

## UAB “NEO GROUP” MONITORING REPORT FOR THE YEAR 2020

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.

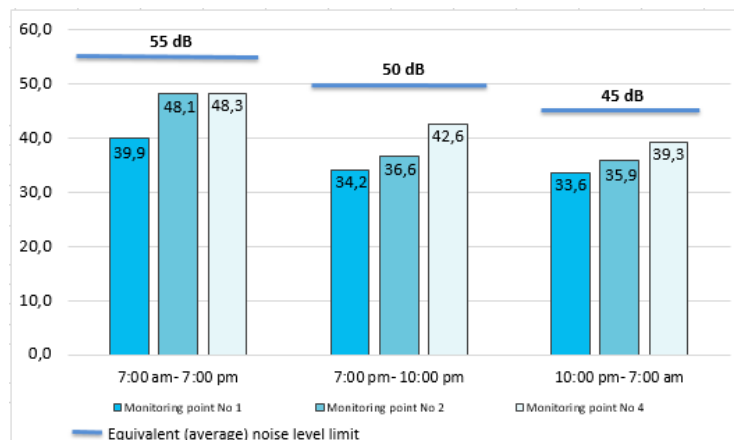
### NOISE

On 10th November 2020 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*.

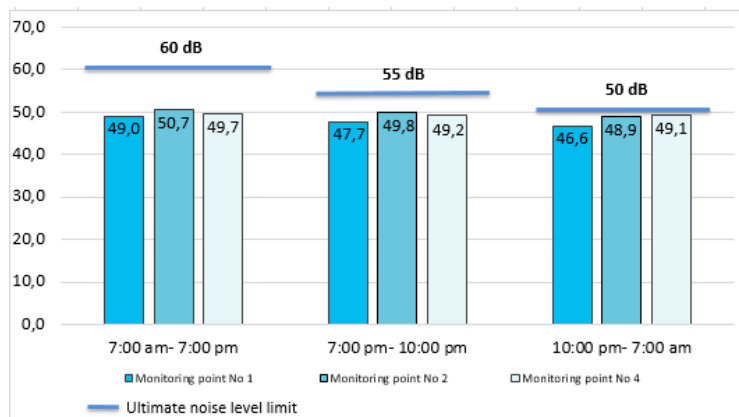
It was established that the noise emissions from the company are lower than the permitted standards for daytime, evening and night time (see *Figures 2 and 3*).



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

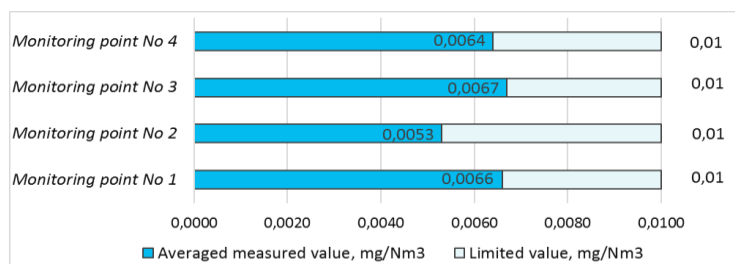


**Fig. 2** Results of measurements of the equivalent (average) noise from UAB “NEO GROUP”, dB



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

### MEASUREMENTS OF ACETALDEHYDE IN THE AMBIENT AIR



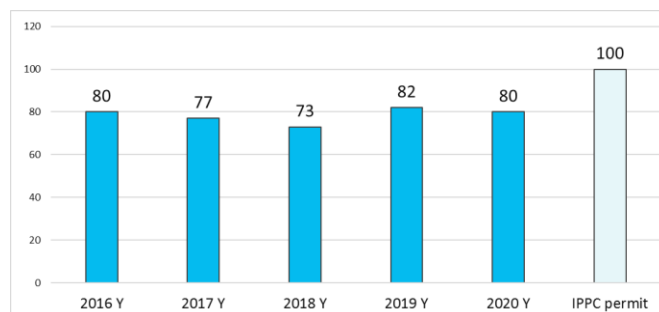
**Fig. 4** Comparison of the acetaldehyde emissions at the monitoring points with the standards

In 2020, 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 2020, 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 80 percent of the permitted emissions (*Fig. 5*).

