



**Voluntary Report** – Voluntary - Public Distribution **Date:** December 22,2020

Report Number: UP2020-0058

**Report Name:** Ukraine' Radiation Contamination MRLs

Country: Ukraine

Post: Kyiv

Report Category: FAIRS Subject Report

Prepared By: Oleksandr Tarassevych

Approved By: Robin Gray

## **Report Highlights:**

Ukraine adopted Maximum Residue Levels (MRLs) for 137 Cesium and 90 Strontium back in 2006. Post is unaware of trade problems associated with those indicators however appropriate MRLs remain compulsory for all imported products. In 2020 Ukraine included these MRLs into the list of regulatory documents with which imports must comply.

Ukraine <u>adopted</u> radiological sanitary-hygiene norms only for two radiological isotopes: <sup>137</sup>Cesium (<sup>137</sup>Cs) and <sup>90</sup>Strontium (<sup>90</sup>Sr). The norms were developed and adopted by the Ministry of Healthcare of Ukraine (MOH) by Order 256 in 2006 (amended in 2008) for a long list of food products and drinking water. No other radioactive substances are officially monitored in food products and drinking water. In 2020 Ukraine included Order 256 in the list of food import requirements.

Cs contamination occurs as a result of nuclear power station accidents and nuclear weapons testing. <sup>137</sup>Cs reacts with water, producing a water-soluble compound (cesium hydroxide). Because of this property, Cs easily moves and spreads in nature.

Naturally occurring Sr is nonradioactive and nontoxic at levels normally found in the environment, but <sup>90</sup>Sr is a radiation hazard. <sup>90</sup>Sr is a product of nuclear fission. It is present in significant amounts in spent nuclear fuel and in radioactive waste from nuclear reactors and in nuclear fallout from nuclear tests.

Some territories of Ukraine received substantial contamination by both <sup>137</sup>Cs and <sup>90</sup>Sr as a result of the Chornobyl nuclear accident in 1986. As a result, radiological MRLs remain relevant predominately to domestically produced products. Dairy products, wild berries and mushrooms, produced and picked, both in the areas adjacent to the Chernobyl nuclear power station exclusion zone, pose the greatest food risks. Post is not aware of any U.S. exports that were rejected due to a violation of these radiological MRLs.

By Order 256, Ukraine adopted sophisticated, risk-based intake norms. Order 256 transferred those norms to food and agricultural products. The MRLs are listed below.

## Maximum Residue Levels for <sup>137</sup>Cs and <sup>90</sup>Sr radionuclides in Food and Drinking Water\*

N	Product name**	MRL, Cs Bq / kg	MRL, Sr Bq / kg
1	Grain, cereals and bakery products		
	1.1. Food grain, including wheat, rye, oats, barley, millet, buckwheat, rice, corn, sorghum and other cereals	50	20
	1.2. Dried legumes, including peas, beans, lentils, etc.	50	30
	1.3. Flour, flour baking mixes, groats, starch, crashed grain or processed into flakes; pasta, cereals, oatmeal; semi-finished cereals; finished products made from grain, cereals, incl. breakfast cereals, muesli, products obtained by blowing or frying cereals, etc.	30	10
	1.4. Dried soybeans, soybean products, including soy protein, flour, finished products and more	50	30
	1.5. Bread and bakery products, including products with additives; flour products, including confectionery products, semifinished products containing dough	20	5
2	Milk and dairy products		

	2.1. Raw milk for industrial processing (except baby food), liquid milk and cream, whey; fermented milk products, including fresh cheeses, yogurts, yogurt products, fresh sour milk desserts, sour milk drinks etc.; products made from milk and cream, incl. with the addition of non-dairy components (ice cream made from milk or cream, ice cream		
	cakes, milk drinks, milk desserts, etc.)	100	20
	2.2. Butter (including butter, spreads, butterfat, etc.); butter-based		
	sandwich pastes	200	40
	2.3. Hard cheeses, pickled cheeses, processed cheeses, blue cheeses	200	100
	2.4. Concentrated or condensed milk and cream, condensed milk and cream with fillers	300	60
	2.5. Dry milk products, including milk, cream, casein etc.; dry milk mixes, milk based food concentrates	500	100
	2.6. Raw milk for industrial processing into infant formulae	40	5
3	Meat and meat products		
	3.1. Meat of slaughter animals, poultry (fresh, chilled, frozen) without bones for industrial processing, meat offal (including raw intestines and blood for food purposes) of slaughter animals and poultry fresh, frozen, and processed in various ways; products of meat and poultry processing, including semi-finished products, finished products,		
	sausages, canned meat, meat and vegetables	200	20
	3.2. Game Meat (birds and animals)	400	40
	3.3. Fat of slaughter animals (including lard) and poultry, products of its processing	100	30
	3.4. Dried meat of slaughtered animals and poultry, products of its processing	400	40
	3.5. Bones of animals and birds of all kinds	50	200
	3.6. Gelatin	150	50
4	Fish, seafood and products of their processing		
	4.1. Fish, fresh and frozen, processed by different methods; fish oil, roe (including artificial), milt and other fish products; processed products, including semi-finished fish products, finished fish products (fish oil, roe oil, fish pastes etc.), fish preserves and canned	150	35
	4.2. Seafood (crustaceans, mollusks and other aquatic invertebrates, meat of amphibians, reptiles and marine mammals) fresh and frozen, processed by various methods; products of their processing, including semi-finished products, finished products, canned seafood; fat of marine mammals	150	35
	4.3. Dried or jerked fish and seafood (crustaceans, mollusks and other aquatic invertebrates, meat of amphibians, reptiles and marine		
	mammals)	300	70
	4.4. Algae, seaweed and processed products	200	70
	4.5. Dried seaweed and water plants	600	200
5	Poultry eggs and products of their processing		

