

UAB “NEO GROUP” MONITORING REPORT FOR THE YEAR 2019

UAB “NEO GROUP” carries out activities based on the **Integrated Pollution Prevention and Control Permit** (IPPC permit), which determines the requirements and standards, monitoring measurement locations and monitoring programme for its environmental protection measures.

NOISE

On 21st October 2019 UAB „Vakarų centrinė laboratorija“ carried out measurements of both the equivalent (average) and the ultimate levels of noise in the daytime (7:00 am – 7:00 pm), in the evening (7:00 pm – 10:00 pm) and at night (10:00 pm – 7:00 am) at the UAB “NEO GROUP” monitoring points No. 1, No. 2 and No. 4, indicated in *Figure 1*.

It was established that the noise emissions from the company are lower than the permitted standards for daytime, evening and night time (see *Figures 2 and 3*).

In 2019 Y, there were no complaints about the noise spreading from the factory.

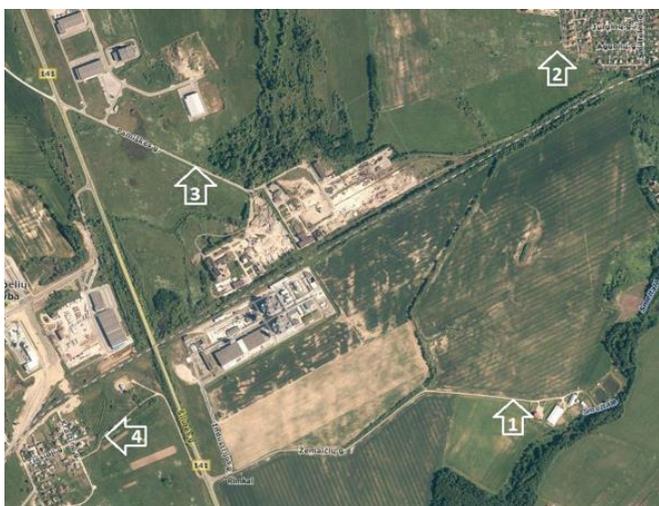


Fig. 1 Points for the environmental monitoring of UAB “NEO GROUP”

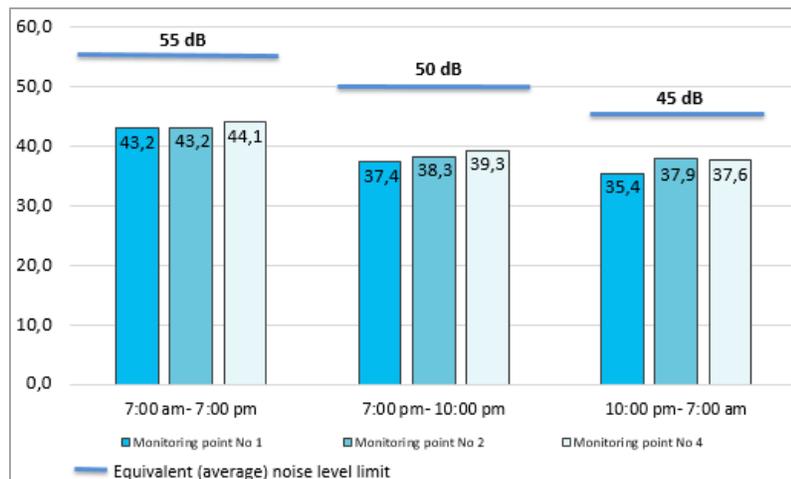


Fig. 2 Results of measurements of the equivalent (average) noise from UAB “NEO GROUP”, dB

