

UAB “NEO GROUP” MONITORING REPORT FOR THE YEAR 2021

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 20th April 2021 UAB „Vakarų centrīnē 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 total noise emissions, including the noise from the company are lower than the permitted standards for daytime, evening and night time (see *Figures 2 and 3*).



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

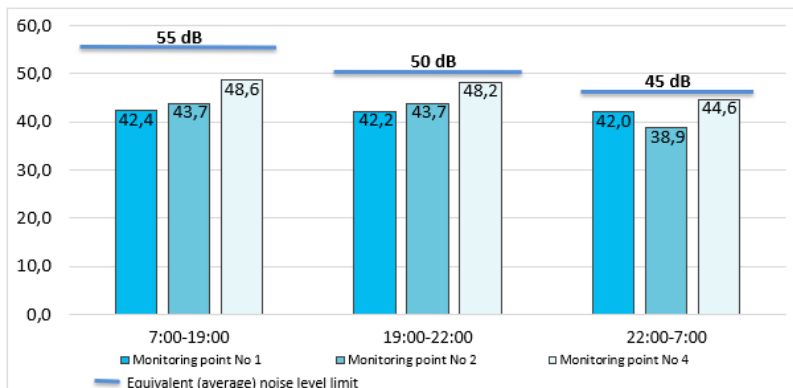


Fig. 2 Results of measurements of the equivalent (average) noise from UAB “NEO GROUP”, dB

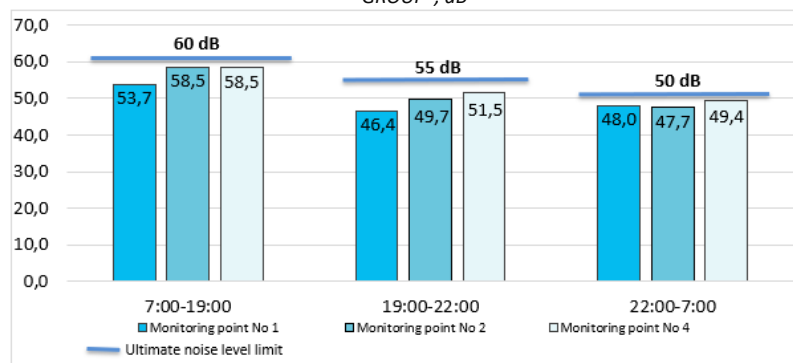


Fig. 3 Results of measurements of the ultimate noise from UAB “NEO GROUP”, dB

MEASUREMENTS OF ACETALDEHYDE IN THE AMBIENT AIR

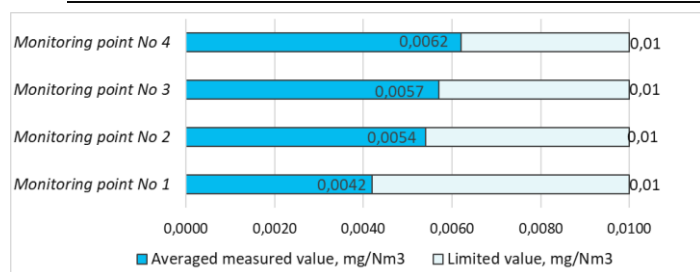


Fig. 4 Comparison of the acetaldehyde emissions at the monitoring points with the standards

In 2021, the company continued to carry out measurements of the acetaldehyde concentrations in the ambient air at 4 monitoring points on its own initiative (*Fig. 1*). The samples were taken at all 4 points on the same day. In this way, the concentrations of pollutants on the upwind and downwind 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 2021, 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. UAB “Vakarų centrīnē laboratorija”, UAB “NEO GROUP” and Latvian State “Latvian Environment, geology and meteorology centre” laboratories carried out the laboratory measurements. Factual annual emissions from the stationary sources of atmospheric pollution were 58 percent of the permitted emissions (*Fig. 5*). More than 97 percent of all the emissions into the ambient air consisted of emissions from the heaters. The major part of the necessary energy production in 2021 was gained from burning the biofuel (wood chips and woody biomass) in the biofuel

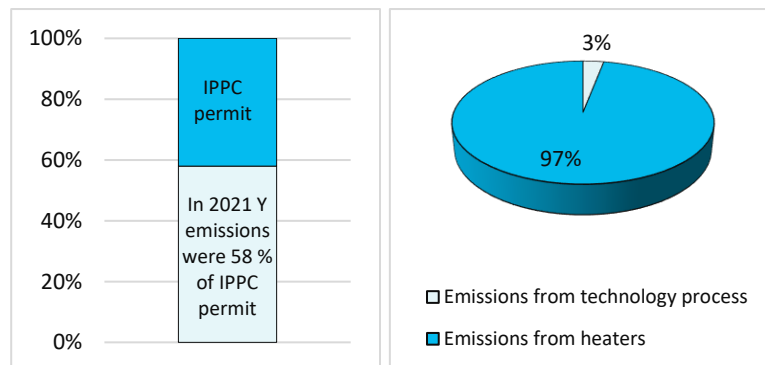


Fig 5. Comparison of factual emissions

heater, while the remaining part of the energy was gained from natural gas burning in high temperature heaters. In 2021, the amount of pollutants emitted into the ambient air decreased compared to 2020: the decrease was due to the fact that from August 2020 (after changing the IPPC permit) newer calculation methodologies were used to calculate emissions from heaters. The annual State control was carried out in 2021 and emissions did not exceed the standards.

