JOURNAL OF LAWS

OF THE REPUBLIC OF POLAND

Warsaw, 6 October 2022

Item 2058

REGULATION OF THE COUNCIL OF MINISTERS

of 9 August 2022

on the scope of an environmental radiation monitoring program developed and implemented by organizational entities included in category I or II of hazards[1]

Based on art. 86o paragraph 3 of the Act of 29 November 2000 - Atomic Law (Dz.U. 2021 item 1941, and 2022 item 974), it is ordered as follows:

§ 1. The following terms used in the regulation shall stand for:

1) gamma emitters—radioactive isotopes that can be determined by means of gamma-ray spectrometry in an energy range of 30–3000 keV;

2) HTO—tritiated water, meaning water whose molecules contain the hydrogen H-3 isotope (tritium);

3) krypton isotopes—radioactive krypton isotopes which can be discharged from the organizational entity, with particular emphasis on the Kr-85 isotope;

4) xenon isotopes—radioactive xenon isotopes which can be discharged from the organizational entity, with particular emphasis on the Xe-133 isotope;

5) the leeward direction—the prevailing direction towards which the wind blows, established based on an analysis of a multiannual average wind direction (a wind rose) from the organizational entity;

6) mobile radiometric measurement—a radiometric measurement in planned points, on planned routes or in specified areas, made by a device adapted for transport, supplemented with geographic coordinates and altitude above the ground surface;

7) OBT—organically bound hydrogen H-3 isotope (tritium), meaning built into the structures of organic compounds.

§ 2. 1. The scope of an environmental radiation monitoring program on-site and off-site of an organizational entity, in a normal situation, developed and implemented by the head of an organizational entity performing an activity included in category I of hazards according to appendix no. 5 to the Act of 29 November 2000—Atomic Law, hereinafter: the 'Act', is established in appendix no. 1 to the regulation.

2. The scope of an environmental radiation monitoring program on-site and off-site of an organizational entity, in a normal situation, developed and implemented by the head of an organizational entity performing an activity included in category II of hazards according to appendix no. 5 to the Act is established in appendix no. 2 to the regulation.

§ 3. 1. The scope of an environmental radiation monitoring program on-site and off-site on of an organizational entity, in case of a radiation emergency, developed and implemented by the head of an organizational entity

[1] Within the scope of its regulation, the present regulation implements Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionizing radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom (Official Journal of the EU L 13 of 17 January 2014, p. 1, Official Journal of the EU L 72 of 17 March 2016, p. 69, Official Journal of the EU L 152 of 11 June 2019, p. 128, and Official Journal of the EU L 324 of 13 December 2019, p. 80).

performing an activity included in category I or II of hazards, according to appendix no. 5 to the Act, involves a situation of:

1) a radiation emergency;

2) existing exposure situation after a radiation emergency.

2. The scope of an environmental radiation monitoring program on-site and off-site of an organizational entity, in case of a radiation emergency, developed and implemented by the head of an organizational entity performing an activity included in category I of hazards according to appendix no. 5 to the Act is established in appendix no. 3 to the regulation.

3. The scope of an environmental radiation monitoring program on-site and off-site on of an organizational entity, in case of a radiation emergency, developed and implemented by the head of an organizational entity performing an activity included in category II of hazards according to appendix no. 5 to the Act is established in appendix no. 4 to the regulation.

§ 4. The head of an organizational entity which on the day of entry into force of the regulation performs an activity included in category II of hazards according to appendix no. 5 to the Act, shall adjust the environmental radiation monitoring program for this activity to the requirements of the regulation within 36 months after the day of entry into force of the regulation.

§ 5. The regulation shall enter into force 14 days after its promulgation.

Prime Minister: *M. Morawiecki*

Appendices to Regulation of the Council of Ministers of 9 August 2022 (Dz.U. item 2058)

Appendix no. 1

THE SCOPE OF AN ENVIRONMENTAL RADIATION MONITORING PROGRAM ON-SITE AND OFF-SITE ON OF AN ORGANIZATIONAL ENTITY. IN A NORMAL SITUATION. DEVELOPED AND IMPLEMENTED BY THE HEAD OF AN ORGANIZATIONAL ENTITY PERFORMING AN ACTIVITY INCLUDED IN CATEGORY I OF HAZARDS.ACCORDING TO APPENDIX NO. 5 TO THE ACT OF 29 NOVEMBER 2000—ATOMIC LAW

No.	**The environment or a component of the environment**	**Measured values**	**The criteria for choosing the location; the distribution and number of sampling or measurement points**	**Sampling or measurement conditions**
1	External radiation	1) a spatial equivalent dose rate for ionizing radiation (H*(10)); 2) gamma spectrum; 3) the magnitude of atmospheric precipitation; 4) air temperature; 5) atmospheric pressure; 6) humidity; 7) wind speed; 8) wind direction	1. On-site of the organizational entity—no less than 2 measurement points. 2. In a precautionary action planning zone, hereinafter: the ‘internal zone’—no less than 8 measurement points, evenly distributed around the organizational entity. 3. In an urgent protective action planning zone, hereinafter: the ‘external zone’—no less than 4 measurement points, evenly distributed around the organizational entity. 4. Within an extended planning distance—no less than 4 measurement points in localities with the highest number of inhabitants (one point per each locality)	1. The measurement shall be performed by means of automatic stations. 2. Continuous measurement. 3. Measurement results—at least once per hour
		ambient dose equivalent for ionizing radiation (H*(10))	1. On-site of the organizational entity—no less than 4 measurement points, evenly distributed. 2. In the internal zone—no less than 4 measurement points, evenly distributed. 3. In the external zone: 1) no less than 8 measurement points, evenly distributed; 2) no less than 2 measurement points—in localities with the highest number of inhabitants (one point per each locality).	1. The measurement shall be performed by means of active dosimeters. 2. Reading the measured doses—once per 2 months

			4. Within an extended planning distance: 1) no less than 6 measurement points, evenly distributed; 2) no less than 2 measurement points—in localities with the highest number of inhabitants (one point per each locality); 3) no less than 1 measurement point—in the place where the predicted impact of the organizational entity is the lowest	
		individual dose equivalent of ionizing radiation ($H_p(10)$)	1. On-site of the organizational entity—no less than 8 measurement points, evenly distributed. 2. In the internal zone—no less than 16 measurement points, evenly distributed. 3. In the external zone:	1. The measurement shall be performed by means of passive dosimeters. 2. Replacing the dosimeters and reading the measured doses—
			1) no less than 8 measurement points, evenly distributed; 2) no less than 2 measurement points—in localities with the highest number of inhabitants (one point per each locality). 4. Within an extended planning distance: 1) no less than 8 measurement points, evenly distributed; 2) no less than 2 measurement points—in localities with the highest number of inhabitants (one point per each locality); 3) no less than 1 measurement point—in the place where the predicted impact of the organizational entity is the lowest	once per quarter
2	Atmospheric aerosols	1) the activity concentration of:	1. On-site of the organizational entity—no less than 1	1. Sampling—in a

		a) Cs-137,	sampling point.	continuous manner, by
		b) Cs-134, c) 1-131, d) Sr-90, e) Pu-238, f) Pu-239+240; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample	2. In the external zone—no less than 1 sampling point in the leeward direction. 3. Within an extended planning distance—no less than 1 sampling point in localities with the highest number of inhabitants (one point per each locality)	means of stationary devices. 2. Filter replacement—at least once per week. 3. Measurement of: 1) gamma emitters—once per week; 2) Sr-90, Pu-238 and Pu-239+240—once per month, a collective sample from weekly samplings. 4. For Cs-137, Cs-134, 1-131, Sr-90, Pu-238, and Pu-239+240—determine the lower limit of
				detection each time, regardless whether these isotopes were detected or not
		the gross beta activity	1. On-site of the organizational entity—no less than 1 sampling point. 2. In the internal zone—no less than 1 sampling point in the leeward direction. 3. In the external zone—no less than 1 sampling point	1. Continuous sampling on the filter. 2 Automatic filter replacement—at least once per hour. 3. Filter measurement—automatic.

