

## SAMARKAND SOURCES POLLUTING THE URBAN ATMOSPHERIC AIR

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### *ANNOTATION*

*In this article, the direct effect of atmospheric air on the atmosphere and the azon layer of toxic gases, heavy metal residues emanating from various factories and factories. The damage caused by factories and factories on the territory of the Republic to our atmosphere is caused by gases and ways to eliminate them, a brief description of the acid rains observed in the cities is given.*

**Key words:** volcanoes, forest, anthropogenic, microorganisms, cosmic dust, soot, sulfur dioxide, freon, troposphere, fog-smog, greenhouse

### **Introduction**

Article 4 of the law of the Republic of Uzbekistan "on the protection of nature"(1992) states "the obligation of environmental education in all types of educational institutions". The main goal of environmental education is to form a conscious attitude to the problems of environmental preservation in all segments of the population, including students of Higher Education. To do this, they need to acquire knowledge, have sufficient skills and qualifications at the level of state requirements regarding ecology. The course "Ecology", which is taught in

universities, should form a scientific worldview in students and serve to focus on practical activities [1].

The atmosphere is the air shell of the globe and is one of the main sources that ensure the existence of life in the biosphere. The atmosphere protects all creatures from harmful cosmic rays, retains heat on the surface of the planet. If it were not for the air shell, a temperature of  $+100\text{ }^{\circ}\text{C}$  would have been observed on the surface of the earth during the day and  $-100\text{ }^{\circ}\text{C}$  in the evening. The upper limit of the atmosphere passes through an altitude of about 2000 km, the atmosphere consists of several layers. Its main mass is located in the lower troposphere, up to 10-16 km in height, the weather and climate are largely associated with atmospheric processes.

Atmospheric air without foreign additives consists of the following components; nitrogen-78.1%, oxygen 20.9%, argon and other inert gases 0.95%, carbon dioxide 0.03 %. The amount of other gases is less than relatively few. Also in the air always 3-4% water vapor. There will be dust particles. Each gas in the atmosphere has its own physical and chemical properties. Including all of us in the process of malumkiy nowg urbanizatsa are taking intensive pictures all over the world, and of course in many cities, at the expense of factories and factories of the size of turli, and albata we see a mixture of toxic gases emanating from machines with the help of humans beminnat you and the sharp pollution of the air in our At present, the cleanest air is above the waters of the ocean, as determined by the scientists in the world's rich the following regions.

The amount of dust particles in the air over villages is 10 times higher than on the surface of the ocean, dust in the air over cities is 35 barovars, over industrial enterprises up to 150 times more harmful dust and turlium toxic gases. Dust pollution of the air is 1.5-2 km high; it captures sunlight by 20% in summer and 50% in winter. The continuation of life on earth depends largely on the cleanliness of the air. For example, a person can live for several days without food and water, but without air, he can live even for only 5 minutes. A person consumes 1 kg of food and 2 l of water per day, spending 25 kg of air to breathe. It follows from this that at present the

olsacchi on the scale of seven billion people on Earth. So the quoted quotationistic numbers show that not only does a person find clear proof of how much he needs balky during his life in a whole petty moment, but also in the atmosphere and It's kislarde [2].

### **LITERATURE ANALYSIS METHODOLOGY**

It is known that the rapid development of industry in the world increases the release of toxic gases into the atmosphere and greatly damages agricultural crops. According to the results of long-term monitoring, the amount of environmentally harmful chemical compounds, substances and elements of combustion products entering the atmosphere doubles every 12-14 years, and therefore the problem of atmospheric pollution is one of the global problems. Atmospheric pollution refers to the change in its composition and properties that negatively affects human health, animals, plants and ecosystems. The atmosphere is polluted by natural and artificial means. Volcanic transitions, dust dust dust, forest, steppe fires, plant dust, microorganisms, cosmic dust, etc. are sources of natural pollution. Sources of artificial pollution include energy, industrial enterprises, transport, household waste, etc.

Currently, 75% of atmospheric pollution corresponds to human sources and 25% to anthropogenic sources. According to the aggregate state, compounds that pollute the atmosphere can be divided into four groups: solid, liquid, gaseous and mixed compounds. The main substance and compounds that pollute the air include aerosols, solid particles, dust, soot, nitrogen oxides, carbon monoxide SO, SO<sub>2</sub>, sulfur oxides, chlorphoruglerodes, metal oxides, etc. Tens of thousands of substances and compounds have been released into the atmosphere, and the compounds they have combined have not been thoroughly studied. The effect of such unknown compounds on living things, including human health, has not been accurately assessed.

Chemical, physical, acoustic noise, heat, electromagnetic pollution of the atmosphere have reached high levels in large cities and industrial regions. The most dangerous pollution of the atmosphere is radioactive contamination. The main

sources of radioactive contamination are nuclear weapons tests, disasters in nuclear power plants. Radioactive contamination leads to an increase in cancer and other diseases. Strong air pollution negatively affects human health, all living things. In cities and industrial regions, there is an increase in cases of nervous, cardiovascular, chronic bronchitis, emphysema, shortness of breath and pulmonary cancer among people. An increase in eye diseases and children's diseases has been recorded. In the air of the city are carcinogenic substances in industrial enterprises and vehicle waste (benz(a)pyrene, aromatic hydrocarbons), as a result of their chronic action, cancer diseases are caused. Lead compounds in the exhaust gases of the vehicle are also particularly volatile for human health [3].

