

The results of atmospheric air quality monitoring on the border of sanitary protection zone of PJSC ArcelorMittal Kryvyi Rih  
in november 2022

Sl. No.	Place of sampling	Pollutant	Quantity of measurements, nos.						Pollutants concentrations, mg/m3				Maximum Permissible Concentration, MPC		concentration, C monthly average, in the similar period of previous year
			Total maximum one-time	including non-standard		Total daily average	including non-standard		Maximum one-time		Monthly average concentration, C				
				during wind direction from industrial sites of AMKR	during wind direction to industrial sites of AMKR		during wind direction from industrial sites of AMKR	during wind direction to industrial sites of AMKR	maximum concentration, C maximum one-time	minimal concentration, C minimum one-time		maximum one-time	daily average		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Monitoring station in the area affected by Steel Plant, 52, Kryvorizhstali Street	NO2	1497	-	-	21	-	-	0,123	0,001	0,014	0,2	0,04	0,005	
		NO	1496	-	-	21	-	-	0,061	0,001	0,005	0,4	0,06	0,002	
		SO2	1496	-	-	21	-	1	0,455	bmm	0,018	0,5	0,05	0,003	
		CO	1497	-	1	21	-	-	8,258	0,001	0,894	5,0	3,0	1,394	
		Dust	1504	-	-	21	-	-	0,136	bmm	0,018	0,5	0,15	0,162	
		Cadmium and its compounds (expressed as cadmium)	2	-	-	-	-	-	0,00019	0,00018	0,00019	-	0,0003	0,00020	
		Iron oxide (expressed as iron)	2	-	-	-	-	-	0,01385	0,01333	0,01359	-	0,04	0,01330	
		Manganese and its compounds (expressed as manganese dioxide)	2	-	-	-	-	-	0,00040	0,00038	0,00039	0,01	0,001	0,00040	
		Copper and its compounds (expressed as copper)	2	-	-	-	-	-	0,00039	0,00040	0,00040	-	0,001	0,00035	
		Nickel and its compounds (expressed as nickel)	2	-	-	-	-	-	0,00049	0,00047	0,00048	-	0,001	0,00049	
		Lead and its compounds (expressed as lead)	2	-	-	-	-	-	0,00017	0,00016	0,00017	0,001	0,0003	0,00016	
Chromium (expressed as chromium trioxide)	2	-	-	-	-	-	0,00040	0,00038	0,00039	0,0015	0,0015	0,00030			
Zinc and its compounds (expressed as zinc)	2	-	-	-	-	-	0,00487	0,00485	0,00486	-	0,05	0,00467			
2	Monitoring station in the area affected by Coke Plant, 2a, Landau Street	NO2	557	-	-	7	-	-	0,015	0,001	0,003	0,2	0,04	0,017	
		NO	557	-	-	7	-	-	0,048	0,010	0,040	0,4	0,06	0,022	
		SO2	557	-	-	7	-	-	0,073	bmm	0,002	0,5	0,05	0,005	
		CO	557	-	-	7	-	-	1,890	0,570	1,387	5,0	3,0	1,937	
		NH3	557	-	-	7	-	-	0,020	bmm	0,001	0,2	0,04	0,001	
		H2S	557	-	-	7	-	-	0,004	bmm	0,002	0,008	not normalized	0,001	
		Dust	556	-	4	7	-	-	0,701	bmm	0,099	0,5	0,15	0,112	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	Monitoring station in the area affected by Coke Plant, 2a, Landau Street	Cadmium and its compounds (expressed as cadmium)	2	-	-	-	-	-	0.00016	0.00015	0.00016	-	0.0003	0.00018
		Iron oxide (expressed as iron)	2	-	-	-	-	-	0.01403	0.01341	0.01372	-	0.04	0.01324
		Manganese and its compounds (expressed as manganese dioxide)	2	-	-	-	-	-	0.00047	0.00044	0.00046	0.01	0.001	0.00046
		Copper and its compounds (expressed as copper)	2	-	-	-	-	-	0.00028	0.00026	0.00027	-	0.001	0.00026
		Nickel and its compounds (expressed as nickel)	2	-	-	-	-	-	0.00048	0.00044	0.00046	-	0.001	0.00047
		Lead and its compounds (expressed as lead)	2	-	-	-	-	-	0.00016	0.00015	0.00016	0.001	0.0003	0.00018
		Chromium (expressed as chromium trioxide)	2	-	-	-	-	-	0.00046	0.00046	0.00046	0.0015	0.0015	0.00039
Zinc and its compounds (expressed as zinc)	2	-	-	-	-	-	0.00475	0.00461	0.00468	-	0.05	0.00455		
3	Monitoring station in the area affected by Mining Department, 41a, Podlepy Street	NO2	1769	-	-	24	-	-	0.039	0.010	0.014	0.2	0.04	0.010
		NO	1769	-	-	24	-	-	0.082	bmm	0.012	0.4	0.06	0.038
		SO2	1769	-	-	24	-	-	0.015	0.001	0.011	0.5	0.05	0.009
		CO	1769	-	-	24	-	-	1.070	0.594	0.820	5.0	3.0	1.326
		Dust	1768	-	5	24	4	-	0.960	bmm	0.096	0.5	0.15	0.097
		Cadmium and its compounds (expressed as cadmium)	2	-	-	-	-	-	0.00017	0.00016	0.00017	-	0.0003	0.00017
		Iron oxide (expressed as iron)	2	-	-	-	-	-	0.01384	0.01416	0.01400	-	0.04	0.01324
		Manganese and its compounds (expressed as manganese dioxide)	2	-	-	-	-	-	0.00038	0.00036	0.00037	0.01	0.001	0.00034
		Copper and its compounds (expressed as copper)	2	-	-	-	-	-	0.00025	0.00023	0.00024	-	0.001	0.00025
		Nickel and its compounds (expressed as nickel)	2	-	-	-	-	-	0.00035	0.00032	0.00034	-	0.001	0.00040
Lead and its compounds (expressed as lead)	2	-	-	-	-	-	0.00020	0.00018	0.00019	0.001	0.0003	0.00021		
Chromium (expressed as chromium trioxide)	2	-	-	-	-	-	0.00042	0.00037	0.00039	0.0015	0.0015	0.00045		
Zinc and its compounds (expressed as zinc)	2	-	-	-	-	-	0.00434	0.00430	0.00432	-	0.05	0.00399		

**Note 1:** Atmospheric air quality control is performed by automated observation posts and the laboratory of the Department of Environmental Protection PJSC "ArcelorMittal Kryvyi Rih", certificate № 08-0058 / 2018 dated 20.12.2018 on compliance of the measurement system with the requirements of DSTU ISO 10012: 2005

**Note 2:** From 08.11.2022, the dust analyzer and gas analyzers of APS No. 1 after passing the scheduled replacement of sensors, maintenance and verification, installed in a regular place, air quality control was carried out automatically

**Note 3:** From 08.11.2022, the dust analyzer and gas analyzers of APS No. 2 were dismantled for maintenance and verification, air quality control was carried out on weekdays by portable devices

**Note 4:** Average monthly concentrations for the content of pollutants are derived from all the maximum single values obtained during the month.

**Note 5:** The determination of the concentration of metals in atmospheric air was carried out by the atomic emission analysis group of the Department of Environmental Protection (Certificate of conformity of the measurement system of the atomic emission analysis group No. 08-0082/2021 dated 17.12.2021.)