

Supplemental Materials



Figure S1. Aerial image depicting industrial facility (entire lower half of image) in relation to neighboring homes (upper half).



Figure S2. Map depicting industrial facility and city of Santa Ana within California.

Table S1. Summary statistics of PM_{2.5} concentrations restricted to minutes when outdoor and indoor samples were collected simultaneously.

	N ^a	Mean	St. Dev.	Medan	Min.	Max.
Indoors by Type						
Mobile (Personal)	1,344	114.8	128.5	77.5	16.3	1,000.0
Stationary	1,417	186.6	221.6	104.2	1.0	1,000.0
Outdoors	463	19.0	6.0	21.0	1.0	28.2

^a The number of one-minute average measurements recorded by Atmotube device.

The following table presents summary statistics for PM_{2.5} (µg/m³) concentrations for each sampling device averaged over both buildings during the three workdays. The table is distinct from Figure 6 in the main manuscript in that Table S1 includes not only the personal monitoring devices, but the stationary devices as well. Additionally, the table offers a more comprehensive summary of the data (e.g., min, max, etc.).

Table S2. Summary statistics for PM_{2.5} (µg/m³) concentrations across all sampling devices averaged over three workdays.

Type	N	Mean	St. Dev.	Min	Max
Indoors (personal)	912	107.8	74.3	1	274
Indoors (personal)	1,533	34.8	19.6	8	147
Indoors (personal)	1,036	103.5	165.5	3	1,000
Indoors (personal)	511	118.6	110.3	1	728
Indoors (personal)	1,548	50.3	34.6	9	209
Indoors (personal)	1,533	210.9	193.7	3	1,000
Indoors (personal)	1,533	101.4	64.1	1	304
Indoors (personal)	1,548	33.5	18.5	1	112
Indoors (stationary)	1,353	106.2	60.5	1	275
Indoors (stationary)	1,533	30.5	25.7	1	88

Indoors (stationary)	1,037	92.1	119.6	1	1,000
Indoors (stationary)	511	184.2	140.8	1	988
Indoors (stationary)	1,548	127.5	116.0	1	786
Indoors (stationary)	1,532	406.1	315.1	14	1,000
Indoors (stationary)	1,548	99.2	113.6	1	1,000
Indoors (stationary)	1,533	31.6	13.8	2	75

Figure S1 presents an example of a three-day sampling period as measured by a personal air monitoring device that was carried by one of the welders (Worker 6) inside of the industrial facility. The figure is meant only to provide an example of the 1-minute data that was reported by the air monitoring instruments (without any post-processing averaging). As shown, the maximum 1-minute PM_{2.5} concentration reached as high as 1,000 µg/m³ on Day 3 within the facility, and exceeded 600 µg/m³ on all three days for this worker.

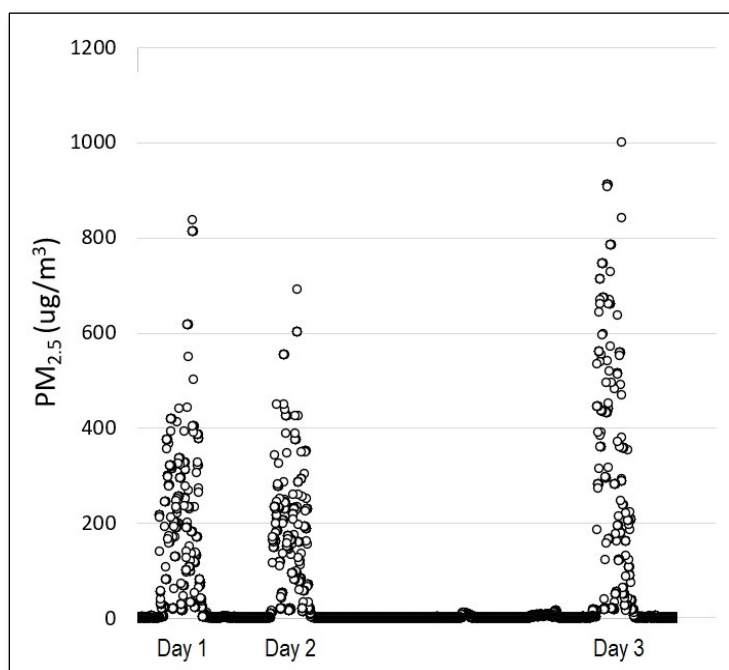


Figure S3. Example of the three-day sampling period as measured by a personal air monitor carried by one of the welders (Worker 6) inside of the industrial facility.