Good Practice Manual for Dealing with Waste Generated at the Workplace of Veterinary Medical Care Practices

Riga, 2011

"Good practice manual for dealing with waste generated at the workplace of veterinary medical care practices in the workplace" includes recommendations to veterinarien and veterinary medical care institution on in the creation, separation and storage of waste, as well as presents key Latvian regulatory requirements in these matters. The manual contains the experience of other countries, mainly of England, concerning medical waste generated in veterinary medical care facilities, as well as the recommendations of international organizations (World Health Organization, etc.) in this area.

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INTRODUCTION

The manual is designed to improve the generation, separation and storage of waste in the workplace of veterinarians, including the major Latvian regulatory requirements. The manual contains the experience of other countries, mainly of England, concerning medical waste generated in veterinary medical care facilities, as well as the recommendations of international organizations (World Health Organization, etc.) in this area.

The target audience of the manual is practicing veterinarians, as well as employees of veterinary medical care institutions.

The basic text of the manual includes the requirements for dealing with waste generated from the work of practicing veterinarians and in veterinary practice places.

The users of the manual are recommended to follow changes in the European Union and national legislation, since they can be regularly amended, repealed or adopted anew. Users should ensure that the minimum requirements described in the manual comply with the applicable laws and regulations.

I. General Issues

This manual includes recommendations for dealing with waste generated from the work of practicing veterinarians and by veterinary medical care institutions (hereinafter referred to as - institutions).

In Latvia Waste Management general requirements are set out in the Waste Management Act and the subordinate Cabinet of Ministers Regulations.

Some specific requirements for dealing with waste generated in the workplace of veterinary medical care practices are included in:

1) Cabinet of Ministers Regulations which are subordinated to Pharmacy Law - unfit veterinary medicine and diagnosticums

2) Regulation (EC) No 1069/2009 of the European Parliament and of the Council and Commission Regulation (EU) No.142/2011 - animal by-products and derived products not intended for human consumption (hereinafter referred to as – by-products)

Partly this sphere is covered by the Law of the Republic of Latvia "On Radiation Protection and Nuclear Safety", Chemical Substances Law, the Law "On Pollution", and other laws and regulations.

Handling the waste, veterinary practitioners and veterinary medical care institutions observe:

1) the laws and regulations on waste management,
2) separate epizootics and zoonoses, the economic infectious diseases prevention and control measures and regulations
3) The local government binding regulations on waste management,

4) as well as the institution hygiene plan requirements for dealing with waste generated by institutions.

II. Definitions

The terms used in laws and regulations and this manual:

1) According to the Veterinary Medicine Law:

practicing veterinarian – a veterinarian who has obtained the right to practise veterinary medicine and is engaged in it;
veterinary medical practice – professional activity of a practising veterinarian in the promotion of animal welfare, improvement and maintenance of health, diagnostics and prevention of animal diseases, treatment of sick animals, as well as preparation and selling of drugs in sufficient amounts for animal care;
workplace of veterinary medical care practices - compliant with specific requirements and specially equipped work place where a practicing veterinarian performs veterinary medical care practice;

2) According to the Regulation (EC) No 1069/2009 of the European Parliament and of the Council and according to the Commission Regulation Nr.142/2011:

animal by-products – entire bodies or parts of animals or products of animal origin or other products derived from animals not intended for human consumption, including ova, embryos and semen**;**
derived products - products obtained from one or more treatments, transformations or steps of processing of animal by-products**;**
animal - means any invertebrates or vertebrates**;**
farm animal - is:

1) any animal that is kept fattened or bred by humans and used for the production of food, wool, fur, feather,

hides and skins or any other product obtained from animals or for other farming purposes;

2) equidae (horses);

wild animal - any animal that is not kept by humans;

pet - means any any animal belonging to species normally nourished and kept for purposes other than farming, but not consumed;

aquatic animals - are aquatic animals as defined in Directive;

aquatic animals - are aquatic animals as defined in e) subparagraph of paragraph 1 of Article 3 of Directive 2006/88/EC, and they are fish belonging to the superclass Agnatha, and to the classes Chondrichthyes and Osteichthyes, mollusc belonging to the Phylum Mollusca, crustacean belonging to the Subphylum Crustacea;

transmissible spongiform encephalopathies (TSEs) - all transmissible spongiform encephalopathies with the exception of those occurring in humans;

specified risk material - are tissues if they come from animals whose origin is in a Member State or third country or of one of their region with a controlled or undetermined BSE risk status**:**

a) for cattle:

- the skull excluding the mandible and including the brain and eyes, and the spinal cord of animals aged over 12 months;
- the vertebral column excluding the vertebrae of the tail, the spinous and transverse processes of the cervical, thoracic and lumbar vertebrae and the median sacral crest and wings of the sacrum, but including the dorsal root ganglia of animals aged over 30 months;
- the tonsils, the intestines from the duodenum to the rectum and the mesentery of animals of all ages;

b) as regards ovine and caprine animals:

- the skull including the brain and eyes, the tonsils and the spinal cord of animals aged over 12 months or which have a permanent incisor erupted through the gum, and
- the spleen and ileum of animals of all ages.

laboratory reagent - a packaged product, ready for use, containing animal by-products or derived products, which is intended for use in the laboratory as a reagent or reagent product, calibrator or control material, whether used alone or in combination with substances which are not of animal origin to detect, measure, examine or to generate other substances;

research and diagnostic samples - animal by-products and derived products intended for the following purposes: research or analysis for the promotion of progress in science and technology, in conjunction with activities in diagnostic, educational or research spheres;

colour marking – is the systematic use of colour, as defined in c) subparagraph of paragraph 1 of Chapter II 3 of Annex VIII of Commission Regulation Nr.142/2011, for displaying information as provided for in this Regulation on the surface or part of the surface of a packaging, container or vehicle, or on a label or symbol applied to it;

manure - feces and / or urine of farmed animals other than farmed fish, which can also be a litter.