GREENHOUSE GASES (GHG)

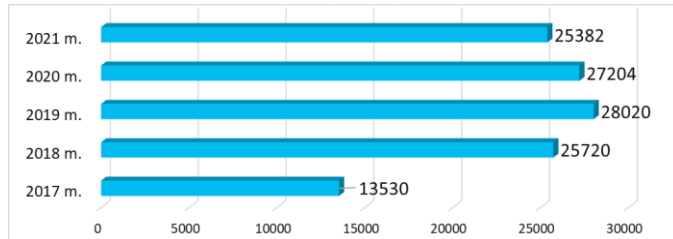


Fig. 6 Change of the CO₂ equivalent GHG emissions in tons from UAB „NEO GROUP“

In order to contribute to the climate change mitigation initiatives, we are continuing to replace the use of natural gas in the production process with biofuels (see Figure 6). In 2021, 59% of the total heat demand was produced in the biofuel heater, the remaining 41% of the heat was obtained by burning natural gas.

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. UAB “NEO GROUP”, the Agrochemical Research Laboratory of the branch of the Lithuanian Research Centre for Agriculture and Forestry and AB “Klaipėdos vanduo” carried out the measurements. 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 2021, the wastewater pollution was found to be within the standard and corresponding to the conditions of the permit.

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 are released into a drainage ditch. In 2021, monitoring was carried out in accordance with the monitoring programme. The researched wastewater parameters were: BOD₇, total nitrogen, total phosphorus, sulphates, chlorides, suspended solids and oil products. The measured wastewater concentrations did not exceed the IPPC permit standards – the comparisons of the concentrations are given in Figure 8. The results of the surface wastewater tests taken during the State control were within the norm.

UNDERGROUND WATER



Fig. 9. Boreholes for the underground water monitoring

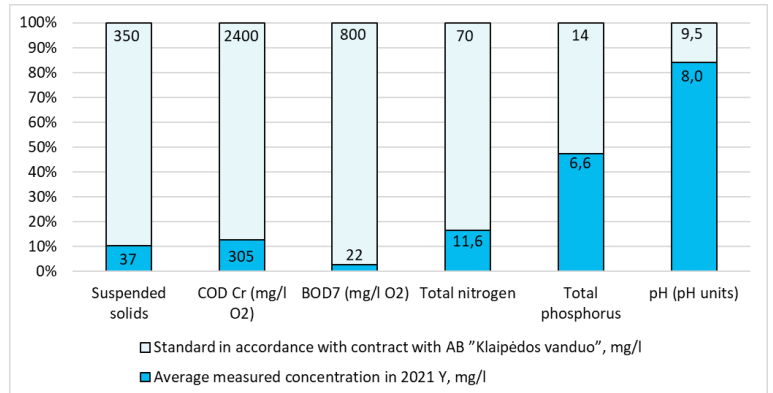


Fig. 7 Pollution of industrial and household wastewater from UAB “NEO GROUP” released into the networks of AB “Klaipėdos vanduo” in 2021

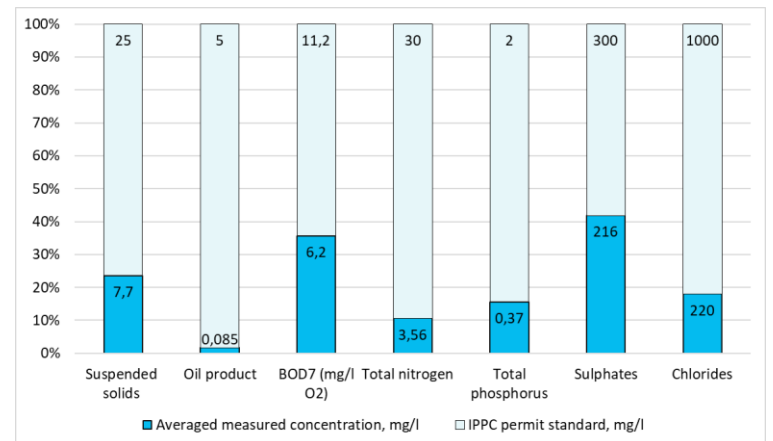


Fig. 8 Pollution of the UAB “NEO GROUP” surface wastewater in 2021

Monitoring of the plant's impact on groundwater is carried out by UAB „DGE Baltic soil and environment“ in accordance with the approved program for 2020-2024. The results of the research carried out in 2021 show a stable groundwater hydrochemical status. The concentration limits of the physico-chemical, biogenic and general chemical components tested during the monitoring did not exceed the concentration limits.

ELECTRICITY

In 2021 UAB „NEO GROUP“ consumed more than 95,7 GWh of electricity. All the electricity was provided from GREEN ENERGY category, meaning it was produced from 100% renewable energy sources, i.e. from sun, wind, water, and others. During 2021 solar power plant, installed on the roofs of the company's production warehouse and water treatment building, produced ~ 885 MWh of energy.