

## THE EFFECT OF INDUSTRIAL ENTERPRISES ON ATMOSPHERIC AIR

Mukhammadova G. Q.

Kodirova M. M.

Boqijonov F. A.

"Communal and Occupational Hygiene" department  
Fergana Medical Institute of Public Health. Uzbekistan.

### Abstract

Recently, the problem of the environmental situation and Environmental Protection has been discussed all over the world. The presence of manufacturing industrial enterprises in residential areas is one of the main polluting factors of the environment. After all, it has a huge impact on the atmosphere, hydrosphere and lithosphere. For a detailed study of the problem, let's get acquainted with the workactivities of industrial enterprises of production in residential areas.

**Keywords:** Atmospheric air pollution, hydrosphere, dust, industrial enterprise of production, natural factors, artificial factors, gas, raw materials of production.

### Introduction

The causes of atmospheric air pollution in residential areas are natural and artificial factors to natural factors: we can give an example of natural disasters that occur by nature without the participation of the human factor. For example: we can example rain, snow, winds, storms, floods, etc.

And artificial factors include pollution that occurs in the presence of a human factor, for example: the construction of industrial enterprises of production, an increase in cars, a decrease in the amount of oxygen in atmospheric air due to the pruning of trees by humans, an increase in the respiratory system, cardiovascular diseases in humans.

The atmospheric air of the industrial centers of the city and regions of Tashkent is constantly covered with dust smoke and fogs. This prevents sunlight from blocking and allowing ultraviolet (UB) rays to pass to the Earth's surface.

Insufficient ultraviolet (UB) radiation to the Earth's surface in turn causes rickets of various diseases, especially in children, and the constant covering of urban air with smoke and fog negatively affects human mood, causing headaches, nausea, dizziness and serious changes in the bone system in humans.

The detection of scientists leads to insufficient light as a result of pollution of atmospheric air, which in turn causes a decrease in working productivity and the origin of special diseases. As a result of this, occupational diseases of workers working in a manufacturing industrial enterprise appear.

If the amount of soot in the atmospheric air reaches 2 mg/m<sup>3</sup>, daylight is reduced by up to 90% and sunlight is reduced by 2/5 until it crosses the upper atmosphere boundary to the Earth's surface. The data showed a decrease in solar radiation to large and developed European cities in areas with air pollution.

Dust particles in the air absorb a significant portion of ultraviolet light, preventing them from falling to the Earth's surface. Suspended substances contained in emissions in atmospheric air cause aerodispers system.

Aerodispers system the diffuse state of dust particles in the air they enter various forms in the air. For example: thread – thread into one forms larger particles. These particles absorb loaves, molecules, water vapor from the pollinated medium to form their various charged charges.

Particles will have two (2) properties, depending on their size and size.

- standing without hanging
- particles entering the respiratory tract

Large-diameter particles cannot stand in the atmospheric air for a long time, such dust particles are not so harmful and can tickle and inflammation of the upper respiratory tract, feathers in the nasal cavity and mucous membranes, but do not reach the pulmonary alveoli. Small-diameter particles are characterized by the fact that they persist in the air for a long time, gradually falling down and reaching the deep floors of the pulmonary alveoli, causing various pathological changes.

As can be seen from the above, atmospheric air pollution negatively affects the health of the population and the sanitary lifestyle. If one looks back at history, it has been held that atmospheric air pollution does not adversely affect the health of the population. But this did not find confirmation, since on December 1, 1930, temperature inversion anticyclonic weather was observed in the Valley of the Moss River. This in turn led to the accumulation of industrial waste in the Near-Earth layer. This resulted in gross morbidity of the population by the third day and caused deaths to occur.

By the sixth day, the wind had begun and the population's appeal to medical facilities had decreased. It follows from this conclusion that: the reason for the high incidence of morbidity and mortality is the high pollution of atmospheric air with industrial emissions and unfavorable meteorological conditions. This situation is the first phenomenon and confirms that the pollution of atmospheric air in industrialized cities negatively affects the health of the population.

In past years, data has been collected on the correctness of the negative impact of polluted atmospheric air on the health of the population.