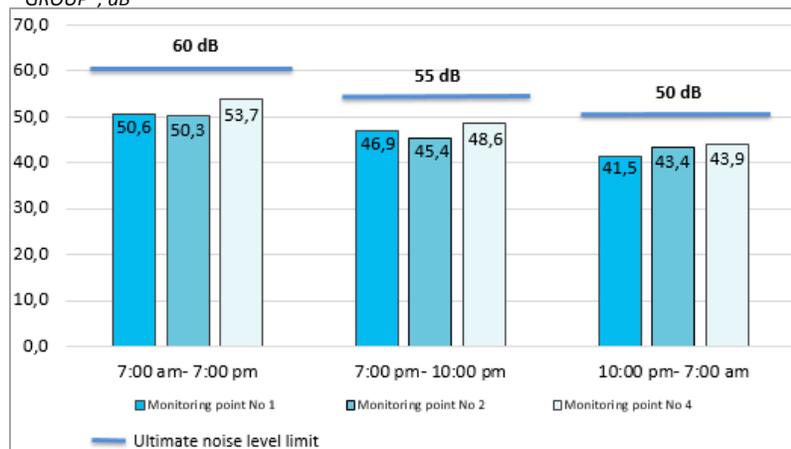


Fig. 3 Results of measurements of the ultimate noise from UAB “NEO GROUP”, dB

UNDERGROUND WATER

The hydrogeological sector of the Institute of Geology and Geography of the Natural Research Centre carried out the monitoring of the impact of UAB “NEO GROUP” on the underground water. This monitoring has been carried out since the establishment of the enterprise – since 2005.

Due to third PET production line, the number of groundwater monitoring bareholes remain the same - 6. In 2019 Y carried out hydrochemical research results ensured a stable groundwater hydrochemical situation. Concentrations of physical, chemical, biogenical indicators and total general chemical parameter’s concentrations were lower than the maximum permitted standards and limit values.

MEASUREMENTS OF ACETALDEHYDE IN THE AMBIENT AIR

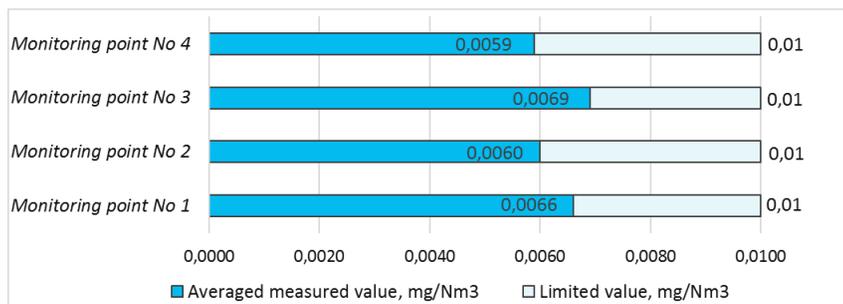


Fig. 4 Comparison of the acetaldehyde emissions at the monitoring points with the standards

In 2019 Y, the company carried out measurements of the acetaldehyde concentrations in the ambient air at 4 monitoring points (*Fig. 1*). The samples were taken at all 4 points on the same day. In this way, the concentrations of pollutants on the windward and leeward sides of the factory could be compared. The measured concentrations of acetaldehyde at all the points were lower than the requirements of the standards (*Fig. 4*)

EMISSIONS FROM STATIONARY SOURCES OF ATMOSPHERIC POLLUTION

In 2019 Y, the control of the pollutants emitted into the atmosphere from stationary sources of pollution was carried out in accordance with the monitoring schedule of the IPPC permit. The laboratory measurements were carried out by the UAB “Vakarų centrinė laboratorija”, UAB “NEO Group” and the “Latvian Environment, geology and meteorology centre” laboratories. Factual annual emissions from the stationary sources of atmospheric pollution were 82 percent of the permitted emissions (Fig. 5).

More than 98 percent of all the emissions into the ambient air consisted of emissions from the heaters. The major part of the necessary energy production in 2019 Y was gained from the burning the biofuel (wood chips and woody biomass) in the biofuel heater, while the remaining part of the energy was gained from natural gas burning in high temperature heaters. In 2019 Y, the amount of pollutants emitted into the ambient air increased by 11 percent compared with 2018 Y: in 2019 Y three PET production lines were operated and 14 percent more product was produced. Also in 2019 Y more biofuels were burned than in 2018. In 2019 Y, as every year, state control was carried out. Emissions did not exceed the standards.

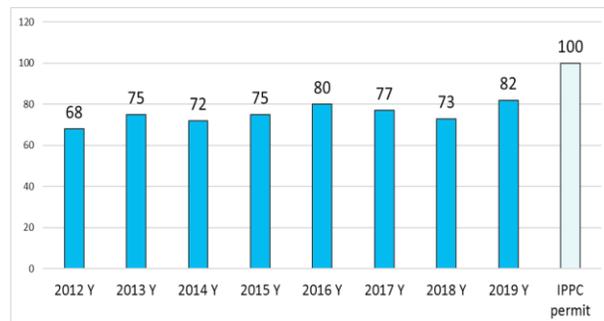


Fig 5. Comparison of factual emissions (%) with IPPC permit's standards

INDUSTRIAL- HOUSEHOLD WASTEWATER

The monitoring of the industrial and household wastewater discharged into the AB “Klaipėdos vanduo” network was carried out in accordance with the monitoring schedule of the IPPC permit. Measurements were carried out by the laboratories of the UAB “NEO GROUP”, the Agrochemical Research Laboratory of the branch of the Lithuanian Research Centre for Agriculture and Forestry and AB “Klaipėdos vanduo”.



