

On 10/22/2008 EPA contractors performed air monitoring at the Pyles Landfill. Monitoring was performed at three separate points within the actual landfill and two monitoring loops along the perimeter. Within the landfill a total of seven atmospheric contaminants were monitored. Maximum readings for each of the constituents along with Occupational Safety and Health Administration (OSHA) mandated permissible exposure limits are summarized in the table below:

	Hydrogen Cyanide	Hydrogen Chloride	Carbon Monoxide	Volatile Organic Compounds	Styrene	Vinyl Chloride	Phosgene
Max. Conc.	0 ppm	0 ppm	110 ppm	11.0 ppm	3.9 ppm	<0.3 ppm	0 ppb
Permissible Exposure Limits	10 ppm	5 ppm	50 ppm	NA	100 ppm	1 ppm	100 ppb

All of the maximum contaminant levels above were recorded inside the smoke plume at the source. Levels dropped sharply with distance from the plume.

In addition to monitoring the plume directly at the source, EPA contractors monitored the downwind areas near the surrounding businesses and residential areas. The first of the two perimeter monitoring loops was located along the southern and western edges of the landfill. The second monitoring loop paralleled Keltner Street located west of the landfill in a primarily residential area. During the loops, monitoring was performed for carbon monoxide and airborne particulates. No significant detections were observed during either monitoring run. Maximum values and averages are summarized below.

	Carbon Monoxide	Particulates
Maximum	2.0 ppm	200 $\mu\text{g}/\text{m}^3$
Average	0.24 ppm	15.92 $\mu\text{g}/\text{m}^3$
Permissible Exposure Limits	50 ppm	3,500 $\mu\text{g}/\text{m}^3$

A MultiRAE was also placed in the cab of an excavator working to remove smoldering material within the landfill. The instrument was in place for approximately six hours and measured the atmospheric concentrations of carbon monoxide, volatile organic compounds, and hydrogen sulfide. Hydrogen sulfide maintained undetectable levels throughout the monitoring period. The maximum observed concentrations for carbon monoxide and volatile organic compounds were 116 ppm and 12.1 ppm respectively with average concentrations of 11 ppm and 1.1 ppm respectively.

Beginning in the afternoon of the 22nd, Pyles began importing dirt in an effort to smother the fire. Since that time, ambient particulate and carbon monoxide levels have dropped precipitously. Air monitoring data suggests the threat of carbon monoxide and particulate inhalation for the workers has been abated.