Table S1. Information of the monitoring stations in the nine different functional areas in Handan.

Functional areas	Longitude/E°	Latitude/N°	Surrounding environment
Traffic area	114.43054	36.59076	On the side of Hangang Road; there is a park nearby
Industrial area	114.46941	36.78076	There are 5 industrial-related factories and companies around
Commercial area	114.48085	36.77537	There are trading buildings, department stores, Century Plaza, restaurants, hardware stores, electrical and kitchenware stores around
Construction site	114.20056	36.65726	The construction site of the Handan Preschool Teachers College project
Residential area	114.78531	36.56001	Surrounded by residential buildings, cultural squares
Township	114.46212	36.76813	Surrounded by communities and small towns
Enterprise area	114.41075	36.60930	There are companies, a new material industrial park, technical transformation department of iron and steel group corporation, Futong Group
Scenic area	114.48466	36.61594	Community, school, barbecue restaurant, hotel
Village	114.16723	36.71245	Villagers' living area

Table S2. The changes (%) in air pollutants at different functional areas in Handan during COVID-19 lockdown period (Stage III) compared with the pre-COVID-19 period (Stage I).

Functional areas	$PM_{2.5-10}$	$PM_{2.5}$	SO_2	NO_2	CO	O_3
Traffic area	-34.7	-45.4	-30.5	-70.0	-34.8	152.8
Industrial area	-54.8	-48.3	80.6	-19.0	-26.8	14.7
Commercial area	-63.7	-51.5	-18.6	-5.3	-33.0	202.3
Construction site	-31.9	-41.8	-9.2	-48.0	-35.1	167.2
Residential area	-56.0	-44.9	-48.7	-64.9	-44.1	82.8
Township	-62.4	-50.7	18.1	9.7	-33.4	242.0
Enterprise area	-43.8	-46.2	15.5	-58.4	-27.2	189.3
Scenic area	-52.7	-40.6	-8.6	-63.9	-31.2	194.4
Village	-32.4	-42.2	3.4	-48.2	-32.8	163.2