

COMMITTEE OF STATE SECURITY [KGB] OF THE USSR
ORDER No.76
September 30, 1986
Moscow

On the permissible levels of the content of radioactive substances, radiological contamination, doses of radiation exposure, and organisation of the observation of the individuals exposed to radiation as a result of the accident at the Chernobyl nuclear power plant

Proclaiming the following directions, approved by the Chief State Medical Officer of the USSR:

- The temporary permissible levels of the content of radioactivity substances in food products, drinking water, medical herbs (total beta-activity), from May 30th, 1986, No. 129-252/DSP;
- The temporary permissible levels of radiological contamination of soil, roads, external and interior surfaces of buildings after the decontamination, from June 2nd, 1986, No. 129-253/DSP;
- The temporary permissible levels of radioactive contamination of skin, undergarments, clothing, shoes, transport conveyances, and personal protection equipment, for the period of the liquidation of the consequences of the accident at the Chernobyl nuclear power plant, from June 2nd, 1986, No. 129-254/FSU.

A page or several pages appear to be missing, the existing pages were re-ordered in the correct sequence.

Approved
Chief State Medical Officer of the USSR
P.N. Burgasov
May 30th, 1986
No. 129-252/DSP

Temporary permissible levels of the content of radioactive substances content in food products, drinking water, and medical herbs (total beta-activity)

Replaces No. 4104-86 and 4105-86

PRODUCT	Permissible content (Bq/L, Bq/kg)
Drinking water	370
Milk	370
Condensed milk	18,500
Powdered Milk	3,700
Cottage cheese	3,700
Cheese	7,400
Butter	7,400
Sour cream	3,700
Vegetable oil	7,400
Margarine	7,400
Meat and meat products	3,700
Poultry	3,700
Eggs (each)	1,850
Fish	3,700
Vegetables	3,700
Herbs	3,700
Potatoes	3,700
Fruits, berries (fresh)	3,700
Fruits, berries (dried – dry weight)	3,700
Juices	3,700
Grains, grain products, cereals	370
Bread and baked goods	370
Sugar	1,850
Mushrooms	18,500
Medical plants	18,500

Deputy Chief State Medical Officer of the USSR
A.I. Zaichenko

Approved
Chief State Medical Officer of the USSR
P.N. Burgasov
June 2nd, 1986
No. 129-253/DSP

The temporary permissible levels of radiological contamination of soil, roads, and external and interior surfaces of buildings after the decontamination

Item	Permissible dose rate in $\mu\text{Sv}/\text{hour}$
Road Surfaces	
Outside populated areas	15
Inside populated areas	7
Open land of populated areas, lands, sidewalks, outdoor recreation areas, playgrounds, vegetable garden plots, etc.	7
Outdoor surfaces of houses and other buildings	7
Interior surfaces of houses and workplaces	3

Note: The calculations are based on the assumption that the coefficient of contamination for the houses and other buildings is equal to 2 (for wooden houses).

Deputy Main State Medical Officer of the USSR
A.I. Zaichenko

Approved
Chief State Medical Officer of the USSR
P.N. Burgasov
June 2nd, 1986
No. 129-254/DSP

Temporary permissible levels of radioactive contamination of skin, undergarments, clothing, shoes, transport conveyances, and personal protection equipment (in $\mu\text{Sv}/\text{hour}$), for the period of the liquidation of the consequences of the accident at the Chernobyl nuclear power plant.

Contaminated Item	Zones			
	III	II	I	Outside the zones
Skin and undergarments	20	10	5	1
Bedding and personal clothing	-	10	5	1
Personal footwear	-	-	10	1
Winter outerwear, personal protection equipment	50	30	-	-
Interior surfaces of means of transport	50	30	10	2
Exterior surfaces of means of transport and road surfaces	200	50	15	3

The values for the radiation dose rates for zones III, II, and I will be communicated according to established protocol.

Deputy Main State Medical Officer of the USSR
A.I. Zaichenko

The KGB personnel participating in the elimination of the consequences of the accident at the Chernobyl nuclear power plant are to comply with the Radiation Safety Standard No.141, as confirmed by the USSR Ministry of Health on June 7th, 1976 and USSR KGB Order No.142/DSP from December 6th, 1984.

The temporary limits for the exposure to external radiation exposure are established as follows:

- For personnel working in areas with a radiation level of less than 50 $\mu\text{Sv}/\text{hour}$ – the dose of 50 mSv;
- For personnel working in areas with a radiation level above 50 $\mu\text{Sv}/\text{hour}$ – the dose of 100 mSv.

In exceptional cases in planning of particularly important work and in the case of absence of any medical contra-indications, a limited number of workers involved in such tasks may be exposed to external radiation at the level of up to 250 mSv. The approval of the commander of the Military Medical Administration of the USSR KGB is required prior to the personnel undertaking such work.

Exposure of personnel to radiation doses of 100 and 250 mSv is only permitted for the individuals who have never before been exposed to radiation or for those who have received a dose of no more than 50 mSv in the previous year.

The personnel who have received the highest permitted exposure of 250 mSv are no longer to be exposed to elevated levels of radiation and their maximum annual exposure should not exceed 50 mSv. They are only allowed to work with radiation after the assessment by the medical commission, in accordance with the point article 3.a of the attachment No.1 to the Order No.285 of the USSR Ministry of Defence, as detailed in the order No.142/DSP of the USSR KGB.

Break in pages, some information missing.

The individuals who have received radiation doses exceeding 250 mSv are to be removed from work with ionising radiation and directed to a medical examination.

The external radiation exposure of personnel working in areas with levels of radiation higher than 10 $\mu\text{Sv}/\text{hour}$ is to be measured by personal dosimeters. When work is conducted or personnel are allocated to areas where radiation levels are below 10 $\mu\text{Sv}/\text{hour}$, the exposure is to be calculated based on the results of area measurements.

The consumption of water and food products with levels of radioactive substances differing from the declared “Temporary permissible levels of the content of radioactive substances in food products, drinking water, and medical herbs (total beta-activity)” by personnel is permitted, provided that the total consumption of radioactive substances from water and food does not exceed 11,100 Bq per day, or 407,000 Bq per year.

There appears to be an error in the above calculation, as year to day ratio is only 37, instead of expected 370 ($3.0 \cdot 10^{-7}$ Ci/day vs. $1.1 \cdot 10^{-5}$ Ci/year in the original text). Taking into account the values in the original limiting document it is considered that the daily allowed consumption is correct and the annual consumption rate is not, and should've been ten times higher, at 4.07 MBq.