

JOURNAL OF AGRICULTURE & HORTICULTURE

International scientific journal



ATMOSPHERIC AIR POLLUTION IN ANGREN. Toshturdiyev Nurbek Nurali ugli

National University of Uzbekistan named after Mirzo Ulugbek 1st year student of Hydrometeorology Faculty Phone: +998 (88) 910 42 46 E-mail: nurbektoshturdiyev86@gmail.com Scientific supervisor: Doctor of Geography **Adenbayev Bakhtiyor Yembergenovich** National University of Uzbekistan named after Mirzo Ulugbek Faculty of Hydrometeorology Hydrometeorology and environment head of the monitoring department Phone: +998 (90) 359 72 19 https://doi.org/10.5281/zenodo.8128830

Abstract: Air pollution is pollution caused by the presence of substances in the atmosphere that harm the health of people and other living beings and the climate. Gases (including ammonia, carbon monoxide, sulfur dioxide, nitrogen oxides, methane, carbon dioxide and chlorofluorocarbons, solid particles (organic and There are different types of air pollutants, such as inorganic) and biological molecules. Air pollution can make people sick, develop allergies, and even kill.

Key words: Atmospheric air, air pollutants, waste, industrial enterprises.

Industrial enterprises are also huge sources of air pollution. Especially, the share of ferrous and non-ferrous metallurgy, cement industry, coke production and mining industry, oil and chemical industry is very large in atmospheric pollution. Industrial enterprises release dust, smoke, sulfur dioxide, carbon compounds, fluorine, nitrogen, chlorine and other harmful substances into the atmosphere together with waste related to burning ilar. In addition, it is used in the metallurgical industry to obtain sulfuric acid and sulfates, to use sulfur disinfection (from French des, infikere to infect, to infect) and disinsection (Latin insectum insect), in refrigerators (Latin refrigerare- to cool), in the purification of oil products, rubber During preparation, production of various fertilizers, mining, coke oven gases and other industrial processes, air is polluted with sulfur gas. Along with sulfur gas, sulfur dioxide (SO3) also falls. Sulfur dioxide in the air quickly turns into very small drops of sulfuric acid. The main source of sulfur dioxide is the burning of mineral fuels.

Other compounds of sulfur that pollute the atmosphere include carbon sulfur, hydrogen sulfide, mercantanes (thiospirits). The list of atmospheric pollutants also includes free chlorine, nitrogen oxides, ammonia, hydrocarbons, aerosols, and smoke. In particular, in the current technology of cement production, 1/5 of it part of it (more than 110 million tons annually) enters the atmosphere. In addition to sulfur gas and emery oxide, smoke and dust emitted from industrial enterprises also contain toxic heavy metals such as antimony, lead, arsenic (margumush), mercury vapors (ferrous metallurgy), copper, zinc (non-ferrous metallurgy) will be 85% of the vanadium, 77% of the nickel, 98% of the cobalt, 80% of the antimony, and 50% of the selenium are released from fuel combustion sources.

The only factory in Central Asia for obtaining enriched kaolin is located in the city of Angren, Tashkent district. The enterprise has a technological line for the enrichment of kaolin by the wet method, during the development of the project, the most modern achievements of the world practice in the production of kaolin were taken into account. The supplier of raw

UIF = 8.1 | SIIF = 5.69

materials ensures the separate mining of primary unenriched kaolin, which allows the enterprise to produce only high-quality enriched kaolin. High quality, the stability of technological indicators, the latest test equipment for express analysis in all areas of the technological process a control system based on a physical-chemical laboratory equipped with

"Angren Kaolin" LLC produces the following products:

- AKF-78 kaolin, kaolin cotton, in the form of raw materials for the production of high-quality ceramics, cables, plastics, electrical engineering (insulators), lacquer, perfumery products, as well as in the production of paper, coagulants and glazes used as a filler.

- AKS-30 kaolin for ceramic products and porcelain. It is used as a raw material in the production of sanitary-technical ceramics, boards for interior and exterior wall covering, refractory materials, ceramic souvenirs, and white clay bricks.

