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IMPACT OF SUBSTANCES EMISSED FROM INDUSTRIAL ENTERPRISES ON THE ENVIRONMENT AND HUMANS

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Annotatsiya: Atrof muhitni muhofaza qilish, ekologik muvozanatni saqlash, tabiiy boyliklarni – resurslarni saqlash va ulardan oqilona foydalanish bugungi kunning dolzarb masalasi bo‘lib tabiatni muhofaza qilish tinchlikni saqlash masalasidan keyingi o‘rinda turadigan eng muhim muammolardan biri hisoblanadi. Texnika taraqqiyoti, ishlab chiqarish jarayonini kuchayishi, yer yuzida insonlarni son jihatidan ortishi natijasida sanoat hamda xalq xo‘jaligini turli tarmoqlari tomonidan chiqarilgan chiqindi mahsulotlarni to‘g‘ridan-to‘g‘ri, qayta ishlanmasdan chiqarilishi atrof-muhitni: tuproqni, suvni, havoni ifloslanishiga, zaharlanishiga va nihoyat insonlarni kasallanishiga olib kelmoqda.

Аннотация:Охрана окружающей среды, поддержание экологического равновесия, сохранение и рациональное использование природных ресурсов являются актуальными вопросами современности, а охрана природы является одной из важнейших проблем, уступая по значимости только проблеме сохранения мира. В результате технического прогресса, интенсификации производст-венных процессов, увеличения численности населения на Земле прямой, непереработанный выброс отходов различных отраслей промышленности и народного хозяйства приводит к загрязнению, отравлению окружающей среды: почвы, воды, воздуха, и в конечном итоге к заболеванию людей.

Annotation: Environmental protection, preservation of ecological balance, conservation of natural resources and their rational use are urgent issues of today, and nature protection is one of the most important problems after the issue of maintaining peace. As a result of technical progress, intensification of the production process, and an increase in the number of people on earth, the direct, unrecycled release of waste products from various sectors of industry and the national economy leads to pollution, poisoning of the environment: soil, water, air, and ultimately to human illness.

Kalit so‘z va iboralar:atrof muhit, ekologik muvozanat, tabiiy boyliklar, texni-kani rivojlanishi, tabiatni muhofaza qilish, texnika taraqqiyoti, atrof-muhitni iflos-lanishi, tuproqni ifloslanishi, suvniifloslanishi, havoni ifloslanishi, og‘ir metallar, atmosfera havosi, avtotransport vositalari, sanoat korxonalari, aerodispers sistema, surunkali bronxit, emfizema, tumov, nafas qisish kasalligi, gigiyenik talab.

Ключевые слова и словосочетания:окружающая среда, экологическое равновесие, природные ресурсы, технологическое развитие, охрана природы, технический прогресс, загрязнение окружающей среды, загрязнение почвы, загрязнение воды, загрязнение воздуха, тяжелые металлы, атмосферный воздух, транспортные средства, промышленные предприятия, аэродиспер-сная система, хронический бронхит, эмфизема легких, грипп, заболевания органов дыхания, гигиенические требования.

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Keywords and phrases: environment, ecological balance, natural resources, technological development, nature protection, technological progress, environmental pollution, soil pollution, water pollution, air pollution, heavy metals, atmospheric air, vehicles, industrial enterprises, aerodisperse system, chronic bronchitis, emphysema, flu, respiratory disease, hygienic requirements.

Today, words, thoughts, and concepts such as environmental protection, maintaining ecological balance, preserving natural resources and using them rationally have become commonplace. The reason for this is that the increase in the number of humans and the development of technology have increased the impact of humans on nature. Nowadays, environmental protection is one of the most important issues after the issue of maintaining peace. On a global scale, any violation of peace or environmental pollution or violation of ecological balance in a particular country, region, continent or continent leads to enormous losses or damages. [1.2.]

Humans have been affecting nature and the environment with their activities for a long time. They cut down trees, destroy forests, pastures, and meadows for their own purposes, damaging the natural balance that has remained unchanged for hundreds of years, and causing the extinction of species.

As a result of technological progress, the intensification of the production process, and the increase in the number of people on earth, the direct release of waste products from various sectors of industry and the national economy leads to pollution and poisoning of the environment: soil, water, and air. [1.5.]

Scientists say that the amount of heavy metals in the soil absorbed by plant tissues depends on the type of plant and soil type, and over time, they are transferred to the human body. Heavy metals, which have different properties in the human body, cause various diseases, the most dangerous of which is that, as we noted above, heavy metals remain in the human body for a long time and exert their toxic effects. As a result of the negative effects of heavy metals on living organisms, a number of diseases occur.