				4. Measurement result—at least once per hour
		the gross alpha activity	1. On-site of the organizational entity—no less than 1 sampling point. 2. In the internal zone—no less than 1 sampling point in the leeward direction.	1. Continuous sampling on the filter. 2. Automatic filter replacement—at least once per hour.
			3. In the external zone—no less than 1 sampling point	3. Filter measurement—automatic. 4. Measurement result—at least once per hour
		activity concentration HTO in water vapor	On-site of the organizational entity—no less than 1 sampling point.	1. Sampling—at least once per month. 2. Determine the lower limit of detection each time, regardless whether this isotope was detected or not
3	Atmospheric air	the C-14 activity concentration	On-site of the organizational entity—no less than 1 sampling point.	1. Sampling—at least once per month.
				2. Determine the lower limit of detection each time, regardless whether this isotope was detected or not
		the activity concentration of: 1) krypton isotopes; 2) xenon isotopes;	On-site of the organizational entity—no less than 1 sampling point in the place of the most probable discharge of these isotopes into the environment	1. Sampling—at least once per month. 2. For Kr-85 and Xe-133—determine the lower limit

				of detection each time, regardless whether these isotopes were detected or not
4	Deposition	1) the activity concentration of:	1.On-site of the organizational entity—no	1.The measurement shall be performed
		a) Cs-137, b) Cs-134, c) 1-131, d) Co-60; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample	less than 4 measurement points, evenly distributed. 2. In the internal zone—no less than 4 measurement points, evenly distributed. 3. In the external zone: 1) no less than 8 measurement points, evenly distributed; 2) no less than 2 measurement points—in localities with the highest number of inhabitants (one point per each locality). 4. Within an extended planning distance: 1) no less than 6 measurement points, evenly distributed; 2) no less than 2 measurement points—in localities with the highest number of inhabitants (one point per each locality);	in situ. 2. Measurement—at least once per half-year. 3. For Cs-137, Cs-134, 1-131, and Co-60—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
			3) no less than 1 measurement point—in the place where the predicted impact of the organizational entity is the lowest. 5. In an area with the largest predicted deposition of radioactive contaminations—no less than 1 measurement point	
5	Precipitation	1) the activity concentration of: a) Cs-137,	1. On-site of the organizational entity—no less than 1 sampling point.	1. Collection of dry and wet deposition samples.

		b) Cs-134, c) 1-131, d) Sr-90, e) Pu-238, f) Pu-239+240, g) HTO in wet deposition, h) C-14 in wet deposition; 2) identify	2. In the internal zone or the external zone—no less than 1 sampling point in the leeward direction	2. Sampling—in a continuous manner. 3. Measurement of the sample—once per month. 4. Collection of dry and wet deposition samples shall be performed simultaneously. 5. For Cs-137, Cs-134, 1-131, Sr-90, Pu-238, Pu-239+240, HTO and C-14—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
		and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross alpha activity 4) the gross beta activity		
6	Soil	1) the activity concentration of: a) Cs-137, b) Cs-134, c) Sr-90, d) Pu-238, e) Pu-239+240,	1. On-site of the organizational entity—no less than 4 sampling points, evenly distributed. 2. In the internal zone—no less than 4 sampling points, evenly distributed. 3. In the external zone: 1) no less than 8 sampling points, evenly distributed, including no less than 4 sampling points in the areas	1. Sampling shall be performed in each sampling point, with a frequency of at least once per year. 2. For Cs-137, Cs-134, Sr-90, Pu-238, Pu-239+240, HTO, C-14, U-238, U-

		f) HTO in soil moisture, g) C-14, h) U-238,	of pastures or meadows;	235,
		i) U-235, j) U-234; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross alpha activity 4) the gross beta activity	2) no less than 2 sampling points—in localities with the highest number of inhabitants (one point per each locality). 4. Within an extended planning distance: 1) no less than 6 sampling points, evenly distributed, including no less than 4 sampling points in the areas of pastures; 2) no less than 2 sampling points—in localities with the highest number of inhabitants (one point per each locality); 3) no less than 1 sampling point—in the place where the predicted impact of the organizational entity is the lowest. 5. In an area with the largest predicted deposition of radioactive contaminations—no less than 1 sampling point	and U-234—determine the lower limit of detection each time, regardless whether these isotopes were detected or not

No.	**The environment or a component of the environment**	**Measured values**	**The criteria for choosing the location; the distribution and number of sampling or measurement points**	**Sampling or measurement conditions**
7	Leaf vegetables	1) the activity concentration of: a) Cs-137, b) Cs-134, c) 1-131, d) Sr-90, e) HTO,	1. On-site of the organizational entity or in the internal zone—no less than 2 sampling points. 2. In the external zone—no less than 2 sampling points. 3. Within an extended planning distance— no less than 4 sampling points	1. Sampling— at least once per month, in the growing season. 2. No less than 2 samples shall be collected from a given measurement point.

		f) OBT, g) C-14, h) Pu-238, i) Pu-239+240, j) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross alpha activity 4) the gross beta activity		3. At least two types of leaf vegetables. 4. For Cs-137, Cs-134, 1-131, Sr-90, HTO, OBT, C-14, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
8	Root vegetables and potatoes	1) the activity concentration of: a) Cs-137, b) Cs-134, c) 1-131, d) Sr-90, e) HTO, f) OBT, g) C-14, h) Pu-238, i) Pu-239+240, j) Am-241; 2) identify and determine the activity concentration of the	1. On-site of the organizational entity or in the internal zone—no less than 2 sampling points. 2. In the external zone—no less than 2 sampling points. 3. Within an extended planning distance—no less than 2 sampling points	1. Sampling—during the harvesting period, including no less than 2 samples from a given measurement point. 2. At least one species of root vegetables. 3. At least one sample of potatoes. 4. For Cs-137, zCs-134, 1-131, Sr-90, HTO, OBT, C-14, Pu-238, Pu-239+240,

		remaining gamma emitters present in the sample;		
		3) the gross alpha activity 4) the gross beta activity		and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
9	Fruit	1) the activity concentration of: a) Cs-137, b) Cs-134, c) 1-131, d) Sr-90, e) HTO, f) OBT, g) C-14, h) Pu-238, i) Pu-239+240, j) Am-241;	1. On-site of the organizational entity or in the internal zone—no less than 1 sampling point. 2. In the external zone—no less than 2 sampling points. 3. Within an extended planning distance—no less than 2 sampling points, in particular in the area of orchards	1. Sampling—during the harvesting period, including no less than 2 samples from a given sampling point. 2. At least two fruit species. 3. For Cs-137, Cs-134,1-131, Sr-90, HTO, OBT, C-14, Pu-238, Pu-239+240 and Am-241—determine the lower
		2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross alpha activity 4) the gross beta activity		limit of detection each time, regardless whether these isotopes were detected or not