3) According to the Waste Management Law:

waste – any object or substance which the holder discards or intends or is required to discard;

hazardous waste – waste which displays one or more of the properties which make it hazardous;

municipal waste – waste produced in a household, trade, in the process of provision of services or waste produced in other places which, because of its properties, is similar to domestic refuse;

production waste – waste produced as a result of production process or construction;

waste producer – any natural or legal person whose activities produce waste (original waste producer) or anyone who carries out pre-processing, mixing or other operations resulting in a change in the composition or nature of the waste;

waste manager – a merchant, also waste dealer and waste management broker who has received the relevant permit for waste management in accordance with the procedures specified in this law or the regulatory enactments regarding pollution;

electrical and electronic equipment – equipment which is dependent on electric currents or electromagnetic fields and equipment for the generation, transfer and measurement of electric currents and electromagnetic fields designed for use with a voltage rating not exceeding 1000 volts for alternating current and 1500 volts for direct current and falling under the categories determined by the Cabinet of Ministers;

waste electrical and electronic equipment – electrical or electronic equipment which is considered as waste, including all components, subassemblies and consumables which are part of the product at the time of discarding.

The terms used within the meaning of the manual:

Pre-treatment of waste - alter the nature of the waste to enable other treatment or regeneration operations to be conducted (waste treament and regeneration type R12 in accordace w/ legislation on the types of waste regeneration and storage). It also refers to the physical or chemical treatment of waste based upon which a compound or mixture is created that is then stored (meeting the storage type D9 in accordance w/ legislation on waste regeneration and storage types);

waste generation area - the area where waste is generated in the process of veterinary medical care;

area/room of waste collection - area or room in the workplace of veterinary medical care practices, in which waste generated in the process of veterinary medical care is collected and temporarily stored before delivering the waste to the waste manager**;**

waste storage area / room - area or room where the waste generated in the process of veterinary medical care are stored until the transfer of waste to waste managers**;**

waste treatment - activities performed with waste by a practising veterinarian in the process of veterinary medical care, employee of veterinary medical care institution and waste managers, collecting the waste, performing the pre-processing, as well as performing further actions with the waste.

III. General recommendations for dealing with waste generated in the institutions

A practicing veterinarian or an employee of veterinary medical care institution shall take steps to reduce generation of waste, provided that they do not endanger human health or the environment and meet the regulatory requirements for waste management:

- by using durable, reusable or recyclable products or goods as much as possible;
- by sorting waste (separating hazardous waste of different categories, as well as by collecting separately municipal waste (separating from each other waste containing paper, waste containing metal, waste containing plastic, waste containing glass));
- establishing a good working practice and environmentally friendly products or methods (such as moving away from mercury-containing medical devices, choosing environmentally friendly cleaning products, carrying out various operations so as to create the least possible amount of waste, etc.);
- providing pre-treatments (thermal, mechanical, chemical or other) of waste (in particular - infectious waste) to prevent hazards of waste incineration.

IV. Basic requirements for handling waste generated in the workplace of veterinary medical care practices

Handling waste, it is prohibited to mix municipal, hazardous, industrial and radioactive waste. It is prohibited to mix different types of hazardous waste (it is also prohibited to mix pharmaceutical, infectious waste with other waste).

It is prohibited to dilute, sterilize or perform other actions to hazardous waste, except where the practicing veterinarian or the institution itself is engaged in pre-processing, in accordance with the Chapter XV of the manual.

If the practicing veterinarian or the institution carries out waste management operations (collection, transportation, incineration or other activities), it in the cases provided by the laws and regulations on waste management receives permission for waste management.

To deliver municipal waste generated by the practicing veterinarian or the institution for management, the practicing veterinarian or the institution enters into a contract with the municipal waste manager, who has obtained a permit for municipal waste management under the procedures provided by the Waste Management Law and has concluded the contract with the municipality for municipal waste management.

When delivering municipal waste for management, the practicing veterinarian or the institution observes the relating laws and regulations, binding regulations issued by the municipality for management of municipal waste (separate collection) in its territory, as well as acts in accordance with the contract concluded with the municipal waste manager.

To deliver hazardous, radioactive or production waste generated by the institution for management the institution shall conclude the contract with waste managers who have obtained a permit for hazardous and industrial waste management under the procedures provided by the *Waste Management Law* or have obtained a permit for management of radioactive waste under the procedures provided by the *Law on Radiation Protection and Nuclear Safety*.

Transferring hazardous, radioactive or industrial waste for management, the institution shall act in accordance with relevant laws and regulations, as well as in accordance with contracts which are concluded with the waste managers.

V. Handling of hazardous veterinary medical waste by a practicing veterinarian and an employee of veterinary medical care institution

Treatment of cytotoxic and cytostatic pharmaceuticals

Cytotoxic Waste

Type of waste: Glassware, test tubes contaminated with cytotoxic and cytostatic pharmaceuticals;

Corresponds to the class 180 207 cytotoxic and cytostatic medicines

Treatment: marked with the label "Cytotoxic Waste", are placed in brightly-colored waterproof containers and in containers provided for sharps in bright colours

Example: *cytotoxic and cytostatic pharmaceuticals*

According to the laws and regulations on waste classification and characteristics that make hazardous waste hazardous, waste, containing cytotoxic and cytostatic medicines, are included in

hazardous waste category. This waste is delivered to managers of hazardous waste, with whom the institution has concluded a contract on the management of waste and who is authorized to engage in the management of waste.