Considering the situation of this state in the Republic of Uzbekistan, the urban atmospheric air is mainly the waste of industrial enterprises, while rural settlements are contaminated with chemical and biological means of protecting their plants. According to data from checkpoints, emissions into atmospheric air accounted for 53% carbon monoxide, 15% sulfur dioxide, 8% hydrocarbons, 5% solids, 4% nitrogen oxides, and 15% special upper substances in the total amount of pollutants, which amounted to 2 million tons in 1991 and 1.8 million tons in 1996.

Pollution of the atmospheric air at such a level is annoying not only by the state governing bodies of medical personnel.

For Example: Uzbekistan Republic the first president was I. A. Karimov's book "Uzbekistan on the path of renewal and acceleration", released in 1993, shows the

rational use of natural resources and the absence of a negative impact on the external environment, without compromising the environmental situation. Later, speaking at the International Conference of 1995 in Copenhagen, the first of the global problems was mentioned as the ecological state of the Aral Sea, and this was shown to pose a threat to the health of the 60 million inhabitants of Central Asia, disrupting the balance of the external environment.

Now the Republic of Uzbekistan is developing rapidly the raw material base has been considered, but now machine heating, black and non-ferrous metallurgy chemical and petrochemical, wheat, textile, food, pharmaceutical, cellulose – paper production has been established.

Considering the proportion of emissions from the Central Asian Republics belonging to the Republic of Uzbekistan: the Republic of Uzbekistan accounts for 60% of total emissions.

In the region, the content of waste mainly consists of carbon monoxide, sulfur 2 oxide, hydrocarbons, solids, nitrogen oxides.

Total amount of sulfur gas - 717 thousand tons / year

Nitrogen oxides have a total waste content of 287 per ton/year.

Of this, the total amount of solids is 505 thousand tons/year.

As can be seen from the above data, fluorine compound waste from the aluminum plant of the Republic of Tajikistan Tursunzoda is exposed to atmospheric air pollution in the residential areas of Sariasiya Jarqurgan and Tursunzoda of the Republic of Tajikistan, and this in turn, cardiovascular diseases, diseases of the upper respiratory tract are common in humans., the high retention of fluorides in plants is causing a decrease in productivity, an increase in morbidity among the local population.

If we analyze the morbidity of the population of a large industrialized city in the Republic of Uzbekistan, we can see the following:

As a result of the development of industrial enterprises of production in the urban territory of the Fergana region, various diseases are developing among the population. Among the population living around the industrial enterprise of production, dizziness, eye congestion, anemia and vomiting are observed a lot.

100% of the population surveyed when a survey Survey study of infection with the questionnaire method of asphyxiation when wind blows from the combined side were disturbed by diseases of the bone system, nausea, headaches and signs of dizziness. The results of biochemical and immunological testing of children aged 6-7 years, on the other hand, showed a decrease in the immune system in their body, a decrease in the excretion of ascorbic acid from the body, an increase in coproporphin in the composition of the bladder. In addition, menstrual cycle disorders were observed among women at 4.89%, fetal miscarriage at 4.79%, etc. These indicators are characteristic again that the longer the period of residence in this region, the higher the incidence rates. There have been cases of gradual exhaustion of the organism of workers working in industrial enterprises of production.

The city of Olmaliq is considered the largest metallurgical production city of the Republic, and the atmospheric air is mainly contaminated with sulfur (II) oxide, ammonia, fluorine hydrogen, nitrogen two oxides, carbon monoxide, fecal and dust.

The city mainly receives atmospheric air from the Almaliq mountain Metallurgical Combine which accounts for 95% of the total phosphorus production chemical plant, as well as domestic chemical plants pollute.

Analysis of the data given above showed that diseases of the respiratory organs among the industrialized adult population and children are in the first place (from 30% to 80%) in the next second place (9-12%) diseases of the skin and subcutaneous cartilage in the third place are purulent otitis of the middle ear, diseases of the ear. In the adult population, the second place is occupied by diseases of the digestive system (7-10%), the third (3) by diseases of the kidneys, genital organs (5-7%), and the fourth (4) by hypertension and ischemic diseases of the heart (5-6%).