10	Cereals	1) the activity concentration of: a) Cs-137, b) Cs-134, c) 1-131, d) Sr-90, e) HTO, f) OBT, g) C-14, h) Pu-238, i) Pu-239+240, j) Am-241;	1. In the internal zone—no less than 2 sampling points. 2. In the external zone—no less than 2 sampling points. 3. Within an extended planning distance—no less than 4 sampling points	1. Sampling—during the harvesting period, including no less than 2 samples from a given sampling point. 2. For Cs-137, Cs-134, 1-131, Sr-90, HTO, OBT, C-14, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
		2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross alpha activity 4) the gross beta activity		
11	Milk	1) the activity concentration of: a) Cs-134, b) Cs-137, c) 1-131, d) K-40, e) Sr-90, f) HTO,	1. In the internal zone—no less than 1 sampling point. 2. In the external zone—no less than 1 sampling point. 3. Within an extended planning distance—no less than 2 sampling points	1. Sampling—at least once per two months, and during the grazing period—at least once per month. 2. For Cs-137, Cs-134, 1-131, K-40, Sr-90, HTO, OBT, C-14, Pu-238, Pu-239+240, and Am-241—determine

		g) OBT, h) C-14, i) Pu-238,		the lower limit of detection each time, regardless whether these isotopes were detected or not
		j) Pu-239+240, k) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross beta activity		
12	Meat (other than poultry and game meat)	1) the activity concentration of: a) Cs-137, b) Cs-134, c) K-40, d) Sr-90, e) HTO, f) OBT, g) C-14, h) Pu-238, i) Pu-239+240,	1. In the external zone—no less than 1 sampling point. 2. Within an extended planning distance—no less than 1 sampling point	1. Collection of muscle and offal samples (liver, kidneys)—at least once per year, in particular near the end of the animal grazing period. 2. At least two species of livestock.
		j) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross beta activity		3. For Cs-137, Cs-134, K-40, Sr-90, HTO, OBT, C-14, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
13	Poultry	1) the activity concentration of:	1. In the external zone—no less than 1 sampling point.	1. Collection of muscle and

		a) Cs-137, b) Cs-134, c) Sr-90, d) HTO, e) OBT, f) C-14, g) Pu-238, h) Pu-239+240, i) Am-241;	2. Within an extended planning distance—no less than 1 sampling point	offal samples (liver, kidneys)—at least once per year, in the 3rd quarter. 2. For Cs-137, Cs-134, Sr-90, HTO, OBT, C-14, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
		2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross beta activity		
14	Game meat	1) the activity concentration of: a) Cs-137, b) Cs-134, c) Sr-90, d) HTO, e) OBT, f) C-14, g) Pu-238, h) Pu-239+240, i) Am-241;	The samples shall be collected within an extended planning distance from game animals acquired via hunting or fishing	1. Collection of muscle and offal samples (liver, kidneys)—at least once per year, in the 3rd quarter, including no less than 2 species of game animals. 2. For Cs-137, sCs-134, Sr-90, HTO, OBT, C-14, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes

				were detected or not
		2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross beta activity		
15	Eggs	1) the activity concentration of: a) Cs-137, b) Cs-134, c) Sr-90, d) HTO, e) OBT, f) C-14, g) Pu-238, h) Pu-239+240, i) Am-241;	1. In the external zone—no less than 1 sampling point. 2. Within an extended planning distance—no less than 1 sampling point	1. Sampling—at least once per year. 2. For Cs-137, Cs-134, Sr-90, HTO, OBT, C-14, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
		2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross beta activity		
16	Drinking water	1) the activity concentration of: a) Rn-222, b) Cs-137,	1. On-site of the organizational entity—1 sampling point in each drinking water intake point (waterworks and wells). 2. In the internal zone—1 sampling point in each	1. Sampling—at least once per half-year, from drinking water intake points.

		c) Cs-134, d) HTO, e) C-14, f) Co-60, g) M31, h) K-40, i) U-238, j) U-235, k) U-234,	drinking water intake point (waterworks and wells). 3. In the external zone and within an extended planning distance—no less than 20 sampling points, including at least 7 sampling points in individual drinking water intake points (wells)	2. For Rn-222, Cs-137, Cs-134, HTO, C-14, Co-60, I-131, K-40, U-238, U-235, U-234, Th-232, Ra-226, Ra-228, Pb-210, Po-210, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
		l) Th-232, m) Ra-226, n) Ra-228, o) Pb-210, p) Po-210, r) Pu-238, s) Pu-239+240, t) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross alpha activity 4) the gross beta activity		
17	Groundwater	1) the activity concentration of:	1. On-site of the organizational entity—1 sampling point.	1. Two measurement fractions are analyzed:

		a) Rn-222 in filtered water,		
		b) Cs-137, c) HTO, d) C-14, e) K-40, f) U-238, g) U-235, h) U-234, i) Th-232, j) Po-210, k) Pu-238, 1) Pu-239+240, m) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample;	2. In the internal zone—no less than 8 sampling points, evenly distributed. 3. In the external zone—2 sampling points, near the major centers of population	1) filtered water; 2) sediment filtered out from water. 2. Sampling in each location—at least once per month. 3. For Rn-222, Cs-137, HTO, C-14, K-40, U-238, U-235, U-234, Th-232, Po-210, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
		3) the gross alpha activity 4) the gross beta activity		
18	Drainage water	1) ambient dose equivalent for ionizing radiation (H*(10)); 2) gamma spectrum; 3) water temperature	On-site of the organizational entity—no less than 1 measurement point, including on the main drainage water collector	1. The measurement shall be performed by means of a dosimetric station. 2. Continuous measurement. 3. Measurement results—at

				least once per hour
		1) the activity concentration of: a) Cs-137, b) 1-131, c) Sr-90, d) HTO, e) C-14, f) K-40, g) Pu-238, h) Pu-239+240;	On-site of the organizational entity—no less than 1 sampling point, including on the main drainage water collector	1. Measurement of samples. 2. Measure the value of the gross alpha activity, the gross beta activity, and HTO concentration, and measure the gamma emitters—by means of high resolution gamma-ray spectrometry, once per week.
		2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross beta activity; 4) the gross alpha activity		3. Measurement of Sr-90, C-14, Pu-238, and Pu-239+240 concentrations—once per quarter. 4. For Cs-137, 1-131, Sr-90, HTO, C-14, K-40, Pu-238, and Pu-239+240—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
19	Green feed, including grass	1) the activity concentration of: a) Cs-137,	1. On-site of the organizational entity—no less than 1 sampling point.	1. Sampling—at least once per half-year.
		b) Cs-134,	2. In the external zone—no less than 4 sampling points in the area of pastures or meadows.	2. For Cs-137, Cs-134, 1-131, Sr-90, HTO, OBT,