In the process of veterinary medical care, clinical items (swabs, masks, gloves), surgical or sharp objects (needles, scalpels) and animal rugs, contaminated with cytotoxic and cytostatic pharmaceuticals, belong to this group of waste and are considered dangerous.

Treatment of sharps

Sharp waste

Type of waste: contaminated sharps
All sharps (needles, hypodermic needles, partially or fully dismantled scalpels) contaminated with blood of animals

Corresponds to the class 180 202 ”Wastes for the collection and storage of specific requirements to prevent and deter the spread of infection are determined”

Treatment: immediately are placed in labeled containers or tanks provided for sharps

Regardless of whether sharps or their waste are contaminated, they must be treated as hazardous waste.

Example: specials conatianers for sharps

The needle from the used syringe may be removed only if the design allows or provides the separation of the needle, or if a specific device for separation of a needle is available in the institution. It is forbidden to put caps on the used syringe needles, except when not putting the cap on the used syringe needle can cause a threat to human life and health, as well as to the environment.

It is prohibited to remove by hand from the used syringes (if the manufacturer has not provided) a needle, to break a needle, or bend the needle.

Used disposable sharp objects and other sharp waste are collected in the container immediately after use. The containers used for the collection of sharp objects shall be placed as close as possible the place of performing manipulations, without being hazardous to support staff, animals, clients.

For the collection of sharps strong, unbreakable, puncture-proof, waterproof containers that are labeled in accordance with the requirements shall be used for collection of sharps. Containers, in which sharps waste is collected, are labeled with danger sign for infectious substances. They are filled up to two thirds of the volume of the container, then they are tightly closed and it is ensure that they are delivered to the waste collection area / location or waste pretreatment facilities, if the waste pre-treatment takes place. If the

container provided for the collection of sharps is punctured, it is placed in another container that is labeled in accordance with the requirements. The container produced for the collection of sharps is filled according to the manufacturer's instructions.

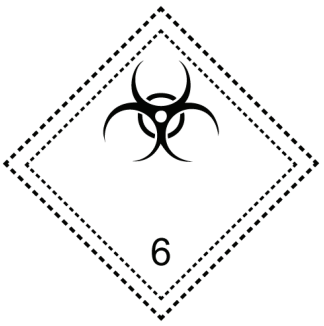
It is prohibited to collect sharps in non-puncture resistant or breakable container (e.g. cardboard box, bag, glass bowl, etc.).

Pre-treatment of sharps

If there are adequate facilities, they perform pre-treatment of sharps according to the requirements of Chapter XV of this manual.

If it is not possible to provide pre-treatment of sharps, they are delivered to the hazardous waste manager.

Treatment of infectious waste



Type of waste: Infectious waste

Clinical items (swabs, masks, gloves), animal rugs, which contain the potential for infectivity (viable micro-organisms or distributed toxins) and can cause infectious diseases to humans and animals

Corresponds to the class 180202 ”Wastes for the collection and storage of specific requirements to prevent and deter the spread of infection are determined”.

Treatment: is placed in liquid impermeable labeled, brightly-coloured bags or containers, if possible, subjected to on-site inactivation (e.g., temperature, chemical treatment, etc.).

Infectious waste which is not sharps objects or sharps waste, are placed in a durable, waterproof bag of a different colour (where possible in a yellow, red or orange bag).

Infective sharp objects or liquid infectious waste is placed in a waterproof container or tank, ensuring that the waste can not leak or fall out.

Infectious waste collection bags or containers are labeled with danger sign for infectious substances.

Infectious waste after collection and packaging are delivered to area/room of waste collection or to the waste pretreatment facilities.

If the institution has laboratory space or place, the microbiological waste prior to being taken from the laboratory facilities or sites are inactivated.

After the hazardous waste manager's request, if provided by the the contract concluded between the practicing veterinarian or institution and the waste manager, the waste is placed in containers provided for transportation that meets the requirements for the carriage of dangerous goods.

A practicing veterinarian or institution shall carry out the registration of hazardous waste in special registers in paper or electronic form.

The records in the registers must contain the following information:

1) *Number*
2) *Date*
3) *Waste origin (the process and supplier)*
4) *Composition of the waste;*
5) *Name of the waste (the name of hazardous waste shall be indicated pursuant to the regulations on waste classification and characteristics that make hazardous waste hazardous)*
6) *Waste class (the class of hazardous waste shall be indicated pursuant to the regulations on waste classification and characteristics that make hazardous waste hazardous)*
7) *Waste Quantity (kg);*
8) *The type of packaging used;*
9) *Number of waste packaging units;*
10) *Waste location (storage) site in the institution;*
11) *Notes on the transportation of waste;*
12) *The person responsible for the waste inventory (name and signature)*

Pre-treatment of infectious waste

If the waste pre-treatment is performed, the waste obtained during the pretreatment process, if infectivity is prevented, is classified as municipal waste and it is managed as municipal waste.

If the waste pre-treatment is not performed, the waste according to the contract concluded is delivered to the hazardous waste manager, who has received permits of Category A or B for the performance of polluting activities as provided by the laws and regulations.

Management of chemical waste


Ļoti toksisks


Toksisks


Kaitīgs


Kodīgs


Kaironošs


Sprādzienbīstams


Īpaši viegli uzliesmojošs


Viegli uzliesmojošs


Spēcīgs oksidētājs


Bīstams videi

Type of waste: Chemicals, disinfection and rodent means, substances for clinical material preservation, photochemicals fixer and developing solutions

Correspond to hazardous waste

Handling: are labeled, placed in liquid-proof containers, delivered to the manager

The waste containing hazardous chemicals is collected in a container or a tank in accordance with the physical state in order to prevent a potential risk the waste poses to public and animal health and the environment.

