



Regulatory Legal Basis for the Management of Livestock By-Products

Elena Dabakhova, Doctor of Agricultural Sciences, Professor of the Department of Ecology, Russian State Agrarian University — Moscow Timiryazev Agricultural Academy.



By-products of agricultural animals are.... (up until March 1, 2023)



Hazard class III—V waste (licensing for waste management activities, waste passport registration, development of draft standards for waste generation and limits for their disposal, payment for environmental impact, etc.)

A supplementary product, not the aim of the production process, that is generated during the production of the main product and is suitable as raw material in another production process

Legal ambiguity: waste or supplementary product?



By-products of agricultural animals are.... (after March 1, 2023).



Livestock by-products (substances formed during the rearing of farm animals, including manure, droppings, bedding, runoff, and utilized in agricultural production)

Federal Law No. 248-FZ of July 14, 2022
"On Livestock By-products and Amendments to Certain Legislative Acts of the Russian Federation":

- Enhancement of the legal position of agricultural producers
- Boosting the efficiency of incorporating livestock by-products into agricultural production

Types of operations for the management of livestock by-products (No. 248-FZ)



- Storage of livestock by-products
- Treatment and processing of livestock by-products
- Transportation of livestock by-products
- Use of livestock by-products (incorporation of treated and processed livestock by-products into the soil to ensure the replenishment of fertility in agricultural lands)







Categorization of substances produced during animal rearing as livestock by-products (No. 248-FZ)



Step 1.

Individuals involved in agricultural production independently categorize substances produced during the rearing of farm animals as either livestock by-products or waste.

Step 2.

Individuals involved in agricultural production inform the Federal Service for Veterinary and Phytosanitary Surveillance (Rosselkhoznadzor):

- About the decision made to categorize substances produced during the rearing of farm animals as livestock by-products
- About the quantity of livestock by-products
- About the date of livestock by-product formation
- About the anticipated timeline for the utilization of livestock by-products in production or the transfer of livestock by-products to other parties
- About the outcomes of such utilization or transfer

Requirements for the management of livestock by-products (No. 248-FZ)



- Adherence to the requirements set forth by the regulatory legal acts of the Russian Federation (regulations, veterinary norms and rules, sanitary and epidemiological rules, hygienic standards, etc.)
- Prevention of environmental pollution and its components, including soil, water bodies, and forests when managing livestock by-products
- Storage of livestock by-products prior to their treatment or processing, only at specialized sites that are not waste disposal facilities and are not subject to inclusion in the state register of waste disposal facilities

Evaluation of compliance with mandatory requirements for the management of livestock by-products (No. 248-FZ)



- Warning! In the event that substances formed during animal rearing are classified as livestock by-products, the activities related to their management become subject to federal state control (supervision) conducted by the Federal Service for Veterinary and Phytosanitary Surveillance (Rosselkhoznadzor).
- Storage, treatment, processing, transportation, and sale of livestock by-products federal state veterinary control (supervision);
- Use of livestock by-products federal state land control (supervision) on agricultural lands.





Storage requirements:

- Storage should only be at specially equipped sites, located on the leeward side relative to animal housing facilities and below water intake structures
- Platforms must have either monolithic concrete or hermetically welded film covers, or they should have a clay cushion at the base that is at least 20 centimeters thick, with curbs on the sides and channels for draining excess moisture
- Storage practices must prevent environmental contamination.





Storage requirements:

Temporary placement of livestock by-products (solid fraction in heaps) on the top fertile soil layer is permitted without its removal and without adhering to site requirements:

- No more than five months from the actual placement of treated and processed livestock by-products
- On agricultural lands situated beyond the boundaries of water bodies' water protection zones, sanitary protection zones of drinking and domestic water supply sources





Requirements for treatment and processing:

- Presence of specially equipped sites
- Methods that prevent environmental contamination

Approaches to the treatment and processing of livestock by-products — accumulation and holding of effluents or clarified fractions, and/or composting of solid fractions, including in the form of deep, non-replaceable bedding, and/or their processing using chemical and/or biological preparations or additives at specialized sites.



Requirements for treatment and processing

Parameter name	Permissible value
Maximum mass concentration of toxic element impurities (gross content), in mg/kg of dry matter:	
lead	130
cadmium	2
mercury	2.1
arsenic	10
Maximum mass concentration of residual pesticide amounts in dry matter, including individual types, in mg/kg of dry matter:	
Gamma isomer of hexachlorocyclohexane (HCH) (sum of isomers);	0.1
DDT and its metabolites (aggregate amounts)	0.1
Presence of pathogenic microorganisms, cells/g, including Salmonella	is not permitted
Presence of viable helminth eggs and larvae, pcs/kg	is not permitted
Cysts of intestinal pathogenic protozoa, pcs/100 g	is not permitted

Compliance with the requirements must be confirmed by the results of studies conducted by an accredited laboratory.



Usage requirements:

- The use of untreated, unprocessed livestock by-products is not permitted
- The use of livestock by-products should not result in negative impacts on land and soil
- The application of livestock by-products to the soil should be carried out at a distance of at least 300 meters from the boundaries of residential construction
- The volumes and frequency of application should prevent the leaching of nutrients into groundwater and surface water bodies
- Application to the soil is permitted when the snow cover height is 20 cm or less, provided that the leaching of nutrients into underground and surface water bodies is prevented
- Livestock by-products are applied to the soil through even distribution across the area of the specified lands





Usage requirements:

The utilization and sale of livestock by-products are conducted based on technical specifications approved by their producer, which define:

- characteristics of livestock by-products,
- methods of their treatment, processing, and usage conditions,
- control methods,
- safety requirements.

List of violations of requirements for the management of livestock byproducts, resulting in these by-products being classified as waste



(Resolution of the Government of the Russian Federation No. 3256-r of October 31, 2022)

- Storage, treatment, and processing of livestock by-products outside of specially equipped facilities
- Use or transfer of livestock by-products that do not meet the mandatory requirements for the management of livestock by-products
- Storage, treatment, and processing of livestock by-products alongside domestic, industrial, and mixed wastewater, and/or failure to prevent pollutants from entering the water table
- Transportation of livestock by-products using hydromechanical equipment (hose, irrigation systems) that does not prevent pollution of human habitats, the environment, and components of the natural environment, including soils, water bodies, and forests



Thank you!