		c) 1-131, d) Sr-90, e) HTO, f) OBT, g) C-14, h) Pu-238, i) Pu-239+240, j) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross alpha activity 4) the gross beta activity	3. Within an extended planning distance—no less than 4 sampling points in the area of pastures. 4. In an area with the largest predicted deposition of radioactive contaminations—no less than 1 sampling point. 5. The abovementioned sampling points are established in the same places as the sampling points for soil samples	C-14, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
20	Bioindicators	1) the activity concentration of:	In an area with the largest predicted	1. Sampling—
	(fungi, mosses, lichens, needles, and leaves)	a) Cs-137, b) Cs-134, c) Ra-226, d) 1-131, e) Ac-228, f) K-40, g) Pb-210, h) Sr-90, i) HTO,	deposition of radioactive contaminations—no less than 2 sampling points	at least once per year. 2. Bioindicators—from no less than 4 species. 3. For Cs-137, Cs-134, Ra-226, 1-131, Ac-228, K-40, Pb-210, Sr-90, HTO, OBT, C-14, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or

		j) OBT, k) C-14, 1) Pu-238, m) Pu-239+240, n) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters		not
		present in the sample; 3) the gross alpha activity 4) the gross beta activity		
21	Surface water	1) ambient dose equivalent for ionizing radiation (H*(10)); 2) gamma spectrum; 3) water temperature	1. In the location of wastewater discharge from a nuclear facility into a water body—at least 1 measurement point. 2. If wastewater is discharged from a nuclear facility into the sea, an additional measurement point shall be established within a distance of no more than 5 km from the discharge location	1. once per hour
		1) the activity concentration of: a) Cs-137, b) Sr-90, c) HTO, d) C-14, e) K-40, f) Pb-210,	1. Sampling points are established in: 1) each location of wastewater discharge from a nuclear facility, that is: a) if the nuclear facility is located close to flowing waters (a river, a canal)—downstream from the location of wastewater discharge from the nuclear facility, in a zone where the wastewater discharge and river water are well mixed; no less than 1	1. Measurement of samples. 2. Sampling— at least once per half-year, for each location and sampling depth.

			sampling point,	
		g) Ra-226, h) U-238, i) U-235, j) U-234, k) Th-232, 1) Pu-238, m) Pu-239+240, n) Am-241, o) Po-210; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross alpha activity 4) the gross beta activity	b) if the nuclear facility is located close to stagnant waters— downstream from the location of wastewater discharge from the nuclear facility, in a zone where the wastewater discharge and the water from the water body are well mixed; no less than 1 sampling point, c) if the nuclear facility is located close to the sea— within a distance of no more than 1 km from the discharge location, where the wastewater discharge and seawater are well mixed; no less than 1 sampling point, d) upstream from the discharge location, in a direction opposite to the flowing direction of surface waters—no less than 1 sampling point, in order to obtain the baseline concentration values;	3. If the nuclear facility is located close to the sea— sampling shall be performed at two depths: down to 2 m from the water surface, and 1 m above the seabed. 4. For Cs-137, Sr-90, HTO, C-14, K-40, Pb-210, Ra-226, U-238, U-235, U-234, Th-232, Pu-238, Pu-239+240, Am-241, and Po-210— determine the lower limit of detection each time, regardless whether these isotopes were detected or not
			2) near the mouths of rivers flowing across an area demarcated by the extended planning distance as well as the internal zone and the external zone; if the river mouths are located outside the abovementioned area, sampling shall be performed at the boundary of the extended planning distance; 3) natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the	

			purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports.	
			2. The sampling points shall be located in a manner eliminating the negative impact of water engineering installations on the measurement results	
22	Fish	1) the activity concentration of: a) Cs-137, b) Sr-90, c) HTO, d) OBT, e) C-14, f) K-40, g) Pu-238, h) Pu-239+240, i) Th-232, j) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample;	1. If the organizational entity is located within a distance of up to 30 km from the shoreline of the sea, establish: 1) no less than 2 sampling points in seawaters; 2) no less than 1 sampling point in inland waters. 2. If the organizational entity is located at a distance of more than 30 km from the shoreline of the Baltic Sea, no less than 3 sampling points shall be established in inland waters	1. Sampling—at least once per year, within a distance of up to 30 km from the organizational entity, including no less than 3 fish species, including 1 benthic species. 2. For Cs-137, Sr-90, HTO, OBT, C-14, K-40, Pu-238, Pu-239+240, Th-232, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
		3) the gross beta activity		
23	Crustaceans and molluscs	1) the activity concentration of:	1. If the organizational entity is located within a distance	1. Sampling—at least once

		a) Cs-137, b) Sr-90, c) HTO, d) OBT, e) C-14, f) K-40, g) Pu-238, h) Pu-239+240, i) Th-232, j) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample;	of up to 30 km from the shoreline of the sea, no less than 3 sampling points shall be established in the coastal zone of the sea, within a distance of up to 30 km from the organizational entity, in particular next to the mouths of rivers flowing across the area within a distance of up to 30 km from the organizational entity. 2. If the organizational entity is located at a distance of more than 30 km from the shoreline of the sea, the sampling of crustaceans and molluscs shall not be performed	per year, including no less than 2 species of crustaceans and molluscs in a zone to 30 km from organizational entity. 2. For Cs-137, Sr-90, HTO, OBT, C-14, K-40, Pu-238, Pu-239+240, Th-232, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
		3) the gross beta activity		
24	Aquatic flora	1) the activity concentration of: a) Cs-137, b) Sr-90, c) HTO, d) OBT, e) C-14, f) K-40, g) Pu-238, h) Pu-239+240,	1. If the organizational entity is located within a distance of up to 30 km from the shoreline of the sea, establish: 1) in the coastal zone of the sea—no less than 2 sampling points in seawater; 2) on a coastal beach, in the place of accumulation of sediments downstream from the organizational entity, from a pipeline or a discharge canal discharging water from the organizational entity, in accordance with the flow of sea currents—no less than 1 sampling point. 2. In inland waters—no less than 2 sampling points	1. Sampling from the sea and from inland waters—at least once per year. 2. No less than 2 species of aquatic flora shall be sampled. 3. If the samples are collected both from the sea and from inland waters, it shall be allowed to sample no

