For periodic observation of gas pollution in the air at the territory of the Khvoynoye oil field, it is recommended to create a mobile post. To establish observation of the most informative component of the ecosystem - the soil cover. In order to control the level of pollution or the degree of land degradation, the scale of the effect on soils, it is recommended to test on the planned construction site along the upper fertile soil layer up to 15 cm.

To diagnose the suitability or unsuitability of water for drinking water supply, hydrological observations are required. On the oilfield territory and construction site, it is recommended to take samples from the surface waters of the river. Koltogorskaya is higher, as close as possible to the piece sites and below the oil pipeline in spring, summer and autumn.

When monitoring vegetation and objects of the animal world, it is recommended to use an observation sys-tem that includes an assessment of changes in the species composition of the original plant community and faunis-tic complex, as well as taking into account the state of plant and animal species listed in the Red Book of the Rus-sian Federation.

An annual adjustment of the environmental monitoring program is required.

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## CONTENT ASSESSMENT OF INORGANIC SUBSTANCES IN THE AMBIENT AIR OF THE STERLITAMAK CITY IN 2010–2012

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To control atmospheric air in cities with a high level of technogenic impact, automatic air control stations (ASKAV) are installed in the residential area in order to provide the population with favorable living conditions. The cost of introducing ASKAV is quite high. The review provides an analysis of changes in the concentration of inor-ganic substances, the sources of pollution of which can be various industrial enterprises, mobile sources of pollution, in order to solve the urgent problem of the effectiveness of the funds spent on the ASKAV installation.

*Keywords:* automatic ambient air monitoring station, ammonia, sulfur dioxide, pollutant, ozone, carbon monoxide, maximum permissible concentration, hydrogen sulfide, average value.

In this work, we use data from ASKAV, located on the street. Furmanova, 33 cityof Sterlitamak. The station performs continuous automatic measurement, processing, registration of the results of measuring the concentra-tions of 25 types of chemicals, including carbon monoxide, ozone, ammonia, nitrogen oxides, sulfur dioxide, hy-drogen sulfide. The meteorological parameters are also identified, such as the strength and direction of the wind, pressure, humidity, air temperature, and the amount of precipitation.

The content of carbon monoxide (II) for 2010–2012 predominantly did not exceed the MPC. In 2010, the concentration of CO above the maximum permissible value was observed in 3 % of days, in 2011 – 4 %, in 2012 – 3 %. The content of carbon monoxide above the MPC is observed mainly in the period from 9–11 am. During the study period, a decrease in the CO content in the atmospheric air of Sterlitamak by 25 % is noted (Fig. 1).

The average annual value of ozone concentration for 2010–2012. above MPC. Due to the fact that the presence of ozone in the air is an indicator of air pollution, the quality of air in Sterlitamak for 2010–2012. worsens. In 2010, the $O_3$ content exceeded the maximum permissible value of 36 % of days, in 2011 – 42 %, in 2012 – 40 %.

A significant increase in the concentration of ammonia in the atmospheric air of Sterlitamak was observed in the spring of 2011, when the substance content reached 3.5 MPC. The rest of the period, the NH3 concentration is close to zero.

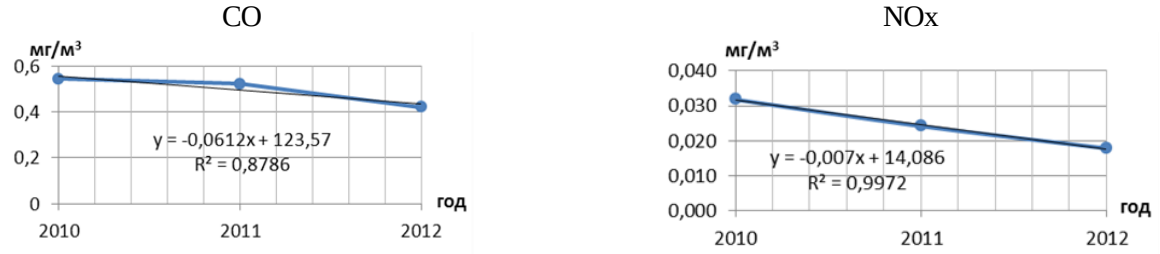


*Fig. 1.* – Dynamics of changes in average annual concentrations of CO (left) and NOx (right) for 2010–2012

In Sterlitamak, 2010–2012 the concentration of nitric oxide (II) exceeded the MAC in 13 % of samples, ni-tric oxide (IV) – 12 %, nitric oxide – 50 %. The trend in the content of nitrogen oxides is different. For $NO_2$ and NOX, a decrease in concentration is noted, while for NO, an increase.

The content of $SO_2$ in the atmospheric air of Sterlitamak exceeded the MPC in 2010 32 % of the days, in 2011 – 15 %, in 2012 – 21 %. The highest average annual concentration of sulfur dioxide was observed in 2011, when at the end of March, November and December the content of sulfur dioxide reached 10 PDC.s.

The concentration of H2S in the air of Sterlitamak was higher than the maximum permissible value in 2010, 14 % of days, in 2011 – 27 %, in 2012 – 36 %. For 2010–2012, there is a tendency to increase the concentration of hydrogen sulfide.

The quality of atmospheric air in Sterlitamak is mainly determined by the concentration values of such substances as carbon monoxide, hydrogen sulfide, sulfur dioxide. The indicator of airspace pollution is ozone, the concentration values of which for 2010–2012, evidence of anthropogenic impact on atmospheric air quality in Sterlitamak for more than half a year.

## CONTENT ESTIMATION OF ORGANIC SUBSTANCES IN THE AMBIENT AIR OF THE STERLITAMAK CITY IN 2010–2012

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In order to provide the population with favorable living conditions in cities with a high level of technogenic impact, automatic air monitoring stations (ASKAV) are installed in the residential area. In Sterlitamak, I operate enterprises that continuously release gas mixtures containing toxic organic substances, the danger of which is determined by their high reactivity in atmospheric air. To assess the effectiveness of the introduction of the station, an analysis is made of the change in the concentration of organic substances, the sources of pollution of which can be various industrial enterprises, as well as motor vehicles.

*Keywords:* 1,2-dichloroethane, automatic ambient air monitoring station, benzene, vinyl chloride, pollu-tant, methanol, maximum permissible concentration, phenol, chloroform, ethylene, ethylbenzene.

The paper analyzes the experimental data obtained from ASKAV, located on the street. Furmanova, 33 city of Sterlitamak. At the station, continuous automatic measurement, processing, recording of measurement results of concentrations of 25 types of chemicals, including benzene, chloroform, ethylbenzene, methanol, toluene, α-methyl styrene, m, p-xylene, o-xylene, 1,2-dichloroethane, is carried out , ethylene, propylene, vinyl chloride, phenol, n-pentane. Also, identification of meteorological parameters, such as wind strength and direction, pressure, humidity, air temperature, and the amount of precipitation, is carried out.

For 2010–2012. there is an increase in the benzene content in the air of Sterlitamak. So, in 2010 there was no excess of the indicator above the maximum permissible value. In 2011, at 8 %, and in 2012 – 13 % of days, an ex-cess of the MPC is recorded. Over the study period, the average annual concentration of benzene increased by 2330 %.

The content of chloroform in the air of Sterlitamak increased during 2010–2012 by 150 %. The number of days in a year when there is an excess of MAC concentration also increased and amounted to 10 % in 2010, 26 % in 2011, 40 % in 2012.