

The results of atmospheric air quality monitoring on the border of sanitary protection zone of PJSC ArcelorMittal Kryvyi Rih
in march 2023

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	
Monitoring station in the area affected by Steel Plant, 52, Kryvorizhstali Street	NO2	2228	-	-	31	-	-	0,047	0,020	0,028	0,2	0,04	0,008		
	NO	2228	-	-	31	-	-	0,001	0,001	0,001	0,4	0,06	0,001		
	SO2	2228	-	-	31	-	-	0,001	0,001	0,001	0,5	0,05	0,063		
	CO	2228	-	-	31	-	-	0,433	0,001	0,103	5,0	3,0	1,832		
	Dust	2227	-	-	31	-	-	0,179	0,001	0,020	0,5	0,15	0,161		
	Cadmium and its compounds (expressed as cadmium)	2	-	-	-	-	-	0,00015	0,00014	0,00015	-	0,0003	-		
	Iron oxide (expressed as iron)	2	-	-	-	-	-	0,01315	0,01289	0,01302	-	0,04	-		
	Manganese and its compounds (expressed as manganese dioxide)	2	-	-	-	-	-	0,00060	0,00057	0,00059	0,01	0,001	-		
	Copper and its compounds (expressed as copper)	2	-	-	-	-	-	0,00028	0,00027	0,00028	-	0,001	-		
	Nickel and its compounds (expressed as nickel)	2	-	-	-	-	-	0,00051	0,00049	0,00050	-	0,001	-		
	Lead and its compounds (expressed as lead)	2	-	-	-	-	-	0,00015	0,00014	0,00015	0,001	0,0003	-		
Chromium (expressed as chromium trioxide)	2	-	-	-	-	-	0,00050	0,00046	0,00048	0,0015	0,0015	-			
Zinc and its compounds (expressed as zinc)	2	-	-	-	-	-	0,00450	0,00425	0,00438	-	0,05	-			
Monitoring station in the area affected by Coke Plant, 2a, Landau Street	NO2	2229	-	-	31	-	-	0,038	0,006	0,020	0,2	0,04	0,040		
	NO	2229	-	-	31	1	-	0,216	bsm	0,008	0,4	0,06	0,022		
	SO2	2229	-	-	31	-	-	0,105	bsm	0,006	0,5	0,05	0,003		
	CO	2229	-	17	31	-	-	10,716	0,001	0,560	5,0	3,0	0,931		
	NH3	2229	-	-	31	-	-	0,057	0,001	0,001	0,2	0,04	0,001		
	H2S	2229	1	19	31	-	-	0,032	bsm	0,001	0,008	not normalized	0,001		
	Dust	2229	2	7	31	-	1	1,549	bsm	0,074	0,5	0,15	0,078		
	Phenol	1	-	-	-	-	-	0,005 (max.one-time)		0,005 (max.one-time)	0,01	0,003	-		
Formaldehyde	1	-	-	-	-	-	0,024 (max.one-time)		0,024 (max.one-time)	0,035	0,003	-			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Monitoring station in the area affected by Coke Plant, 2a, Landau Street	Cadmium and its compounds (expressed as cadmium)	2	-	-	-	-	-	-	0,00016	0,00014	0,00015	-	0,0003	-
	Iron oxide (expressed as iron)	2	-	-	-	-	-	-	0,01286	0,01272	0,01279	-	0,04	-
	Manganese and its compounds (expressed as manganese dioxide)	2	-	-	-	-	-	-	0,00071	0,00063	0,00067	0,01	0,001	-
	Copper and its compounds (expressed as copper)	2	-	-	-	-	-	-	0,00029	0,00026	0,00028	-	0,001	-
	Nickel and its compounds (expressed as nickel)	2	-	-	-	-	-	-	0,00036	0,00032	0,00034	-	0,001	-
	Lead and its compounds (expressed as lead)	2	-	-	-	-	-	-	0,00013	0,00013	0,00013	0,001	0,0003	-
	Chromium (expressed as chromium trioxide)	2	-	-	-	-	-	-	0,00056	0,00052	0,00054	0,0015	0,0015	-
	Zinc and its compounds (expressed as zinc)	2	-	-	-	-	-	-	0,00436	0,00426	0,00431	-	0,05	-
Monitoring station in the area affected by Mining Department, 41a, Podlepy Street	NO2	2229	-	-	31	-	-	-	0,047	bsm	0,014	0,2	0,04	0,011
	NO	2229	-	-	31	-	-	-	0,008	bsm	0,001	0,4	0,06	0,033
	SO2	2229	-	-	31	-	-	-	0,001	0,001	0,001	0,5	0,05	0,014
	CO	2229	-	-	31	-	-	-	2,100	0,262	0,494	5,0	3,0	0,869
	Dust	2229	3	2	31	1	2	-	0,639	bsm	0,073	0,5	0,15	0,060
	Cadmium and its compounds (expressed as cadmium)	2	-	-	-	-	-	-	0,00015	0,00014	0,00015	-	0,0003	-
	Iron oxide (expressed as iron)	2	-	-	-	-	-	-	0,01291	0,01281	0,01286	-	0,04	-
	Manganese and its compounds (expressed as manganese dioxide)	2	-	-	-	-	-	-	0,00047	0,00044	0,00046	0,01	0,001	-
	Copper and its compounds (expressed as copper)	2	-	-	-	-	-	-	0,00020	0,00020	0,00020	-	0,001	-
	Nickel and its compounds (expressed as nickel)	2	-	-	-	-	-	-	0,00028	0,00027	0,00028	-	0,001	-
	Lead and its compounds (expressed as lead)	2	-	-	-	-	-	-	0,00016	0,00015	0,00016	0,001	0,0003	-
Chromium (expressed as chromium trioxide)	2	-	-	-	-	-	-	0,00065	0,00063	0,00064	0,0015	0,0015	-	
Zinc and its compounds (expressed as zinc)	2	-	-	-	-	-	-	0,00375	0,00368	0,00372	-	0,05	-	

Note 1: Atmospheric air quality monitoring was carried out by Environment Protection Department of PJSC ArcelorMittal Kryvyi Rih, certificate No. 08-0081/2021 dated 17.12.2021 regarding measurement system conformity to the requirements of DSTU ISO 10012:2005

Note 2: Monthly average concentrations of pollutants content were derived from all maximum one-time values collected during the month.

Note 3: Metals concentration in the atmospheric air was detected by atomic emission analysis team of Environment Protection Department (Certificate of measurement system conformity of atomic emission analysis team No. 08-0082/2021 dated 17.12.2021).

Note 4: bsm - below the sensitivity of the methods.