		i) Th-232, j) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample;		less than 1 species of aquatic flora occurring locally in the Polish offshore zone
		3) the gross beta activity		sea, and no less than 1 species of aquatic flora occurring locally in inland waters in the location area, respectively. 4. For Cs-137, Sr-90, HTO, OBT, C-14, K-40, Pu-238, Pu-239+240, Th-232, and Am-241— determine the lower limit of detection each time, regardless whether these isotopes were detected or not
25	Benthic organisms	1) the activity concentration of: a) Cs-137,	1. In the coastal zone of the sea or inland water bodies— no less than 2 sampling points.	1. Sampling— at least once per
		b) Sr-90, c) HTO, d) OBT, e) C-14, f) K-40,	2. Sampling in the coastal zone of the sea shall be performed within a distance of up to 1 km from the shoreline, in the case when the organizational entity is located within a distance of up to 30 km from the shoreline	year. 2. For Cs-137, Sr-90, HTO, OBT, C-14, K-40, Pu-238, Pu-239+240, Th-232, and Am-241— determine the lower limit of detection each time,

		g) Pu-238, h) Pu-239+240, i) Th-232, j) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross beta activity		regardless whether these isotopes were detected or not
26	Bottom sediments	1) the activity concentration of: a) Cs-137,	1. The sampling points shall be established by taking into account the location of surface water intake points.	1. Sampling—at least once per
		b) Co-60, c) Sr-90, d) HTO, e) C-14, f) K-40, g) Pu-238, h) Pu-239+240, i) Th-232, j) Am-241, k) Po-210; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample;	2. Sampling points are established in: 1) each location of wastewater discharge from a nuclear facility, that is: a) if the nuclear facility is located close to flowing waters (a river, a canal)—downstream from the location of wastewater discharge from the nuclear facility, in a zone where the wastewater discharge and river water are well mixed; no less than 1 sampling point, b) if the nuclear facility is located close to stagnant waters— downstream from the location of wastewater discharge from the nuclear facility, in a zone where the wastewater discharge and the water from the water body are well mixed; no less than 1 sampling point, c) if the nuclear facility is located close to the	year. 2. For Cs-137, Co-60, Sr-90, HTO, C-14, K-40, Pu-238, Pu-239+240, Th-232, Am-241 and Po-210—determine the lower limit of detection each time, regardless whether these isotopes were detected or not

		3) the gross beta activity	sea—within a distance of no more than 1 km from the discharge location, where the wastewater discharge and seawater are well mixed; no less than 1 sampling point, d) upstream from the discharge location, in a direction opposite to the flowing direction of surface waters—no less than 1 sampling point, in order to obtain the baseline concentration values; 2) near the mouths of rivers flowing across an area demarcated by the extended planning distance as well as the internal zone and the external zone; if the river mouths are located outside the abovementioned area, sampling shall be performed at the boundary of the extended planning distance; 3) natural and artificial inland water bodies located in the area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports. 3. The sampling points shall be located in a manner eliminating the negative impact of water engineering installations on the measurement results	
27	Sewage sludge	1) the activity concentration of: a) Cs-137, b) Cs-134, c) Co-60,	1. In a wastewater treatment plant belonging to the organizational entity, if the organizational entity has such a wastewater treatment plant—1 sewage sludge sampling point. 2. In various wastewater treatment plants located at the	1. Sampling—at least once per quarter, from the settlers of the wastewater treatment plant. 2. For Cs-137, Cs-134, Co-

		d) 1-131, e) Sr-90, f) HTO, g) C-14,	shortest distance from the organizational entity, in particular in an external wastewater treatment plant receiving	60, 1-131, Sr-90, HTO, C-14, K-40, Ra-226, Pu-238, Pu-239+240, Am-241, and Po-210— determine the lower limit of detection each time, regardless whether these isotopes were detected or not
		h) K-40, i) Ra-226, j) Pu-238, k) Pu-239+240, 1) Am-241, m) Po-210; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross beta activity; 4) the gross alpha activity		
28	Sand from coastal beaches	1) the activity concentration of: a) Cs 137, b) Co-60, c) K-40,	1. If the internal zone or the external zone includes a publicly accessible coastal beach —no less than 3 sampling points.	1. Sampling—at least once per year. 2. Sampling—from the place where the seawater contacts the beach.

		d) Ra-226, e) Ac-228, f) Pb-210, g) Sr-90, h) HTO in the moist part, i) C-14, j) Pu-238, k) Pu-239+240, l) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross beta activity; 4) the gross alpha activity	2. The samples shall be collected in particular from the place of accumulation of sediments near the outlet of a pipeline or a discharge canal discharging water from the organizational entity, taking into account the flow of sea currents	3. For Cs-137, Co-60, K-40, Ra-226, Ac-228, Pb-210, Sr-90, HTO, C-14, Pu-238, Pu-239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not
29	People	1) the activity concentration of: a) Cs-137, b) Cs-134, c) 1-131, d) Co-60, e) Zr-95, f) La-140, g) Ra-226, h) Ac-228,	No less than 3 measurements of various individuals from the population inhabiting the internal zone or the external zone	1. The measurement shall be performed by means of a whole-body counter. 2. Measurement—at least once per two years. 3. For Cs-137, Cs-134, 1-131, Co-60, Zr-95, La-140, Ra-226, Ac-228, and K-40—determine the lower limit of detection each time, regardless whether these isotopes

		i) K-40; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross gamma activity;		were detected or not
30	Diet	1) the activity concentration of: a) Cs-137, b) K-40, c) Sr-90, d) HTO, e) OBT, f) C-14, g) Pu-238, h) Pu-239+240, i) Am-241; 2) identify and determine the activity concentration of the remaining gamma emitters present in the sample; 3) the gross beta activity	1. No less than 2 sampling points for food samples from various mass caterers located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, and spaced apart from each other by more than 10 km. 2. It is allowed to collect food samples from a cafeteria located on-site of the organizational entity	1. Sampling—once per year. 2. Full board—collected for a period of 1 week. 3. For Cs-137, K-40, Sr-90, HTO, OBT, C-14, Pu-238, Pu- 239+240, and Am-241—determine the lower limit of detection each time, regardless whether these isotopes were detected or not

Appendix no. 3

THE SCOPE OF AN ENVIRONMENTAL RADIATION MONITORING PROGRAM ON-SITE AND OFF-SITE ON OF AN ORGANIZATIONAL ENTITY. IN CASE OF A RADIATION EMERGENCY. DEVELOPED AND IMPLEMENTED BY THE HEAD OF AN ORGANIZATIONAL ENTITY PERFORMING AN ACTIVITY INCLUDED IN CATEGORY I OF HAZARDS. ACCORDING TO APPENDIX NO. 5 TO THE ACT OF 29 NOVEMBER 2000—ATOMIC LAW