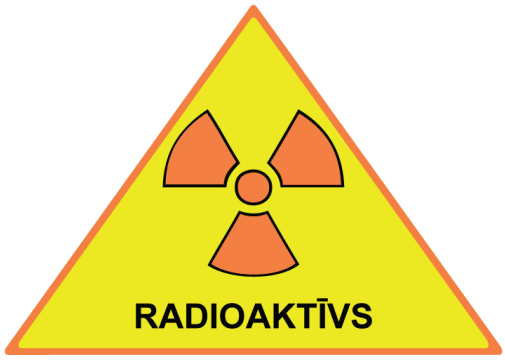
The container or tank containing hazardous chemicals shall be marked in accordance with labeling requirements for chemical substances and chemical products.

Photographic process waste

Photographic process wastes (eg solvents, developers, film, photo paper, etc.) are collected separately in a container or tank and are delivered for processing to the hazardous waste manager, who has received regulatory statutory authorization.

Photographic process waste containing liquids, such as photographic film, plates and photo paper may be collected in cardboard boxes, if it is aligned with the hazardous waste manager.

Treatment of radioactive waste



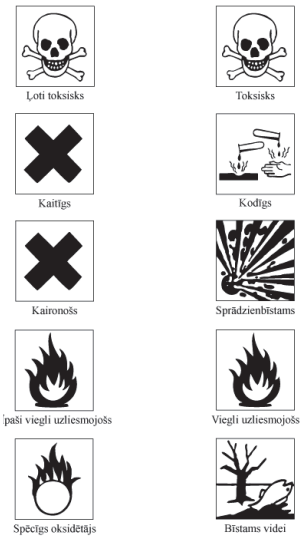
Type of waste: radioactive waste

Correspond to: hazardous waste

Treatment: are labeled, delivered to the waste managing company

Packages are labeled with radioactive hazard sign. Radioactive waste shall be treated in accordance with the requirements of laws and regulations on the handling of radioactive waste and related materials, as well as in accordance with laws and regulations concerning minimum requirements for medical institutions and their departments.

Treatment of mercury-containing waste



Mercury, items and materials used in the collection of mercury are considered hazardous waste.

- Amalgam waste is managed in accordance with laws and regulations concerning minimum requirements for medical institutions.
- If mercury is spilled in the institution, its residue is collected in a glass container, poured with mercury vapor suppression agents such as potassium permanganate solution (KMnO4)), the container is tightly sealed and sent to the waste collection area as hazardous waste. Performing these actions, an employee must use gloves and respirator or wet gauze mask. The place where mercury was found is treated with mercury vapor suppression agents (eg, potassium permanganate (KMnO4) solution or soap-soda solution). Wet cleaning and ventilation of all the rooms shall be performed. During the mercury collection process, the window shall be opened (if it does not face the other side of the institution area) and, if possible, the persons who are not participating in the collection of mercury must be asked to leave the premises.

VI. How a practicing veterinarian and an employee of veterinary medical care institution shall handle by-products

According to Regulation (EC) No 1069/2009 of the European Parliament and of the Council and Commission Regulation (EU) No.142/2011:

Definition:

animal by-products and derived products not intended for human consumption, including ova, embryos and semen.

For the purpose of optimisation of the management of by-products, the following categories shall apply to them;

Category 1 material

- Dead pet animals, zoo animals and circus animals or their body parts;
- Dead animals or bodies of dead animals containing specified risk material;
- Animals or parts of the body, suspected of being infected by a TSE, or in which the presence of a TSE has been officially confirmed, or animals killed in the context of TSE eradication measures;
- animals or their body parts used for the procedure or procedures, where the Food and Veterinary Service determines that such animals or their body parts due to the procedure or procedures can cause a serious harm to humans or other animal health. The word "procedure" means invasive or non-invasive use of an animal for experimental or other scientific purposes, with known or

unknown outcome, or educational purposes, which may cause pain, suffering, distress or lasting harm to an animal, which is similar to that caused by needle injection in accordance with good veterinary practice or exceeds it. The procedure includes any activity which causes or may cause birth or hatching of an animal, or formation of a new genetically modified animal line and maintenance in such conditions, but it does not include killing of animals only to use their organs or tissues;

- wild animals, when suspected of being infected with diseases communicable to humans or animals;
- mixtures of Category 1 material with either Category 2 material or Category 3 material or both.

Category 2 material

- Dead animals or their body parts;
- animals killed for disease control;
- manure, digestive tract content;
- foetuses;
- eggs;
- oocytes, embryos and semen which are not destined for breeding purposes;
- dead-in-shell poultry;
- animal by-products other than Category 1 material or Category 3.

Category 3 material

- blood, placenta, wool, feathers, hair, horns, hoof cuts and raw milk originating from live animals that did not show any signs of disease communicable through that product to humans or animals;
- aquatic animals, and parts of such animals, except sea mammals, which did not show any signs of disease communicable to humans or animals;

- the following material originating from animals which did not show any signs of disease communicable through that material to humans or animals: hatchery by-products, eggs, egg by-products, including egg shellsif no signs of any disease communicable through that material to humans or animals - hatchery by-products, eggs, egg products, including egg shells;
- day-old chicks killed for commercial reasons;
- aquatic and terrestrial invertebrates other than species pathogenic to humans or animals;
- animals and parts thereof of the zoological orders of *Rodentia and Lagomorpha*, except Category 1 material and Category 2 material.

To deliver the by-products resulting from the veterinary medical activities for treatment, recovery or disposal, a practicing veterinarian or veterinary medical care institution enters into a contract with the person engaged in by-products business, the activities of whom are approved or registered by the Food and Veterinary Service in accordance with the laws and regulations as regards procedures of registration and recognition of the persons involved in business dealing with animal by-products.

