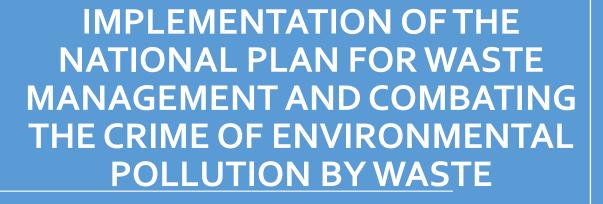
5TH INTERNATIONAL STUDENT CONFERENCE ON LOCAL SAFETY AND SECURITY







Faculty of Criminal Justice and Security





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Sustainable Development Goal 15: Life on Land

Introduction to elementary concepts provided by the law on waste management

Main focus are the goals that lead to more efficient waste management and control

- Our law defines waste as:
 - 1) Waste is any substance or object that the holder has discarded, intends to discard or is obliged to discard in accordance with the law.
 - 2) Waste management is the prevention of creating the waste and represents a proper collection, transport, processing and disposal of waste, supervision of these procedures and subsequent maintenance of landfills.
- Types of waste are:
 waste from electrical and electronic products, waste for vehicles, tires, batteries and accumulators, oils and liquids,
 construction waste, asbestos-containing waste, sewage sludge, medical and veterinary waste, mining waste,
 packaging waste.
- Waste is classified :
 - 1) In groups and subgroups, according to the origin of the waste;
 - 2) In groups depending on dangerous properties;
 - 3) Activities within which it was produced, i.e. by the method of origin.
- The types of waste are:
 - 1) hazardous,
 - 2) non-hazardous waste,
 - 3) and in terms of disposal inert waste.

























The criminal offence of environmental pollution by waste

- Environmental crime includes an increasing number of incriminations that endanger the environment.
- The Law on Amendments to the Criminal Code of Montenegro prescribes the following criminal offences against the environment and spatial planning:
- 1. environmental pollution by waste,
- 2. ozone depletion envelope,
- 3. illegal construction, commissioning and operation of facilities and plants that pollute the environment,
- 4. removal and introduction of protected natural assets and specially protected plants and animals and trading of them,
- 5. export and import of dangerous goods,
- 6. illicit handling of dangerous goods materials.
- The criminal offence of environmental pollution with waste is of a blanket nature and in order to determine the meaning and the content of the incrimination that is relevant to the provisions of the Law on Waste Management.

- The Constitution defines Montenegro as an ecological state.
- The Constitution in the common provisions for the part: "Human rights and freedoms" prescribes that everyone has the right to a healthy environment to timely or complete information about its condition as well the possibility of influencing the decision-making on issues of importance for the environment and the legal protection of these rights (Article 23).
- Article 303a of the Criminal Code of Montenegro the basic form of the criminal offence of environmental pollution by waste is the one who, by collecting, transporting, processing, disposing of or disposing of waste endangers the life or health or the body of people or the risk of significant damage to air, water or soil quality or for animal or plant world.
- The goal of this incrimination is to contribute to sustainable development.

Management strategy of Montenegro

Goals that must be harmonized with the basic principles of the EU in the field of waste management, which are:

General goal - a successful, functional and sustainable waste management system in Montenegro.

Specific objectives

- 1) intensive development of waste management,
- 2) introduction of the principles of circular economy with a clear goal of managing the reuse of materials and products,
- 3) achieving a satisfactory level of development, intensive application in the practice of the system of receiving secondary selection of waste,
- 4) increasing the level of separation and utilization of biodegradable waste,
- 5) increasing the level of separation and adequate recycling and disposal of construction and demolition waste,
- 6) providing sewage sludge treatment,
- 7) reducing the amount of waste to be permanently disposed of in one of the landfills,
- 8) application of waste management system for future use of energy from waste or thermal treatment of waste.

Assumptions that need to be fulfilled for the implementation of goals in action

- The law defined certain obligations for the amount of collected waste material, such as glass, paper, metal and plastic which should be prepared for reuse and recycling, while, in the same period, it is necessary to prepare at least 70 percent of construction waste for reuse.
- There are also certain levels that should be reached in the collection and recycling or export of special waste streams.
- The big question is what resources will be the key participants in the creation of a system that will solve the mentioned problem.
- There are multiple ways for realisation of these ideas for: municipal, medical, industrial, biodegradable and packaging kinds of waste.

Municipal waste

01

- 1. Creation of an application system of selection on the principle of two buckets dry and wet.
- 2. Establishment of collection networks in rural settlements as a condition for achieving the goal, establishing a collection network throughout the territory.
- 3. Raising the capacity of utility companies that perform utility services in all municipalities.
- 4. Organizing campaigns, informing citizens through the media, organizing actions of collecting certain types of waste, eco camps.