No.	The environment or a component of the environment	The scope of a radiation monitoring program
1	External radiation	I. DISCHARGE INTO THE ENVIRONMENT 1. MEASUREMENTS BY MEANS OF AUTOMATIC STATIONS: 1) a radiation emergency situation—measurement results at least once per 10 minutes; 2) an existing exposure situation after a radiation emergency—like in a normal situation. 2. MEASUREMENTS BY MEANS OF NEUTRON RADIATION COUNTERS OPERATING IN A CONTIUNUOUS MODE *(if the occurrence of neutron radiation is to be expected in a radiation emergency situation):* 1) a radiation emergency situation: a) commence measurements of the neutron radiation dose—at least 1 neutron radiation detector on-site of the organizational entity, b) measurement results—at least once per 10 minutes;
		2) an existing exposure situation after a radiation emergency—stop performing the measurements. 3. MEASUREMENTS BY MEANS OF ACTIVE DOSIMETERS: 1) a radiation emergency situation: a) before the discharge, and during the dispersion of radioactive substances in the environment—like in a normal situation, b) after the dispersion of radioactive substances in the environment: - immediately perform measurements of the ambient dose equivalent for ionizing radiation (H*(10)) in the points established in appendix no. 1 to the regulation, - introduce mobile radiometric measurements of the ambient dose equivalent for ionizing radiation

		(H*(10)), - identify areas with the various degrees of land contamination by performing mobile radiometric measurements; 2) an existing exposure situation after a radiation emergency—like in a normal situation. 4. MEASUREMENTS BY MEANS OF PASSIVE DOSIMETERS—like in a normal situation
2	Atmospheric aerosols	I DISCHARGE INTO ATMOSPHERIC AIR 1. SAMPLING BY MEANS OF STATIONARY DEVICES: 1) a radiation emergency situation: a) values measured like in a normal situation, excluding measurements of activity concentration for Sr-90, Pu-238, and Pu-239+240, b) sampling—continuous sampling, with filter replacements every 2 hours, c) measurement by means of high resolution gamma-ray spectrometry—immediately after sampling; 2) an existing exposure situation after a radiation emergency—like in a normal situation. 2. MEASUREMENTS OF THE GROSS BETA ACTIVITY—like in a normal situation. 3. MEASUREMENTS OF THE GROSS ALPHA ACTIVITY—like in a normal situation. 4. DETERMINING THE HTO ACTIVITY CONCENTRATION IN WATER VAPOR: 1) a radiation emergency situation: a) continuous sampling and measurement, b) measurement—at least once per day; 2) an existing exposure situation after a radiation emergency—like in a normal situation
3	Atmospheric air	I. DISCHARGE INTO ATMOSPHERIC AIR 1. MEASUREMENTS OF THE C-14 ACTIVITY CONCENTRATION:
		1) a radiation emergency situation: a) continuous sampling and measurement,

		b) measurement—at least once per day; 2) an existing exposure situation after a radiation emergency—like in a normal situation. 2. MEASUREMENTS OF THE ACTIVITY CONCENTRATION OF KRYPTON ISOTOPES AND XENON ISOTOPES: 1) a radiation emergency situation before discharge and during the dispersion of radioactive substances in the environment: a) continuous sampling, b) measurement—at least once per 8 hours, c) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry; 2) an existing exposure situation after a radiation emergency—like in a normal situation
4	Deposition	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) immediately perform measurements in the points established in appendix no. 1 to the regulation;

		2) introduce teams performing in situ measurements in places where the highest ambient dose equivalent (H*(10)) has been identified for ionizing radiation as a result of mobile radiometric measurements, as well as in the established points, where the concentration of radioactive isotopes in the soil is important for further presence of people or agricultural production. 2. An existing exposure situation after a radiation emergency—like in a normal situation
5	Precipitation	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) sampling—like in a normal situation; 2) measurement—at least once per day. 2. An existing exposure situation after a radiation emergency—like in a normal situation
6	Soil	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has

		passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the magnitude of deposition; 2) add soil sampling points to reach a minimum of 8 points, for which the highest contamination of the ground surface by isotopes of an artificial origin has been identified

		as a result of mobile radiometric measurements of the ambient dose equivalent for ionizing radiation (H*(10)) or gamma-ray spectrometry. 2. An existing exposure situation after a radiation emergency—sampling points supported by points established for a radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed)
7	Leaf vegetables	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) increase the frequency of sampling to no less than one sampling per day in the growing season: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmospheric air; 3) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per week.

		2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters):

		1) if it is not possible to use contaminated water for irrigation—like in a normal situation; 2) if it is possible to use contaminated water for irrigation: a) increase the frequency of consecutive samplings to no less than one sampling per day in the growing season: - identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity, b) increase the number of sampling points—based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated

		by the extended planning distance and the precautionary action planning zone, hereinafter: the ‘internal zone’, and the urgent protective action planning zone, hereinafter: the ‘external zone’, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports. 3) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per week. 2. An existing exposure situation after a radiation emergency—like in a normal situation
8	Root vegetables and potatoes	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling during the harvesting period, in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity,

		d) determine the gross beta activity;

		2) consecutive samplings—at least once per week during the harvesting period: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmospheric air; 4) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per month. 2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): 1) if it is not possible to use contaminated water for irrigation—like in a normal situation; 2) if it is possible to use radioactively contaminated water for irrigation:

		a) increase the frequency of consecutive samplings to no less than one sampling per week during the harvesting period: - identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity, b) increase the number of sampling points—based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland

		water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports; 3) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per month. 2. An existing exposure situation after a radiation emergency—like in a normal situation
9	Fruit	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling during the harvesting period, in the points established in appendix no. 1 to the regulation — in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) consecutive samplings—at least once per week during the harvesting period: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmospheric air;
		4) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per month.

		2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): 1) if it is not possible to use contaminated water for irrigation—like in a normal situation; 2) if it is possible to use contaminated water for irrigation: a) increase the frequency of consecutive samplings to no less than one sampling per week during the harvesting period: - identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity, b) increase the number of sampling points—based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as
		natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports, c) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per month. 2. An existing exposure situation after a radiation emergency—like in a normal situation
10	Cereals	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling during the harvesting period, in the points established in appendix no. 1 to the

		regulation—in order to determine the current contaminations; 2) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmospheric air; 3) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per month.

		2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): 1) if it is not possible to use contaminated water for irrigation—like in a normal situation; 2) if it is possible to use contaminated water for irrigation—increase the number of sampling points, based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports. 2. An existing exposure situation after a radiation emergency—like in a normal situation
11	Milk	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation: 1) during the dispersion of radioactive substances in the environment (during the passage of the radioactive cloud) — increase the frequency of sampling to no less than once per day.

		a) identify and determine the activity concentration of gamma emitters, in particular 1-131, Cs-134, and Cs-137, by means of high resolution gamma-ray spectrometry, b) determine the Sr-90 activity concentration, c) determine the HTO activity concentration, d) determine the gross alpha activity,

		e) determine the gross beta activity; 2) after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): a) increase the frequency of sampling—to no less than one sampling per day: - identify and determine the activity concentration of gamma emitters, in particular 1-131, Cs-134, and Cs-137, by means of high resolution gamma-ray spectrometry, - determine the Sr-90 activity concentration, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity, b) increase the number of sampling points—based on the results of mobile radiometric measurements of

		radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmospheric air, provided it is possible, c) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per week. 2. An existing exposure situation after a radiation emergency — like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): 1) if it is not possible to use contaminated water for irrigation—like in a normal situation; 2) if it is possible to use contaminated water for irrigation: a) increase the frequency of consecutive samplings to no less than one sampling per day in the growing season: - identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity,

		- determine the gross beta activity,

		b) increase the number of sampling points—based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports, c) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per week. 2. An existing exposure situation after a radiation emergency—like in a normal situation
12	Meat (other than poultry and game meat)	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, in order to determine the current contaminations; 2) consecutive samplings—at least once per month; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmosphere, provided the acquisition of samples is possible.