Collection, storage and transportation of by-products

The treatment of by-products

A practicing veterinarian shall identify by-products generated in the workplace of veterinary medical care practices as soon as they occur. The term Identification means the sorting of by-products by categories, holding separately, marking with colour codes and indicating the information determined by the Commission Regulation (EU) No.142/2011 on the packaging, container or vehicle surfaces or portions of the surface, or on a label attached thereto, or the symbol.

Category 1 material shall be marked in black, clearly indicating the category "Category 1 material" and information "only for disposal."

Example: Marking of Category 1 materials
Category 1 materials **Only for disposal!**

Category 2 material shall be marked in yellow, clearly indicating the category "Category 2 material" information and "not consumed as a food".

Example: Marking of Category 2 materials
Category 2 materials **Not consumed as a food!**

Category 3 material shall be marked with green color (green color with a blue impurity, to ensure that they are easily distinguishable from other colours), clearly indicating the category "Category 3 material" information and "Not consumed as a food".

Example: Marking of Category 3 materials
Category 3 materials **Not consumed as a food!**

Products must be collected and transported in tightly closed packaging or new leak-proof sealed containers or vehicles.

Vehicles and reusable containers, as well as reusable parts of equipment or appliances that come into contact with by-products must be maintained a clean condition. They must be clean and dry before use, and they must be cleaned, washed and / or disinfected after each use to the extent necessary to prevent cross-contamination.

Transporting the by-products from the workplace of veterinary medical care practices they are moved together with the commercial document, the model of which is defined by laws and regulations on animal by-products movement (see Annex 1).

Registration of by-products

A practicing veterinarian or institution shall make registration of by-products. Records shall contain:

- a description of the animal species,
- the amount of by-products,

- the date when the material is taken from the workplace of veterinary medical care practices
- the name and address of the transporter and the consignee, and the registration or approval number given by the Food and Veterinary Service.

A practicing veterinarian or institution shall store the registration data on paper or electronically for at least two years.

Research and diagnostic samples

If a practicing veterinarian uses research and diagnostic samples in the workplace of veterinary medical care practices, he shall provides all the necessary measures to prevent the spread of diseases transmissible to humans or animals, in particular, applying good laboratory practice.

It is prohibited to use research and diagnostic samples for purposes other than research or analysis for developing progress in science and technology, in conjunction with activities in diagnostic, educational or research areas.

Research and diagnostic samples, as well as any of the products obtained by the use of samples shall be disposed:

a) disposed of as waste by incineration or co-incineration. Disposal by incineration or co-incineration takes place only in the approved or registered for incineration or co-incineration plants of the Food and Veterinary Service;
b) performing processing under the conditions which are at least equivalent to validated method for steam autoclaves (sterilisers for medical purposes-EN 285:2006 + A2: 2009), and subsequently disposing as the waste or waste water in accordance with the relevant EU legislation, if they are part of the cell cultures, laboratory kits or laboratory samples;

c) sterilizing under pressure (Processing method for category 1 material, mentioned in Regulation 142/2011) and after processing disposing in accordance with conditions and requirements of Regulation No.1069/2009.

Practicing veterinarian, who handles the research and diagnostic samples, records the following information:

- description and origin of the animal species;
- material category;
- quantity;
- place of origin and place of dispatch;
- the name and address of the consignor;
- Date and method of disposal.

A practicing veterinarian shall store registration data on paper or electronically for at least two years.

VII. Handling of non-hazardous waste

In the workplace of veterinary medical care practices, every day waste is generated, which are not hazardous waste.

Treatment of pharmaceutical waste

Type of waste: Pharmaceutical waste (other than cytotoxic or cytostatic pharmaceuticals): established drugs, prescription drugs, expired drugs, empty bottles, the outer packaging

Corresponds to the class 180208 „Other medications that do not correspond to class 180207"

Treatment: to avoid mixing with household waste, the product is packed in fluid-tight packages and containers. Outer packaging shall be disposed as of municipal waste

Pharmaceutical waste, except waste containing cytotoxic and cytostatic medicines, is not considered hazardous waste, however, it is treated as hazardous waste.

Medicines of poor quality or unfit for use (other than cytotoxic and cytostatic medicines) are treated as hazardous waste in accordance with laws and regulations on drug acquisition, storage, utilization, registration and disposal destruction procedures in medical institutions.

Management of municipal waste

Type of waste: Municipal waste
Consists of secondary packaging, wrapping, paper, cardboard, beverage bottles, etc..

Treatment: delivered to household waste manager under the contract

Municipal waste is collected in the packaging of appropriate size, specially provided for collection of waste (cardboard boxes, tanks, containers, disposable bags). They are easy and safe resealable.

Requirements for bags for municipal waste collection:

- bag volume corresponds to the volume of waste collection container or bag holder size. It is recommended that the maximum capacity does not exceed 100 liters;
- metal wire or metal staples shall be forbidden to be used for tying up or fixing bags provided for household waste collection.

Bags provided for municipal waste collection shall be filled so as to be capable of being tied. It is recommended to fill a waste collection bag no more than two-thirds of the volume.

Household waste is collected in accordance with the requirements for sorting set in the local government binding regulations and the contract concluded with the waste manager.

The collected municipal waste shall be delivered to the waste collection area or the household waste containers according to the conctract concluded between a practicing veterinarian or institution and a waste manager on the household waste management.

The waste which does not contain hazardous chemicals, in accordance with the laws and regulations on classification, labeling and packaging of chemical substances, shall be managed as municipal waste.