Medical waste

02

- 1. Collection of waste in special boxes that are resistant to tearing and splitting.
- 2. Needles and other sharp objects are placed in boxes and sent to appropriate containers.
- 3. These containers should be located in a certain location with adequate protection (locked fence), within the health centers.
- 4. Waste should be transported for adequate treatment.

Industrial waste

03

In terms of industrial waste management, the accumulated industrial waste will be filled in - preparation of hazardous waste cadastre; locations where hazardous waste is stored will be marked - preparation of pollutants cadastre, storage for hazardous waste storage will be built.

Biodegradable waste

04

Biodegradable waste treatment plant should be built. Through the education of residents and the gradual introduction of a system for the collection of fees for landfilled waste, household composting is encouraged on the basis of landfilled quantities.

Packaging waste

Collection is planned in the following way:

- 1) collection in special containers within collection stations,
- 2) division of dedicated bags,
- 3) by placing dedicated containers in stores.

05

Proper waste disposal

We can classify waste into 3 groups:

- Communal Municipal waste is a type of waste that is extremely common in our climate. According to the latest sources from 2018, 330,039 tons were generated by MONSTAT (2.1% more compared to the previous year).
- Industrial According to the latest MONSTAT data on the amount of industrial waste generated in 2017, a total of 667,266.9 tons of waste was produced.
- Medical According to the data of the Ministry of Health, in the period 2016-2018, was recorded a decrease quantities
 of collected and processed medical waste.

Waste management infrastructure:

- 1. Montenegro has two large non-hazardous landfills (Podgorica and Bar);
- 2. 3 recycling centers (Podgorica, H. Novi, Zabljak);
- 3. 5 waste processing plants vehicles (Podgorica, Berane, Niksic (3));
- 4. 8 recycling yards (Podgorica (6), Herceg Novi, Kotor);
- 5. 2 medical waste management facilities (Podgorica and Berane).

There is still no technical and technological infrastructure for hazardous waste disposal in Montenegro resolved with European standards.

Remediation of unregulated landfills is also one of the main goals of Montenegro.

The case related to the pollution caused by Thermal power plant

- Case in which waste from thermal power station caused the death of fish in the rivers Vezičnica and Ćehotina.
- Death of fish on the length of 14 km of watercourses, 2600 kilograms of trout and 420 kilograms of scallops died.
- Ecosystem will need at least 5 years to recover.
- After the investigation, the prosecution issued an order to conduct an investigation, and after gathering
 evidence, filed a criminal complaint against the management of Thermal power plant and Electric power
 industry.
- Charging them based on Article 303 and 304 of the Montenegrin Criminal Code.
- The existing evidence was not valid and it could not be established from them that the fish death occurred due to wastewater from Thermal power plant.
- After the harmful event in the investment development plan of Electric power industry of Montenegro, the realization of ecological reconstruction was accelerated.
- Electric power industry of Montenegro paid financial compensation to the 'Lipljen' Sports Fishing Club, according to a report by the Commission for determining and compensating damage educated by the Ministry of Agriculture and Rural Development, to restore fish stocks and improve the biodiversity of the Vezičnica and Cehotina rivers.



Thermal power plant Pljevlja



Landfill "Maljevac"



l — Death of fish



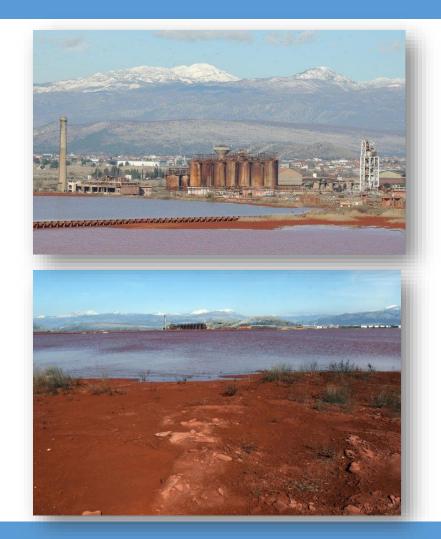
High ph wastewater in the river





The most polluted zone of Podgorica

- Red Lake near KAP is the black spot of our capital.
- Red Lake, which is located near the aluminum plant on the outskirts of Podgorica.
- All harmful substances from the lake that the earth absorbs directly affect on the health of people who consume products originating from Zeta.
- Montenegro is the country which generates the largest source of income from the tourism industry.
- Important question is what would a tourist think if he decided to spend time on a nearby hill and see such a sight.
- The Red Lake is a consequence of the biggest industrial pollution in Montenegro.
- A solution must be found as soon as possible, because we are still a country that aspires to the EU.
- What is the most important is the health of our citizens, which is very much in danger due to pollution of the land by water from the lake, as well as particles that are spread by the wind.



Red mud pond, only 9,6 km away from the city center