For example:

As – lung cancer, skin diseases, hematological effects, anemia;

Be – dermatitis, ulcers, mucosal damage;

Cd – chronic and acute lung diseases, kidney, cancer;

Cr – lung, gastrointestinal diseases, dermatitis;

Pb – blood, kidney, liver, nervous diseases;

Ni – pulmonary asthma, birth defects, kidney, lung cancer;

Hg – causes nervous, kidney diseases;

A very difficult situation arises in the human body, which is simultaneously contaminated with several heavy metals. As a result of studying the effects of heavy metals on soil and living organisms, the task of cleaning contaminated soils has arisen. To date, two chemical reactions have been used to restore soils contaminated with heavy metals, namely, by leaching slightly mobile metals, for example,

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cadmium and cobalt, and by neutralization reactions. Environmental changes affect human health and lifestyle. Various degrees of pollution and deterioration of atmospheric air began to develop rapidly mainly from the second half of the 19th century, and by the 20 th century reached unprecedented levels.

There are a lot of harmful substances and compounds emitted from various industrial enterprises, factories and plants, vehicles and other institutions of the national economy on Earth. Some scientists believe that these substances are spontaneously eliminated in living organisms. In reality, this is not the case. Industrial enterprises and other economic waste remain in the external environment for many years, moving from one environment to another. The atmospheric air of well-developed cities and industrial centers with industrial enterprises is constantly covered with dust, smoke, soot and fog. This blocks sunlight and prevents ultraviolet rays from reaching the earth's surface. Insufficient ultraviolet rays reaching the earth's surface, in turn, cause various diseases, especially rickets in children. The constant coverage of city air with smoke and fog also affects and reduces people's mood and productivity. Exhaust gases, dust, soot and other substances in the atmospheric air, which fall on the soil and water under the influence of annual precipitation, snowfall, lead to water and soil pollution, and when they fall on plants and animals, they cause various diseases and damage. If the amount of soot in the atmospheric air reaches 2 mg/m3, daylight is reduced by 90%. Dust in the air absorbs a significant part of harmful ultraviolet rays, preventing them from reaching the ground. In particular, the suspended and suspended dust emissions from industrial centers in the air also lead to a decrease in sunlight. Because these suspended factors create an aerodisperse system in the air environment. An aerodisperse system is a distributed state of dust particles in the air. Dusty substances take on various forms in the air and remain suspended in the atmospheric air. Sometimes they combine with each other and combine to form large particles. [3.4.]

Particles absorb ions, molecules, and water vapor from the external environment and cause them to accumulate. Such particles have different charges. The aerodisperse system causes strong scattering of light. Dusty or foggy air, pollution, and exposure to solar radiation change the urban environment, slowing down air movement and reducing relative humidity. Toxic substances in fog droplets formed from exhaust gases, dust, soot, and other substances in the air have a negative effect on the human body. Such phenomena occur in economically developed cities with many industrial enterprises and factories. The harmful effect of fog there is that it does not allow dust particles in the air to disperse and self-clean.

Such smogs that occur in industrial centers have a negative impact on human health. Ordinary smog is mixed with toxic substances and affects the human body, including the mucous membrane of the nose and upper respiratory tract. For example, people with diseases such as chronic bronchitis, emphysema, colds, and shortness of breath feel unwell. Changes in the gas composition of the air are considered dangerous from a hygienic point of view or can later cause various diseases if inhaled. That is why there should be no foreign unpleasant odors in the air. However, there are also gases that, despite being extremely toxic, have no odor. In most cases, people do not notice carbon monoxide (carbon II oxide, CO). Such gases are mainly emitted by industrial enterprises and cars. In large cities, due to the development of manufacturing industries, one can feel that the air composition is polluted and disturbed.

For example, the air of the cities of Almalyk, Chirchik and Navoi contains 10 or more different harmful gases. These substances are harmful gases emitted from industrial enterprises and vehicles in the city. From all this, it is clear that the role of ecology in maintaining or restoring human health is

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very important. In this regard, the following opinion of the American scientist J. Button can be cited: “One of two things will happen: either people will achieve a state in which the air is less polluted, or air pollution will lead to a state in which there will be fewer people on Earth.” [1.4.]

The purity of atmospheric air has become dependent on human economic activity.

One of the most difficult tasks in eliminating air pollution is the problem of reducing emissions from motor vehicles. Because the number of cars in the world is increasing year by year. In order to capture and neutralize exhaust gases from industrial enterprises, automotive engineers have to positively address the issues of compacting and improving car engines in order to reduce harmful gases emitted by cars. Some work has been done on this issue. For example, electric cars have been developed, which are achieving high efficiency by consuming less fuel.

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