Aerosol containers are considered as household waste when they are completely empty. These containers should not burn.

If the institution has not properly sorted waste, household waste may contain sharps, infectious waste or other waste. Therefore, when dealing with household waste, labour protection requirements shall be observed.

VIII. Treatment of Industrial Waste

If in the institution or its territory the manufacturing process takes place or construction work is performed, industrial waste may be generated. If the institution is defined as a generator of the waste, the waste shall be delivered to the waste managing company (with which the institution has signed the contract on the management of this waste and who is authorized to deal with the management of such waste) or the institution shall deliver the industrial waste to a specially equipped manufacturing waste collection point.

IX. Veterinary Medical Care Service on an On-call Basis. Home Visits

If a practicing veterinarian or an employee of veterinary medical care institution makes a visit on call, he is responsible for the treatment of waste generated in veterinary medical manipulation.

A practicing veterinarian working on-call basis, shall sort the waste material in the following way: used sharps are put in a container for sharp objects, but the infectious waste – in the containers provided for collection of infectious waste, primary packaging of used veterinary medicinal products - in a waterproof bag or container, secondary packaging - as household waste

A practicing veterinarian may dispose on-site in the animal housing the products (other than Category 1 material), resulting from:

1) performing surgery on live animals,
2) during animal birth on-site in the animal housing (eg, amniotic, placenta).

X. Requirements for Handling of Environmentally Hazardous Waste Products

Environmentally hazardous waste is collected separately from other wastes in accordance with the laws and regulations on waste management.

The waste batteries and accumulators, as well as waste electrical and electronic equipment and other environmentally harmful waste products must not be placed in the tank or container for household waste.

XI. Labour protection

A practicing veterinarian in his place of practice and a veterinary medical care institution dealing with the waste generated by the institution shall comply with laws and regulations on labour protection.

Employees who are involved in the collection and removal (transportation) of waste, during the performance of the above mentioned work shall use gloves in accordance with laws and regulations on the basic requirements for hygiene regime in institution. Moving hazardous waste in the territory, personal protective equipment shall be used in accordance with the prepared lists concerning environmental risk assessment.

Transporting hazardous waste, work clothes and boots, waterproof apron shall be used. Employees must be provided with a face shield and respirator.

Employee training

Employees of an veterinary medical care institution who or involved in dealing with waste generated by an institution or in organizing and overseeing these activities, before starting the work shall be recommended to get acquainted with the procedures laid down in an institution and which determine how to properly handle the waste generated by the institution, and subsequently at least once a year, the institution is recommended to organise such training.

The training shall include information on:
• state policy for a regional waste management plan and waste prevention programs in the state and the institution;
• the regulatory laws;
• waste handling activities of the employees concerning the waste generated by the institution, their roles and responsibilities.

XII. Collection and Storage of Waste within the Medical Institution

Waste shall be sorted as close to its source as possible.

If in the institution, when handling the waste, household and hazardous waste are mixed with each other, all mixed wastes are considered hazardous waste. It is prohibited to separate the mixed waste.

It is forbidden to sort infectious waste. If infectious waste is mixed with other types of waste, all waste is concidered as infectious waste.

The equipment provided for the removal of hazardous waste in the territory of the institution shall not be used for the removal of other substances or objects. The equipment provided for handling hazardous waste shall be washed and disinfected so as to ensure that waste collection and transfer that does not endanger human life and health, as well as the environment.

The institution shall ensure regular emptying of waste tanks, as well as washing and disinfecting, to ensure that waste collection and transfer is performed in a manner that does not endanger human life, health and the environment. Waste shall not be accumulated in the area of its generation.

Waste collection and storage area / room

In the workplace of veterinary medical care practices a separate collection of waste space / room shall be provided. In the veterinary medical care institution it is recommended to set up a separate waste collection and storage room or place. A waste collection room of an institution must be lockable, but the area must be separated.

If in the waste collection / storage room or area both municipal and hazardous wastes are stored, the storage of the above mentioned waste must be ensured in such a way as to prevent waste mixing.

Cytotoxic waste and radioactive waste must be stored separately from other waste.

Waste collection / storage area / room must be:

- with easy to clean surfaces;
- well-lighted;
- with ventilation;
- protected from the animal (rodent) and human unauthorized access.

A waste collection room must contain impermeable to water and pollutants floor, it must be cleaned after each waste disposal, where appropriate, by disinfection, to prevent danger to human life and health, as well as to the environment.

Waste storage time and temperature must meet the regulatory requirements for waste collection, sorting and bundling of biodegradable waste sites. According to it:

- hazardous waste which is infectious, shall be stored for no longer than one week after their occurrence. If for the storage of these wastes the temperature od 2-8 ° C is provided they are stored no longer than one month after the occurrence;
- hazardous waste which is not infectious shall be stored for no longer than three months after their creation.

The above mentioned storage duration and temperature shall not be attributable to the by-products.

Containers used for collection of hazardous waste, as well as other reusable packaging, the waste handling equipment, must be disinfected daily or when the waste is spilled or waste have not been properly packed.

XIII. General Packaging Requirements for Collection, Storage and Transportation of Hazardous Waste

A practicing veterinarian or an institution, through a contract with hazardous waste managers, agree on the packages to be used by a practicing veterinarian or an institution for collection and storage of hazardous waste, including the placement of labels on the packaging and completion of labels.

For the reduction of risks, a practicing veterinarian or an institution:

- on the hazardous waste packaging, which is provided for hazardous waste collection, storage or transport, ensures a label placement in accordance with the contract concluded with the hazardous waste manager;
- a practicing veterinarian or an employee of an institution, or a manager of hazardous waste, in accordance with the concluded contract, ensures the completion of a label in accordance with laws and regulations on hazardous waste tracking, identification, storage, packaging, labeling and shipment tracking procedure.