AKT-10 kaolin is used for the production of household chemical cleaning agents, artificial resin, glue, rubber engineering products, cable products and plastics.

The organization of production of the products of the First Rubber Engineering Plant in Angren is determined based on state standards, international ISO and ASTM (USA) standard requirements. The enterprise's testing laboratory was accredited based on the requirements of the ISO 17025 standard. The enterprise also has certificates confirming the implementation of ISO 9001, IATF 16949, ECE 30, ECE 54, ECE 106, ECE 117 international standards. Tires produced at the enterprise can compete with the products imported to the territory of the republic. For example, as a result of a study conducted in 2019, the speed and pressure resistance of car tire 175/65 R14 "Tunga Zodiak 2, SP-7 86T" (CORDIANT, Russia) and 235/55 R17, 175/70 R13 "CATCHFORS PCR" (QINGDAO WINDFORCE TIRE CO.LIMITED, China) has been found to be of poor quality due to the deformation of its sidewalls. According to the official website of the "First Rubber Engineering Plant" LLC, the company plans to export tires to companies in Russia and Azerbaijan in 2021, which constantly encourages the improvement of product quality. We believe that monitoring of the quality of tire products on official sale in the territory of the republic has been established and issues related to quality control are constantly being improved.

The largest contribution to atmospheric air pollution is made by "Angren Kaolin" LLC, which accounts for 50% of the allocated funds. "Angren Kaolin" is the enterprise of the First Rubber Engineering Plant in MCHAngren. 50% of the allocated funds will be contributed by other enterprises.

They are metallurgical industry, construction industry, utility industry, chemical industry, food industry, light industry. The contribution of other sectors is very small. In 2012, 69% of natural gas, 21% of fuel oil, and 10% of coal were used to produce electricity and thermal energy, and the total emissions to the atmosphere amounted to 252.2 per year the situation is not taken into account or objects are built directly near these points. In the places where they are located, it was observed that atmospheric air pollution with nitrogen oxide, sulfur dioxide, and solid particles is high. Oil and gas extraction and processing industries occupy a special place among permanent sources of atmospheric pollution, their emissions in 1997 amounted to 298,000 tons produced, of which 101.0 thousand tons (33%) are hydrocarbons. In this network, 100 million m3 of natural gas is burned without purification per year, which leads to the release of hydrocarbons and sulfur dioxide into the atmosphere. The gases and aerosols released into the atmosphere contain about 160 harmful substances. Most of the substances



used in industry and public services are toxic due to the fact that their release into the atmosphere is prohibited in most countries of the world. In Uzbekistan, the amount of toxic substances in the air is regulated by special sanitary standards.

Conclusion:

The main source of atmospheric air pollutants is the coal-fired enterprise "Angren Kaolin" LLC, which emits soot, ash, SO2 into the atmosphere, and metallurgical enterprises that emit soot, dust, iron oxide and SO2, and in some cases fluorides, the gases they emit into the atmosphere in large quantities. Tire factories are a source of dust. Enterprises producing inorganic substances pollute the atmosphere with gases such as SO2, SiF4, HF, NO, NO2. Cellulose production, oil refining enterprises emit foul-smelling gaseous waste into the atmosphere. In addition, all industrial enterprises have their own energy systems, and the gases released from them also pollute the air.

References:

1.V.. Korobkin, L.V. Peredelsky - "Ecology" Moscow 2018[1]

2. S.I. Kolesnikov - "Ecology" Moscow 2018[2]

3.www.ziyonet.uz[3]

4. Bekmurodov M., Public opinion in Uzbekistan, Tashkent 2011 [4]

5. Environmental chemistry" S.M. Turobjonov, T.T. Tursunov, K.M. Adilova Tashkent - 2022

6. "Fundamentals of ecology and environmental protection" P.S. Sultonov [6]

7.Numonjonov M.G., Parpiyev A.T., Bozorboyev Sh.A., Vakhobova Sh.A. Alkaloids in some medicinal plants (CAPPARIS L, HYPERICUM L, ACHILLEA L,) their structure and significance. SCIENCE AND EDUCATION scientific journal ISSN 2181-0842 volume 1, ISSUE 4. July 2020