### References:

1. Iskandarov T.I., Otabaev Sh.T., Iskandarova G.T. Communal hygiene. Textbook-Tashkent. "New century generation publishing". 2019.
2. Otabaev Sh.T., Iskandarov T.I., Iskandarova G.T. Communal hygiene. Textbook-Tashkent. "New century generation publishing". 2010.
3. Kodirova, M. M., & Muxammadova, G. Q. (2024). PEDAGOGIK TEXNOLOGIYALAR TIZIMINING TIBBIYOT FANLARINI O'QITISHDAGI O'RNI (Kommunal va Mehnat gigiyenasi dars mashg'ulotlarini organayzerlar asosida). PEDAGOGS, 53(1), 37-41
4. Azizjon o'g'li, B. F. (2024). HYGIENIC ASSESSMENT OF THE IMPACT OF ATMOSPHERIC AIR POLLUTION ON PUBLIC HEALTH. JOURNAL OF SCIENTIFIC RESEARCH, MODERN VIEWS AND INNOVATIONS, 1(1), 7-12.
5. Bogli Bokijonov, F. A. (2024). ANALYSIS OF DISEASES IN ELDERLY AND SENILE PERSONS, AFFECTING ACTIVE WORK ACTIVITY. Innovative Development in Educational Activities, 3(1), 360-364.
6. OGLI, B. F. A. (2024). HYGIENIC ASSESSMENT OF THE PROBABILITY OF DISABILITY OF THE WORKING AGE POPULATION. International Multidisciplinary Journal for Research & Development, 11(02).
7. Matxoshimov, N. S., & Boqijonov, F. A. (2022). MEHNATGA LAYOQATLI YOSHDAGI AHOLINING NOGIRON BO'LIQ EHTIMOLLIGI VA UNING PROGNOZI (FARG'ONA VILOYATI MISOLIDA). Новости образования: исследование в XXI веке, 1(3), 452-455.
8. Boqijonov, F. A., Nazirova, M. R., & Mamadaliyev, D. D. (2024). HYGIENIC ASSESSMENT OF THE LEVEL OF ATMOSPHERIC AIR POLLUTION. Ethiopian International Journal of Multidisciplinary Research, 11(01), 66-68.
9. Ruzmatova, X. Q., Kamalova, D. A., & Muxammadova, G. Q. (2023). ZAMONAVIY KIYIM ISHLAB CHIQRISHDA MEHNAT SHAROITLARINI GIGIENIK BAXOLASH VA ULARNING AYOLLAR SALOMATLIGIGA TA'SIRINI O'RGANISH. "GERMANY"

---

MODERN SCIENTIFIC RESEARCH: ACHIEVEMENTS, INNOVATIONS AND DEVELOPMENT PROSPECTS, 9(1).

10. Муйдинова, Ё. Г., Мухаммадова, Г. К., & Ёринбоев, Ф. Ш. (2023). АКТУАЛЬНОСТЬ НАУКИ О ВОЕННОЙ ГИГИЕНЕ И ЕЕ ВАЖНЫЕ АСПЕКТЫ. Евразийский журнал медицинских и естественных наук, 3(5), 256-258.

11. Ашурова, М. Д., & Муйдинова, Ё. Г. (2023, March). ЭКОЛОГИЧЕСКОЕ ПОВЕДЕНИЕ И ВОЗДЕЙСТВИЕ ЗАГРЯЗНЯЮЩИХ ВЕЩЕСТВ В ВОДЕ. In INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE (Vol. 1, No. 12, pp. 26-29).

12. Исмоилов, Д. Т., Ж. А. Абдухамидов, and Б. Б. Қамбаров. "БОЛАЛАРДА УЧРАЙДИГАН ДИСПЕПСИЯ КАСАЛЛИГИНИНГ ОФИР АСОРАТЛАРИ." Евразийский журнал медицинских и естественных наук 3.6 Part 2 (2023): 117-120.

13. OGLI, B. F. A. (2024). HYGIENIC ASSESSMENT OF THE PROBABILITY OF DISABILITY OF THE WORKING AGE POPULATION. International Multidisciplinary Journal for Research & Development, 11(02).