	5.1. Poultry eggs and liquid egg products; semi-finished and finished products from poultry eggs	100	30
	5.2. Dried products of poultry eggs processing, incl. egg powder, dried protein, yolk; dry mixes made from poultry eggs	400	100
6	Vegetables and products of their processing		
	6.1. Fresh potatoes and potato processing products, including canned potatoes, frozen potatoes; culinary potato products, semi-finished potatoes etc.	60	20
	6.2. Fresh vegetables (leafy, including table greens, fruits, melons, roots), legumes, sweet corn, mushrooms (cultivated); processed vegetable products, including semi-finished products, finished products, juices, canned food and more	40	20
	6.3. Vegetable concentrates (including tomato paste, tomato sauces, ketchups, etc.)	120	50
	6.4. Dried vegetables (including potatoes), mushrooms (cultivated) and vegetable mixtures; products of processing of dried vegetables	240	80
7	Fruits and berries		
	7.1. Fruits and berries fresh, frozen, canned; fruit and berry juices	70	10
	7.2. Processed products of fruits and berries (jams, pastes, marmalades, jellies etc.)	140	20
	7.3. Dried fruits and berries, including freeze-dried products, dry fruits and berry-based mixtures	280	40
	7.4. Nuts and products of their processing	70	10
	7.5. Mixtures of fruit, berry and vegetable juices	50	15
	Sugar, confectionery products (caramel, toffee, pastille, marmalade,		
8	etc.), jellies, chocolate and chocolate products; chewing gum	50	30
9	Mushrooms and wild berries (fresh, frozen or canned)	500	50
10	Dried wild mushrooms and berries	2500	250
	Seeds of oilseeds (sunflower, sesame, peanut, poppy and others, excluding soybeans); products of their processing, excluding vegetable		
11	fats and oils	70	10
12	Vegetable fats and oils, products made from them, including margarines, cooking fats, confectionery fats, creams etc.	100	30
	Black tea, pressed, flavored, with vegetable impurities; green coffee beans, roasted beans (whole, grounded, instant coffee); cocoa beans, cocoa mass, cocoa powder; dry instant drinks based on tea, cocoa,		
13	coffee and coffee substitutes (roasted malt, chicory, etc.)	200	50
14	Drinking water (water from underground sources of drinking water is also analyzed for content of natural radionuclides)	2	2
15	Drinks		
	15.1. Mineral water (water from underground sources of drinking water is also analyzed for content of natural radionuclides)	10	5

	15.2. Non-alcohol and low-alcohol beverages, including those based on vegetable raw materials; beer, kvass, ice cream; beverage concentrates		
	not included in other sections	20	20
	15.3. Alcohol beverages (excluding beer)	50	30
	Dried herbs (not applicable to herbal medicinal raw materials (substance) used for the manufacture of medicines); herbal teas, mate		
16	(Paraguayan tea), hyacinth (Sudanese rose) etc.	200	100
17	Tobacco and tobacco products	120	50
18	Dietary supplements of all kinds; extracts and thickeners of vegetable origin (substances containing pectin, pectinates and pectates; agaragar and other adhesives and thickeners of vegetable origin)	200	50
19	Spices and their mixes; seasonings, incl. sauces (soy sauce, mushroom etc.), excluding tomato sauces, mustard (ready to be consumed and mustard powder), salad dressings, mayonnaise etc.	120	50
20	Food additives and their mixtures (natural and artificial dyes, stabilizers, emulsifiers, flavors, fillers and others); vinegar; baking soda; yeasts; sublimated food products, desserts, mousses, creams, etc., not already included; instant soups and broths; malt extract	150	50
21	Table salt and salt mixtures	120	30
22	Honey and beekeeping products	200	50
23	Baby food		
	Ready-made baby food, infant milk formulae	40	

<sup>\*</sup> In cases, when the food product contains different ingredients subject to controls above, Ukraine's controlling authority makes a risk-based decision as to which component will be measured for contaminants.

## **Attachments:**

No Attachments.

<sup>\*\*</sup>MRLs in concentrated or diluted products must be re-calculated for the original product.