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Efficiency of Processing of Secondary Raw Materials.

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Annotation: This article discusses polymer wastes that cause serious damage to the environment and their effective use. Secondary raw materials can be used as a starting material from polymer waste. During the writing of the article, attention was paid to the detection of harmful values of secondary raw materials, analysis of the use of secondary raw materials and the use of secondary raw materials.

Keywords. Household waste, industrial waste, organic matter, raw materials, paper, glass, metals, chemicals, petroleum products, plastics, rubber, wood waste, landfills.

Today, the problem of waste is becoming one of the most pressing environmental issues in the world. Analyzes show that in recent years, household and industrial waste has been increasing year by year. Especially in the XXI st century, the growth of household waste has begun to have a significant negative impact on environmental sustainability [1]..

It should be noted that 80% of these wastes are organic and their processing can produce large amounts of energy and energy carriers. According to experts, household waste is the cheapest raw material in the world [2].

Defining priorities of state policy in the field of environmental protection, prevention of violations of the legislation in the field of nature protection, introduction of effective mechanisms for their detection and prevention, state bodies for sanitary and ecological condition of settlements of the republic, heads of economic entities and strengthening the personal responsibility of citizens approved by the Joint Resolution of the Chambers of the Oliy Majlis of the Republic of Uzbekistan. reflected in the new version of the draft law "On Waste" included in the "Road Map"[4].

This document will serve as a basis for strategic direction and coordination of waste management activities [6]. In this process, the main focus is primarily on increasing and reducing the effectiveness of public policies and actions in the field of waste management, their
reuse as much as possible and secondary recycling. Therefore, these products can be used as secondary raw materials [3].

What is a secondary raw material? Recycled material is a type of waste that can be used as a source for further processing. Secondary raw materials can be used as a starting material.

The topic was not chosen by chance, it is relevant not only for developed countries, but also for our country. Because the environmental problem is very acute now [5].

In the process of working on the article, the following goals and objectives were identified:
- determination of harmful values of secondary raw materials,
- analysis of the use of secondary raw materials,
- focus on the use of secondary raw materials.

Types of secondary raw materials. Secondary raw materials are divided into classes according to the degree of danger. They are highly toxic and can harm people and the environment. The first category of waste must be recycled. The second hazard class includes batteries, which can also be recycled [12]. Solid waste is the least hazardous and belongs to classes 3-5. These include paper, glass, scrap metal, chemicals, petroleum products, plastics, rubber, and wood waste. As a rule, most solid waste falls into the fifth and (less) fourth hazard classes [13]

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a) b)

c) d)

a-paper waste, b-plastic waste, c-glass waste, d-metal waste.

These are practically non-hazardous and low-hazard wastes. Since they do not poison the natural environment, in our country they are simply taken to landfills and stored there. To date, 95 percent of all materials have been recycled [15].

Waste recycling technology

Nature and secondary raw materials. If we look at the problem of recycling, it should be noted that very little depends on the average person. For the cleanliness of the city or the whole country, waste collection should be well organized, sorted and recycled. First of all, there must be a production that allows almost complete processing of obsolete raw materials [19]. In developing countries, only 4% of raw

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materials are processed. The remaining volume is taken to landfills, then buried or incinerated. Incineration of waste is dangerous because carcinogens are released during combustion and they cause severe allergic reactions [20].

Waste decomposition period

Waste name	**decay period**
milk box	Up to 1 year
juice box	5 years
Cellophane	50 years possible
battery	90 years
rubber tires	Up to 100 years
plastic bottle	More than 100 years
polyethylene film	More than 100 years
glass	From 100 years to 1000 years

Why recycle? If waste is not disposed of and recycled, it can accumulate in large amounts at landfills and pose a serious threat to the environment and humanity [17]. First of all, the fact that landfills are located in the open air always has a negative impact on the environment. During the rainy season, wastes containing many elements lead to the formation of liquid filtrate. The stream is highly toxic and not only remains on the surface of the landfill, but also seeps into the soil and can enter groundwater [16].

Toxic wastewater pollutes everything within a 5 km radius of the landfill and beyond. Domestic water supply in our country is carried out mainly through the use of groundwater, the pollution of which can lead to the most dangerous and unpleasant consequences [10].

But landfills are dangerous only with filtrate. It is known that a lot of methane is released in the garbage and it burns very well [2]. Toxic clouds can cause poisoning and have a very negative impact on the ecological situation in the region as a whole.

Another reason for solving the problem of landfills in the near future is that landfills occupy large areas that can be used more rationally and efficiently. All this affects the pollution of the soil, atmosphere and groundwater. Rotten waste emits toxic gases - methane, nitrogen, hydrogen sulfide [11]. When plastic (glass, polyethylene bags, etc.) is burned, the substance that causes asphyxia - sarin - is released.

Fortunately, today the protection of the environment is becoming an increasingly important topic, so ecology is emerging in the state program, and specialized enterprises are being opened to receive recycled materials for their processing [15].

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The amount of waste collected in 1 year is 1 billion tons			
Russia	Kazakhstan	Uzbekistan	Developed countries of Europe
3	1	0.6	-
of which valuable by-products %			
40	30	25	70
Processed %			
30	15	10	60

Importance of waste sorting. One of the important steps in combating waste landfills and organizing an efficient recycling process is its sorting. Sorting involves the division of waste into several groups, usually: plastic waste, waste paper, and metal items. Most of the secondary raw material from the selected material is pressed and can then be sent for processing or use. Every year, the population throws away more bags, tires and household appliances [12]. Processed materials are used to produce a variety of arts and crafts, as well as products for the construction and leather industries.

Conclusion.

Anyone can contribute to reducing waste. Dispose of household waste in special containers, do not dispose of it in unintended areas. When buying goods in stores, pay attention to environmentally friendly packaging.

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