Large areas of forest have been observed in the United States, Canada, Germany, Sweden, Norway, Russia, and other developed countries of the world affected by acid rain. Such rains reduce productivity, increase the sourness of water bodies, destroy buildings, historical monuments, harm human health. As a result of the long-distance migration of acid rains, disagreements arise between different states. Events are held locally, regionally and internationally to address this environmental risk [4].

The combination of smog smoke and fog, a toxic mist observed as a result of inversion - the immobilization of air in certain areas, has an extremely negative effect on human health. More than 4,000 people died in the 1952 smog in London on 5-9 December. In later years, London-type smog, Los Angeles-type smog were recorded in major cities around the world. Photochemical smog is understood to mean that industrial and transport exhaust gases react under the influence of sunlight to form volatile compounds. In particular, there is an increase in the formation and quantity of ozone, formaldehyde and other compounds. Prevention of smog is important. Necessary measures must be taken with speed to reduce atmospheric air pollution on Earth.

As American meteorologist Louis Battan put it: "or humans reduce smoke in the air, otherwise smoke reduces human beings on Earth". Atmospheric air pollution has

various socio-economic consequences. Deterioration of human health, destruction of buildings, historic sites, destruction of plants and animals, and other events cause significant economic damage. Atmospheric air has the property of self-purification.

## **DISCUSSION AND RESULTS**

On the territory of the city of Samarkand, there are 4 permanent base posts of the Hydrometeorological Center, which determine the level of pollution of atmospheric air, and the analysis showed that during the past 5 months of this year, harmful substances from large enterprises and cars decreased by 10.5 percent compared to the same period last year. But in the next month and 15 days, a state of slight increase in the normative indicator of toxic substances in the amount of 0.2 percent is observed due to an increase in the level of movement of industrial enterprises and cars.

During the reporting period, chemical analyzes carried out on air samples from existing hydrometeoposts did not reveal a condition in which the amount of harmful substances polluting the air exceeded the norm.

It is worth noting that from the engines of 1 light vehicle (moving on gasoline fuel) moving in the territory of the city, 0.0003 percent of harmful discharges come out of atmospheric air. As a result, urban air has reached several levels of high levels compared to rural air, indicating a spontaneous increase in toxic air.

Over the next 6 months, it can be observed that the city's air has been cleared by 22.7 percent due to the fact that the environmental situation of the city has stopped the work of cars and industrial enterprises. The result has led to the fact that for several years in our city, plants and trees older than 100 years have lived by budding anew.

Also, the air density level is normalized, indicating an increase in oxygen content by 15.3 percent.

The factors that mainly disrupt the air of the city are the large production enterprises and the abundance of cars. For example, out of 12 large enterprises operating in the territory of the city, 24.9 percent of harmful emissions per year,

namely chlorine 4.9 percent, fluorine 3.1 percent, chromium 5.9 percent, bromine 1.9 percent and carbon 6.3 percent, lead to slow-slow atmospheric air damage.

In the Republic of Uzbekistan, atmospheric air pollution is one of the main environmental problems. The fact that the cities are located mainly in mountainous and Intermountain swamps, the climate is hot and dry, has led to a relatively high level of atmospheric air pollution in Uzbekistan. Atmospheric air in Uzbekistan is especially heavily polluted in the Tashkent and Fergana economic regions, where the population, industry and transport are highly concentrated. Pollution of the atmosphere negatively affects the health of the population, the condition and yield of plants, buildings, metal structures, historical monuments, etc. As a result of the transition of Uzbekistan to market relations and the implementation of various environmental measures in recent years, there is a relative decrease in the amount of emissions thrown into the atmosphere. The contribution of moving sources in the gross release of polluting compounds is in excess. The decrease in the amount of emissions thrown into the atmosphere is also directly related to the decrease in the capacity of industrial enterprises and the drop in the volume of cargo transportation in transport. The amount of emissions into the atmosphere decreased from 183.7 kg per capita in 1991 to 90.1 kg in 2001 [5].

More than 51% of harmful compounds that pollute the atmosphere contain carbon monoxide is gas-SO, sulfur dioxide-16%, hydrocarbons-17.9%, nitrogen oxides-8.9%, solid compounds-6% and other harmful emissions-0.2% in 2001. More than 150 polluting compounds are released into the atmosphere by industrial enterprises in the Republic. The main ones are sulfur dioxide, hydrocarbons and solid compounds. Reducing volatile organic compounds is important. About 90% of atmospheric compounds have the main environmental impact on the contribution of enterprises of Tashkent, Kashkadarya, Fergana, Bukhara, Navoi and Syrdarya regions, where the production of harmful compounds is located. The shares of the enterprises of energy (34.1%), oil and gas industry (31.9%), metallurgy (16.5%), construction industry (3.8%), utility (3.6%) and chemical industry (2.6%) in

atmospheric pollution were the size of 2001. The contribution of other enterprises does not exceed 7.4%.

In the main industries of the Republic, the capture and neutralization of harmful compounds is not at the level of demand. In enterprises, the supply of dust-gas cleaning devices is 85%, and the efficiency of their work is 70-86%, and 77% of devices are outdated and do not work well.

## CONCLUSION

Currently, the sun of the atmosphere the level of pollution is increasing .local, regional and global atmosphere pollution is observed. Compounds that pollute the atmosphere according to the aggregate state it can be divided into four groups; solid, liquid, gaseous and mixed compounds, aerosols, solid particles to the main substance and compounds that pollute the air, curum, nitrogen oxides, carbon oxides, sulfur oxides, chlorphtorug, which includes hydrocarbons, metal oxides, etc., ten in the atmosphere thousands of tons of substances and compounds are released, which are combined the resulting mixtures are not completely beaten. Of such unknown compounds the effect on human health, including on living things, has not been accurately assessed.

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