		2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): 1) if it is not possible to use contaminated water for commercial purposes in local slaughterhouses or agricultural production holdings, or agricultural farms—like in a normal situation; 2) if it is possible to use contaminated water for the purposes of commerce or consumption in local slaughterhouses

		or agricultural production holdings, or agricultural farms: a) increase the frequency of consecutive samplings to no less than once per month, b) increase the number of sampling points—based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as

		used for the purpose of commerce, provided the acquisition of samples is possible. 2. An existing exposure situation after a radiation emergency—like in a normal situation
13	Poultry	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, in order to determine the current contaminations; 2) consecutive samplings—at least once per month; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmosphere, provided the acquisition of samples is possible. 2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): 1) if it is not possible to use contaminated water for commercial purposes in poultry holdings—like in a normal situation;

		2) if it is possible to use contaminated water for commercial purposes in poultry holdings:

		a) increase the frequency of consecutive samplings to no less than once per month, b) increase the number of sampling points—based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, provided the acquisition of samples is possible. 2. An existing exposure situation after a radiation emergency—like in a normal situation
14	Game meat	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, in order to determine the current contaminations; 2) consecutive samplings—once per quarter, provided the acquisition of samples is possible. 2. An existing exposure situation after a radiation emergency—like in a normal situation.
		II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): 1) single additional sampling in the points established in appendix no. 1 to the regulation—identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, in order to determine the current contaminations; 2) consecutive samplings—once per quarter, provided the acquisition of samples is possible. 2. An existing exposure situation after a radiation emergency—like in a normal situation
15	Eggs	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—identify and determine

		the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, in order to determine the current contaminations; 2) consecutive samplings—at least once per month; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmosphere, provided the acquisition of samples is possible.

		2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): 1) if it is not possible to use contaminated water for commercial purposes in poultry holdings—like in a normal situation; 2) if it is possible to use contaminated water for commercial purposes in poultry holdings: a) increase the frequency of consecutive samplings to no less than once per month, b) increase the number of sampling points—based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, provided the acquisition of samples is possible. 2. An existing exposure situation after a radiation emergency—like in a normal situation
16	Drinking water	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment

		(after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray

		spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) increase the frequency of sampling to no less than one sampling per week; 3) increase the number of sampling points in the external zone and within an extended planning distance—all public water intake points and at least 20 individual water intake points (wells), evenly distributed, or based on the results of mobile radiometric measurements and the predictions of the dispersion of radioactive isotopes in the atmosphere. 2. An existing exposure situation after a radiation emergency — like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters):

		1) single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) increase the frequency of sampling to no less than one sampling per week; 3) increase the number of sampling points in the external zone and within an extended planning distance—all public water intake points and at least 20 individual water intake points (wells), evenly distributed, or based on the results of mobile radiometric measurements and the predictions of the dispersion of radioactive isotopes in the aquatic environment. 2. An existing exposure situation after a radiation emergency—like in a normal situation.

		III. DISCHARGE INTO SOIL 1. A radiation emergency situation during the dispersion and after the dispersion of radioactive substances in the environment (when penetrating, and after penetrating the soil): 1) increase the frequency of sampling to no less than one sampling per week; 2) increase the number of sampling points in the external zone and within an extended planning distance—all public water intake points and at least 20 individual water intake points
		(wells), based on the predictions of the dispersion of radioactive isotopes in the soil. 2. An existing exposure situation after a radiation emergency—like in a normal situation
17	Groundwater	. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) consecutive samplings—like in a normal situation; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmospheric air, provided the acquisition of samples is possible. 2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS
		1. A radiation emergency situation during the dispersion and after the dispersion of radioactive substances in the environment

		(during discharge and after discharge into surface waters): 1) increase the frequency of determining the activity concentration of Sr-90, C-14, Pu-238, and Pu-239+240 to no less than once per month; 2) introduce determinations of the activity concentration of U-238, U-235, U-234, Am-241, Po-210, and Th-232 for each sampling—at least once per month; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the soil, provided the acquisition of samples is possible. 2. An existing exposure situation after a radiation emergency—like in a normal situation. III. DISCHARGE INTO SOIL 1. A radiation emergency situation during the dispersion and after the dispersion of radioactive substances in the environment (when penetrating, and after penetrating the soil): 1) increase the frequency of determining the activity concentration of Sr-90, C-14, Pu-238, and Pu-239+240 to no less than once per month; 2) introduce determinations of the activity concentration of U-238, U-235, U-234, Am-241, Po-210, and Th-232 for each sampling—at least once per month; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of

		radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the soil, provided the acquisition of samples is possible. 2. An existing exposure situation after a radiation emergency—like in a normal situation
18	Drainage water	I. DISCHARGE INTO ATMOSPHERIC AIR 1. MEASUREMENTS BY MEANS OF DOSIMETRIC STATIONS: 1) a radiation emergency situation — measurement results at least once per 10 minutes; 2) an existing exposure situation after a radiation emergency—like in a normal situation. 2. MEASUREMENTS OF SAMPLES: 1) a radiation emergency situation after the dispersion of radioactive substances in the environment (after the

		radioactive cloud has passed)—single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) an existing exposure situation after a radiation emergency—like in a normal situation.
		II. DISCHARGE INTO SURFACE WATERS 1. MEASUREMENTS BY MEANS OF DOSIMETRIC STATIONS: 1) a radiation emergency situation—measurement results at least once per 10 minutes; 2) an existing exposure situation after a radiation emergency—like in a normal situation. 2. MEASUREMENTS OF SAMPLES: 1) a radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters)—single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) an existing exposure situation after a radiation emergency—like in a normal situation
19	Green feed, including grass	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment
		(after the radioactive cloud has passed):

		1) single additional sampling in the growing season, in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) consecutive samplings—at least once per day, in the growing season: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmospheric air; 4) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per week;

		2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): 1) if it is not possible to use contaminated water for irrigation—like in a normal situation; 2) if it is possible to use contaminated water for irrigation: a) increase the frequency of consecutive samplings to no less than one sampling per day in the growing season: - identify and determine the activity concentration of gamma emitters by means of high resolution

		gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity, b) increase the number of sampling points—based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports,

		c) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per week. 2. An existing exposure situation after a radiation emergency—like in a normal situation
20	Bioindicators (fungi, mosses, lichens, needles, and leaves)	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations, provided the acquisition of samples is possible; 2) the frequency of consecutive samplings—like in a normal situation; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmospheric air. 2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS—like in a normal situation
21	Surface water	I. DISCHARGE INTO ATMOSPHERIC AIR 1. MEASUREMENTS BY MEANS OF DOSIMETRIC STATIONS: 1) a radiation emergency situation—measurement results at least once per 10 minutes;