The label states:

1) the name of the waste,
2) the origin,
3) chemical composition of the waste (if such information is available)
4) the date of packaging,
5) the packer,
6) the warning signs in accordance with the requirements of laws and regulations for hazardous waste tracking, identification, storage, packaging, labeling and shipment tracking procedures, laws and regulations for the transport of dangerous goods.

Hazardous waste is collected and sorted in the packaging of appropriate size, specially provided for collection of hazardous waste (disposable bag, disposable or reusable container, box or container), which is waterproof, lightweight and with a secure closure.

If for the hazardous waste collection a bag is used, ensure that:

- bag volume corresponds to the volume of waste collection container or bag holder size;
- specially-made bags for infectious waste collection are used;
- metal wire or metal staples are not used for tying up a hazardous waste collection bag.

During the collection of hazardous waste, the bag provided for hazardous waste collection is filled up to two-thirds of the volume of the bag, then it is closely tied up or closed and delivered to the waste collection area or the waste collection site, or the waste pretreatment facilities, if any. If the packing provided for the collection of hazardous or household waste on the outside is soiled with blood or other biological fluids or excretions, before the transfer this bage is placed into another bag, which is closely tied up. In this case, the waste that is contaminated with the packaging, is considered hazardous waste, regardless of content.

The hazardous waste collection bag, tank, box or container that is designed for transportation of hazardous waste shall be labeled in accordance with laws and regulations on transport of dangerous goods.

If for the collection of hazardous waste a multiple-use tank, box or container which comes into contact with hazardous waste is used, the packaging disinfection shall be provided to prevent the spread of infectious diseases and the threat to the environment.
A practicing veterinarian and a veterinary medical care institution shall register the waste generated and managed and submit the information collected to the environmental protection authorities, as

well as to the relevant local government, in accordance with the requirements for hazardous waste tracking, identification, storage, packaging, labeling and shipping procedures for registration.

XIV. Transportation of Waste

Hazardous waste from institutions is transported:

1) within an institution, if necessary, the waste is transported to the storage site by special trolley
2) outside an institution, waste is transported in accordance with laws and regulations on the transport of dangerous goods and it is provided by the manager.

XV. Pre-treatment of Waste

Definition:

- **Pre-treatment of waste -** alter the nature of the waste to enable other treatment or regeneration operations to be conducted (waste treament and regeneration type R12 in accordace w/ legislation on the types of waste regeneration and storage). It also refers to the physical or chemical treatment of waste based upon which a compound or mixture is created that is then stored (meeting the storage type D9 in accordance w/ legislation on waste regeneration and storage types).

Performing processing under the conditions which are at least equivalent to validated method for steam autoclaves (sterilisers for medical purposes-EN 285:2006 + A2: 2009), and subsequently disposing as the waste or waste water in accordance with the relevant EU legislation,

If a practicing veterinarian or institution has appropriate equipment for waste pre-treatment performance and it is authorized for performing Category A or B polluting activities in accordance with laws and regulations on pollution, the institution carries out pre-processing to reduce the waste hazards, such as disinfection, or to change the appearance of waste (to make waste unrecognizable, for example, by grinding).

If the institution does not perform waste pre-treatment it disposes the waste or in accordance with the contract, in cases provided by the Waste Management Law, delivers the waste to the waste manager,

with whom a contract in accordance with laws and regulations on waste management is concluded, and who has received the permission of the management of waste in accordance with laws and regulations on pollution or waste management.

For pre-treatment only the waste listed in the permit and that is technically feasible and acceptable for treatment according to the manufacturer's conditions, may be accepted.

Infectious waste pre-treatment process is carried out in such a way as to ensure that the waste generated during the pre-treatment process meets the set requirements and they are not considered hazardous waste.

All waste pretreatment activities may be carried out in rooms with good drainage and water and pollutant-proof flooring.

If necessary, before a waste pre-treatment process waste storage is provided in the pre-treatment site in a manner to prevent cross contamination. Hazardous wastes prior to their pre-treatment are stored in closed, strong, leak-proof containers.

The waste placed in the bags immediately after their arrival at the place of pre-treatment shall be put in containers where they must be kept until the pre- treatment performance.

An institution or a waste manager, who performs the infectious waste pre-treatment, follows the equipment, operating instructions, and provides pre-processing according to the requirements set by the A or B polluting activities permit issued for the performance of the above mentioned activities.

An institution or a waste manager, who performs the infectious waste pre-treatment provides that once a month the inspection of the operation of the equipment of infectious waste pre-treatment takes

place, using the waste samples resulting from the waste pre-treatment process and testing their compliance with the requirements. The accredited laboratory shall perform sample sterility (infectivity) tests to check whether the plant's operation provides prevention of waste hazards.

Waste sampling and verification of compliance shall be performed by laboratories that are accredited in the limited liability company "Standardization, Metrology and Accreditation Centre" in accordance to standard ISO/IEC 17025:2005, “General requirements for the competence of testing and calibration laboratories ISO / IEC 17025:2005” and for which the Ministry of Economic Affairs has published a notice in the newspaper “Latvijas Vēstnesis” (hereinafter referred to as - the laboratory), or laboratories and institutions to which the competent institutions of the relevant state of the European Union, European Economic Area, European Free Trade Association, or Economic Cooperation and development Organization have issued a certificate or approval in accordance with the rules of European Union Member States, stating that the relevant studies have been conducted and supervised in accordance with good laboratory practice requirements.