Fig. 6 Aerotanks – part of the biological cleaning equipment for wastewater

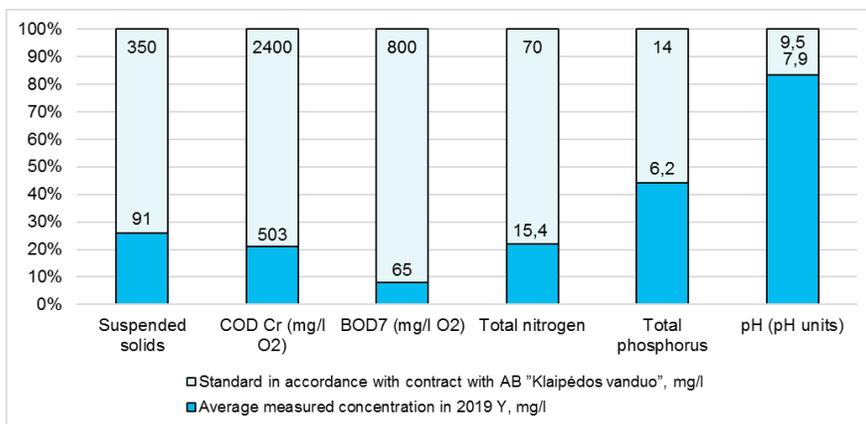


Fig. 7 Pollution of industrial and household wastewater from UAB “NEO GROUP” released into the networks of AB “Klaipėdos vanduo” in the year 2019

The measured average annual concentrations of pollutants are given in Figure 7. During the monitoring of the industrial and household wastewater of UAB “NEO GROUP” in 2019 Y, the wastewater pollution was found to be within the standard and corresponding to the conditions of the permit. During the year, AB “Klaipėdos vanduo” also controlled the pollution of the released wastewater – and it was found that the measurements satisfied the standards.

SURFACE WASTEWATER

Surface wastewater from the factory site locations (asphalted roads and car parking lots) and the relatively clean industrial wastewater (cooler water) collected after cleaning (Fig. 9) are released into a drainage ditch. In 2019 Y, monitoring was carried out in accordance with the monitoring programme. The researched wastewater parameters were: BOD₇, total nitrogen, total phosphorus, sulphates, chlorides, suspended solids, oil products. The measured wastewater concentrations did not exceed the IPPC permit standards – the comparisons of the concentrations are given in Figure 8.

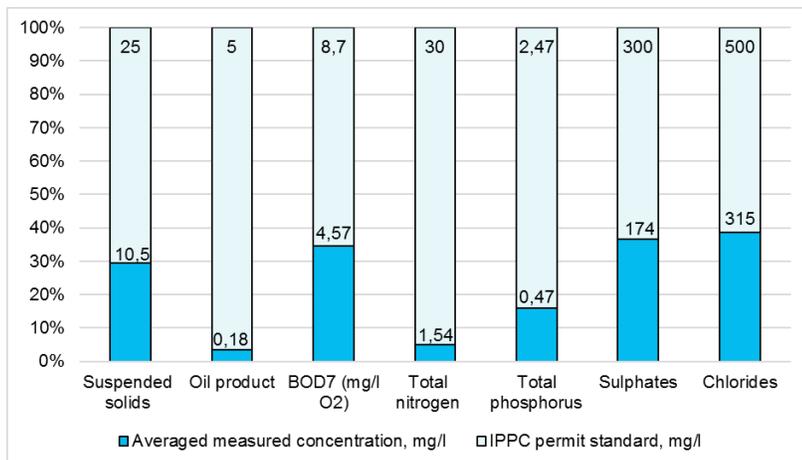


Fig. 8 Pollution of the UAB “NEO GROUP” surface wastewater in 2019 Y

ELECTRICITY

In 2019 Y UAB „NEO GROUP“ consumed more than 94,7 GWh electricity. 100 % consumed electricity was consisted of GREEN ENERGY, which was produced from 100% renewable energy sources, i.e. from sun, wind, water, etc.