		2) an existing exposure situation after a radiation emergency—like in a normal situation. 2. MEASUREMENTS OF SAMPLES: 1) a radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): a) single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: - identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity, b) consecutive samplings—like in a normal situation, c) increase the number of sampling points—based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the atmospheric air, in particular in the sea as well as

		natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports; 2) an existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. MEASUREMENTS BY MEANS OF DOSIMETRIC STATIONS: 1) a radiation emergency situation—measurement results at least once per 10 minutes; 2) an existing exposure situation after a radiation emergency—like in a normal situation. 2. MEASUREMENTS OF SAMPLES: 1) a radiation emergency situation during the dispersion of radioactive substances in the environment (during discharge into surface waters):

		a) single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: - identify and determine the activity concentration of gamma emitters by means of

		high resolution gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity, b) increase the frequency of consecutive samplings to no less than once per day: - identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity; 2) a radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): a) increase the frequency of consecutive samplings to no less than once per day: - identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity,

		b) increase the number of sampling points—based on the results of monitoring, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or

		recreation, in particular bathing and practicing water sports, c) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per week; 3) an existing exposure situation after a radiation emergency—like in a normal situation
22	Fish	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, in order to determine the current contaminations; 2) consecutive samplings—like in a normal situation; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmospheric air.

		2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation: 1) during the dispersion of radioactive substances in the environment (during discharge into surface waters): a) single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: - identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity, b) increase the frequency of consecutive samplings to no less than once per month; 2) after the dispersion of radioactive substances in the environment (after discharge into surface waters):

		a) increase the frequency of consecutive samplings to no less than once per month,

		b) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal and external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports. 2. An existing exposure situation after a radiation emergency—like in a normal situation
23	Crustaceans and molluscs	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, in order to determine the current contaminations; 2) consecutive samplings—like in a normal situation; 3) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the atmospheric air.

		2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation: 1) during the dispersion of radioactive substances in the environment (during discharge into surface waters): a) single additional sampling in the points established in appendix no. 2 to the regulation—in order to determine the current contaminations: - identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, - determine the HTO activity concentration,

		- determine the gross alpha activity, - determine the gross beta activity, b) increase the frequency of consecutive samplings to no less than one sampling per month; 2) after the dispersion of radioactive substances in the environment (after discharge into surface waters): a) increase the frequency of consecutive samplings to no less than once per month, b) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal and external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports.

		2. An existing exposure situation after a radiation emergency—like in a normal situation
24	Aquatic flora	I. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation: 1) during the dispersion of radioactive substances in the environment (during discharge into surface waters)—single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) after the dispersion of radioactive substances in the environment (after discharge into surface waters):

		a) increase the frequency of consecutive samplings to no less than one sampling per quarter, b) increase the number of sampling points—based on the results of mobile radiometric measurements

		of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports. 2. An existing exposure situation after a radiation emergency—like in a normal situation
25	Benthic organisms	I. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation: 1) during the dispersion of radioactive substances in the environment (during discharge into surface waters)—single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration,
		c) determine the gross alpha activity, d) determine the gross beta activity; 2) after the dispersion of radioactive substances in the environment (after discharge into surface waters): a) increase the frequency of consecutive samplings to no less than one sampling per quarter, b) increase the number of sampling points—based on the results of mobile radiometric measurements of radioactive contaminations, and the predictions of the dispersion of radioactive isotopes in the aquatic environment, in particular in the sea as well as natural and artificial inland water bodies located in an area demarcated by the extended planning distance as well as the internal zone and the external zone, constituting a source of water for the purpose of consumption or commerce, as well as used for the purpose of commerce, including fishery, or recreation, in particular bathing and practicing water sports. 2. An existing exposure situation after a radiation emergency—like in a normal situation
26	Bottom sediments	I. DISCHARGE INTO ATMOSPHERIC AIR

		1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—in order to

		determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) consecutive samplings—like in a normal situation; 3) increase the number of sampling points—in accordance with the established additional surface water intake points. 2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation: 1) during the dispersion of radioactive substances in the environment (during discharge into surface waters)—increase the frequency of consecutive samplings to no less than once per week: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration,

		c) determine the gross alpha activity, d) determine the gross beta activity; 2) after the dispersion of radioactive substances in the environment (after discharge into surface waters): a) increase the frequency of consecutive samplings to no less than once per week: - identify and determine the activity concentration of gamma emitters by means of high resolution

		gamma-ray spectrometry, - determine the HTO activity concentration, - determine the gross alpha activity, - determine the gross beta activity, b) increase the number of sampling points—in accordance with the established additional surface water intake points, c) determine all values according to the requirements included in appendix no. 1 to the regulation—at least once per month. 2. An existing exposure situation after a radiation emergency—like in a normal situation
27	Sewage sludge	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed):

		1) additional sampling in the points established in appendix no. 1 to the regulation, in order to determine the current contaminations—at least once per week: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) increase the frequency of sampling to no less than one sampling per month; 3) increase the number of sampling points—all wastewater treatment plants in the internal zone and the external zone. 2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters):

		1) additional sampling in the points established in appendix no. 1 to the regulation, in order to determine the current contaminations—at least once per week: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry,
		b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) increase the frequency of sampling to no less than one sampling per month; 3) increase the number of sampling points—all wastewater treatment plants in the internal zone and the external zone. 2. An existing exposure situation after a radiation emergency—like in a normal situation
28	Sand from coastal beaches	I. DISCHARGE INTO ATMOSPHERIC AIR 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) increase the frequency of sampling to no less than one sampling per month;
		3) increase the number of sampling points by additional 3 points in the internal zone and the external zone. 2. An existing exposure situation after a radiation emergency—like in a normal situation. II. DISCHARGE INTO SURFACE WATERS

		1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after discharge into surface waters): 1) single additional sampling in the points established in appendix no. 1 to the regulation—in order to determine the current contaminations: a) identify and determine the activity concentration of gamma emitters by means of high resolution gamma-ray spectrometry, b) determine the HTO activity concentration, c) determine the gross alpha activity, d) determine the gross beta activity; 2) increase the frequency of sampling to no less than one sampling per month; 3) increase the number of sampling points by additional 3 points in the internal zone and the external zone. 2. An existing exposure situation after a radiation emergency—like in a normal situation
29	People	I. DISCHARGE INTO THE ENVIRONMENT 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) a single additional measurement of no less than 10 individuals from the population inhabiting the internal zone or the external zone; 2) the frequency of consecutive measurements (preferably of the same individuals)—at least once per half-year. 2. An existing exposure situation after a radiation emergency—measurement of no less than 10 individuals from the population inhabiting the internal zone or the external zone, at least once per year (preferably of the same individuals)
30	Diet	I. DISCHARGE INTO THE ENVIRONMENT 1. A radiation emergency situation after the dispersion of radioactive substances in the environment (after the radioactive cloud has passed): 1) single additional sampling of food samples from locations covered by an environmental monitoring program with respect to the diet; 2) the frequency of consecutive samplings—at least once per half-year.

		2. An existing exposure situation—like in a normal situation