REFERENCES

The manual uses the following legislation:

1. Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products intended for human consumption and repealing Regulation (EC) No 1774/2002 (hereinafter referred to as - the European Parliament and Council Regulation Nr.1069/2009);
2. Commission Regulation (EU) No 142/2011 of 25 February 2011 implementing Regulation (EC) No. 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption, and implementing Council Directive 97/78/EC as regards certain samples and items exempt from veterinary checks at the border under that Directive." (hereinafter - Commission Regulation Nr.142/2011)
3. Commission Regulation (EU) No. 749/2011 of 29 July 2011, amending Regulation (EU) No. 142/2011 implementing Regulation (EC) No 1069/2009, laying down health rules as regards animal by-products and derived products not intended for human consumption, and implementing Council Directive 97/78/EC as regards certain samples and items exempt from veterinary checks at the border under that Directive."
4. Law on Veterinary Medicine
5. Pharmacy Law
6. Waste Management Law
7. Regulations of the Cabinet of Ministers No. 599 of 13 July 2004. "Requirements for workplaces of animal veterinary medical care practices"
8. Regulations of the Cabinet of Ministers No. 258 of 5 April 2011 "Procedure under which a veterinary medical care

institution and a practicing veterinarian acquires, stores, registers and uses medicine"

9. Regulations of the Cabinet of Ministers No. 302 of 19 April 2011 "Regulations on waste classification and characteristics which make waste hazardous"
10. Regulations of the Cabinet of Ministers No. 484 of 21 June 2011 "Procedures for tracking, identification, storage, packaging, labeling and shipping accounting of hazardous waste"
11. Regulations of the Cabinet of Ministers No. 485 of 21 June 2011 "Certain types of hazardous waste management procedures"
12. Regulations of the Cabinet of Ministers No. 985 of 1 September "Provisions for sites of waste collection, sorting and composting of biodegradable waste"

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Recommendations

1. British Veterinary Association (BVA): Good practice guide to handling veterinary waste
2. Manual on Helath Care Waste Management, "Lautus", Riga.
3. Good practice manual for dealing with waste generated by medical institutions, UNDP/GEF Global project "Demonstrating and Promoting Best Techniques and Practices for Reducing Health-Care Waste to Avoid Environmental Releases of Dioxins and Mercury"

ANNEX

Annex 1

The accompanying document No _____ Animal by-products and processed products in the accompanying document

___ _____20___.* _____

Consignor (animal by-products and the owner / holder of processed products)

Registration or approval number of the Food and Veterinary Service in the register of supervision objects

☐☐ ☐☐☐☐☐☐

_____☐☐☐☐☐☐☐☐☐☐

(name, name of animal building) (Commercial Register Number or registration number of the Company Register)

_____

(address)

_____ ☐☐☐☐☐☐-☐☐☐☐☐

(natural person (company representative) – name, surname) (personal identification number)

Transporter
Registration or approval number of the Food and Veterinary Service in the register of supervision objects

☐☐ ☐☐☐☐

_____ ☐☐☐☐☐☐☐☐☐☐☐☐

(company name) (Commercial Register Number or registration number of the Company Register)

_____

(address, telephone number)

Vehicle registration number ☐☐☐☐☐☐☐☐,

☐☐☐☐☐☐☐☐

Number of container ☐☐☐☐

Consignee
Registration or approval number of the Food and Veterinary Service

☐☐☐☐☐☐☐☐

_____ ☐☐☐☐☐☐☐☐☐☐☐☐

(company name) (Commercial Register Number or registration number of the Company Register)

_____

(address, telephone number)

The consignor shall deliver to the transporter / consignee the following animal by-products and processed products:

No	Description of animal by-products and processed products						
	Name	Category**	Species ***	Lot no. / animal identification number or registration number of animal housing ***	Weight (kg)	Number of packages (pcs) and Type	Identification****
				LV□□□□□□□□□□□□			
				LV□□□□□□□□□□□□			
				LV□□□□□□□□□□□□			

I authorize the consignee to deliver to the State Agency "Agricultural Data Centre" the animal passports:

_____ _____

_____ (signature of the consignor)

_____

The animal owner / keeper has informed the practicing veterinarian of the animal death _____, and there are no restrictions on the transport of animal carcasses.
(name, surname)

□ the authorised veterinarian has taken the brain sample for the investigation of transmissible spongiform encephalopathies (TSEs).
(makes a mark ☒, if the sample of the animal carcass of the corresponding species and age has been taken)

The temperature of the animal by-products and processed products

Surrounding area ☐ Chilled ☐ Frozen ☐

Animal by-products and processed products are certified for the following purposes

Animal feed ☐ Technical use ☐ Other purposes ☐

Date on which the material is sent ***** ☐☐.☐☐.☐☐☐☐.

Consignor _____ _____
(name, surname) (signature)*

Transporter	**Consignee**
(name, surname)	(name, surname)
(signature) *	(signature) *

Notes.

* Requisites "___ _____20___" and "signature" are not filled, if the electronic document has been prepared in accordance with laws and regulations on electronic documents. "

** To be completed in accordance with the requirements determined by Article 8, 9, 10 of Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002.

*** To be completed for category 3 material and its processed products intended for use as animal feed ingredients.

**** To be completed in accordance with the requirements determined by Chapter II of Annex VIII of the Commission Regulation (EU) No 142/2011 of 25 February 2011 implementing Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption, and implementing Council Directive 97/78/EC as regards certain samples and items exempt from veterinary checks at the border under that Directive.

***** To be completed by the consignor or transporter.

The Accompanying document shall be completed by the consignor or transporter and the number shall be recorded. The accompanying document is made in three copies. The 1st copy of the Accompanying document shall be held by the consignee, the 2nd copy – the consignor and the 3rd copy - the transporter. (Note applies only to documents written on paper.)"