radium-228.

(b) For the initial analysis required by subsection H 57.21 (1) (a), data acquired after June 24, 1976 may be substituted at the discretion of the department.

(c) Suppliers of water shall monitor at least once every 4 years following the procedure required by section H 57.21 (1) (a). At the discretion of the department, when an annual record taken in conformance with section H 57.21 (1) (a) has established that the average annual concentration is less than half the maximum contaminant levels established by section H 57.18, analysis of a single sample may be substituted for the quarterly sampling procedure required by section H 57.21 (1) (a).

1. More frequent monitoring shall be conducted when ordered by the department in the vicinity of mining or other operations which may contribute alpha particle radioactivity to either surface or groundwater sources of drinking water.

2. A supplier of water shall monitor in conformance with section H 57.21 (1) (a) within one year of the introduction of a new water source for a community water system. More frequent monitoring shall be conducted when ordered by the department in the event of possible contamination or when changes in the distribution system or treatment processing occur which may increase the concentration of radioactivity in finished water.

3. A community water system using 2 or more sources having different concentrations of radioactivity shall monitor source water, in addition to water from a free-flowing tap, when required by the department.

4. Monitoring for compliance with section H 57.18 after initial period need not include radium-228 except when required by the department, provided that the average annual concentration of radium-228 has been assayed at least once using the quarterly sampling procedure required by section H 57.21 (1) (a).

5. Suppliers of water shall conduct annual monitoring of any community water system in which the radium-226 concentration exceeds 3 pCi/l, when required by the department.

(d) If the average annual maximum contaminant level for gross alpha particle activity or total radium as set forth in section H 57.18 is exceeded, the supplier of a community water system shall give notice to the department pursuant to section H 57.25 and notify the public as required by section H 57.26. Monitoring at quarterly intervals shall be continued until the annual average concentration no longer exceeds the maximum contaminant level or until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

(2) MONITORING REQUIREMENTS FOR MAN-MADE RADIOACTIVITY IN COMMUNITY WATER SYSTEMS. (a) By June 24, 1979 systems using surface water sources and serving more than 100,000 persons and such other community water systems as are designated by the department shall be

monitored for compliance with section H 57.19 by analysis of a composite of 4 consecutive quarterly samples or analysis of 4 quarterly samples. Compliance with section H 57.19 may be assumed without further analysis if the average annual concentration of gross beta particle activity is less than 50 pCi/1 and if the average annual concentrations of tritium and strontium-90 are less than those listed in Table A, provided, that if both radionuclides are present the sum of their annual dose equivalents to bone marrow shall not exceed 4 millirem/year.

1. If the gross beta particle activity exceeds 50 pCi/1, an analysis of the sample must be performed to identify the major radioactive constituents present and the appropriate organ and total body doses shall be calculated to determine compliance with section H 57.19.

2. Suppliers of water shall conduct additional monitoring, as required by the department, to determine the concentration of man-made radioactivity in principal watersheds designated by the department.

3. At the discretion of the department suppliers of water utilizing only groundwaters may be required to monitor for man-made radioactivity.

(b) For the initial analysis required by section H 57.21 (2) (a) data acquired since June 24, 1976 may be substituted at the discretion of the department.

(c) After the initial analysis required by section H 57.21 (2) (a) suppliers of water shall monitor at least every 4 years following the procedure given in section H 57.21 (2) (a).

(d) By June 24, 1979 the supplier of any community water system designated by the department as utilizing waters subject to contamination by effluents from nuclear facilities shall initiate quarterly monitoring for gross beta particle and iodine-131 radioactivity and annual monitoring for strontium-90 and tritium.

1. Quarterly monitoring for gross beta particle activity shall be based on the analysis of monthly samples or the analysis of a composite of 3 monthly samples. The former is recommended. If the gross beta particle activity in a sample exceeds 15 pCi/1, the same or an equivalent sample shall be analyzed for strontium-89 and cesium-134. If the gross beta particle activity exceeds 50 pCi/1, an analysis of the sample must be performed to identify the major radioactive constituents present and the appropriate organ and total body doses shall be calculated to determine compliance with section H 57.19.

2. For iodine-131, a composite of 5 consecutive daily samples shall be analyzed once each quarter. As required by the department, more frequent monitoring shall be conducted when iodine-131 is identified in the finished water.

3. Annual monitoring for strontium-90 and tritium shall be conducted by means of the analysis of a composite of 4 consecutive quarterly samples or analysis of 4 quarterly samples.

Note: The latter is recommended procedure.

4. The department may allow the substitution of environmental surveillance data taken in conjunction with a nuclear facility for direct monitoring of man-made radioactivity by the supplier of water where

the department determines such data is applicable to a particular community water system.

(e) If the average annual maximum contaminant level for man-made radioactivity set forth in section H 57.19 is exceeded, the operator of a community water system shall give notice to the department pursuant to section H 57.25 and to the public as required by section H 57.26. Monitoring at monthly intervals shall be continued until the concentration no longer exceeds the maximum contaminant level or until a monitoring schedule as a condition to a variance, exemption or enforcement action shall become effective.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.22 Alternative analytical techniques. With the written permission of the department, concurred in by the administrator of the U.S. environmental protection agency, an alternative analytical technique may be employed. An alternative technique shall be acceptable only if it is substantially equivalent to the prescribed test in both precision and accuracy as it relates to the determination of compliance with any maximum contaminant level. The use of the alternative analytical technique shall not decrease the frequency of monitoring required by section H 57.21.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.23 Approved laboratories. For the purpose of determining compliance with sections H 57.17 through H 57.22, samples may be considered only if they have been analyzed by the department's laboratory or a laboratory approved by the department.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.24 Monitoring of consecutive public water systems. When a public water system supplies water to one or more other public water systems, the department of natural resources may modify the monitoring requirements imposed by this section to the extent that the interconnection of the systems justifies treating them as a single system for monitoring purposes. Any modified monitoring shall be conducted pursuant to a schedule specified by the department of natural resources and concurred in by the administrator of the U.S. environmental protection agency.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.25 Reporting requirements. (1) Except where a shorter reporting period is specified in this section, the supplier of water shall report to the department within 40 days following a test, measurement or analysis required to be made by sections H 57.16 through H 57.26, the results of that test, measurement or analysis.

(2) The supplier of water shall report to the department within 48 hours the failure to comply with any primary drinking water regulation (including failure to comply with monitoring requirements) set forth in sections H 57.16 through H 57.26.

(3) The supplier of water is not required to report analytical results to the department when the department performs the analysis and reports the results to the department.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.26 Public notification. Public notification shall be provided as prescribed in section NR 109.81, Wisconsin Administrative Code.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.27 Record maintenance. The supplier of water shall maintain records as prescribed by section NR 109.82, Wisconsin Administrative Code.

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.

H 57.28 Variance and exemptions. Variances and exemptions may be granted from any requirement respecting a maximum contaminant level for radioactivity as prescribed in sections NR 109.90 through NR 109.98, Wisconsin Administrative Code. 11/14/77

History: Cr. Register, February, 1978, No. 266, eff. 3-1-78.