More than 94 percent of all the emissions into the ambient air consisted of emissions from the heaters. The major part of the necessary energy production in 2020 was gained from burning the biofuel (wood chips and woody biomass) in the biofuel heater, while



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

the remaining part of the energy was gained from natural gas burning in high temperature heaters. In 2020, the amount of pollutants emitted into the ambient air decreased by 7,8 percent compared to 2019: 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 2020 and emissions did not exceed the standards.

### GREENHOUSE GASES (GHG)

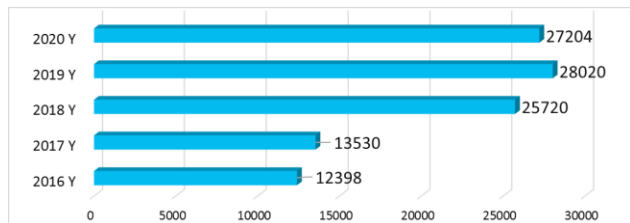


Fig. 6 Change of the CO<sub>2</sub> equivalent GHG emissions in tons from UAB „NEO GROUP“

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 2020, 54% of the total heat demand was produced in the biofuel heater, the remaining 46% 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 2020, 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 met the standards.

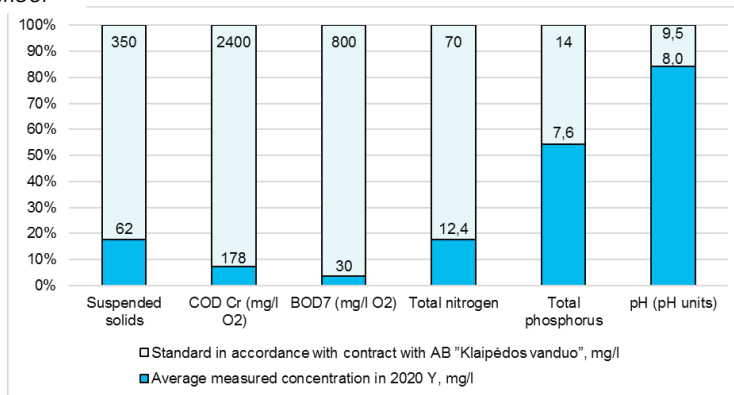


Fig. 7 Pollution of industrial and household wastewater from UAB “NEO GROUP” released into the networks of AB “Klaipėdos vanduo” in the year 2020

### 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 2020, monitoring was carried out in accordance with the monitoring programme. The researched wastewater parameters were: BOD<sub>7</sub>, 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.

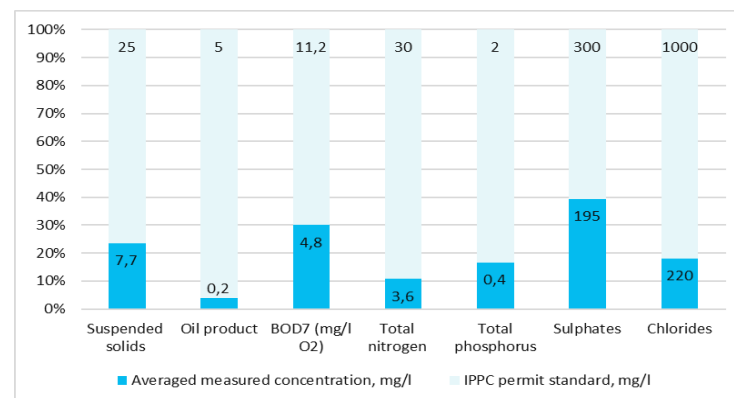


Fig. 8 Pollution of the UAB “NEO GROUP” surface wastewater in 2020

### UNDERGROUND WATER



Fig. 9. Boreholes for the underground water monitoring

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 2020 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, except for the chloride concentration in the first half of the year in the sample taken from borehole no. 36747 (Fig. 9). In this borehole, a slight increase in sodium concentration also is observed, which is related to the use of salt during the winter in the plant and surrounding areas (roads). No increase in chloride concentration was observed in the surrounding monitoring

boreholes in the downstream flow of groundwater.

### ELECTRICITY

In 2020 UAB „NEO GROUP“ consumed more than 92,5 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. At the end of 2020, renewable energy source - a 1 MW solar power plant was installed on the roofs of the company's production warehouse and water treatment building. During 2020 this power plant produced 5,26 MW of energy.

