

## Air Monitoring Summary Tables

The table below summarizes monitoring data collected on using EPA's Viper wireless remote monitoring system.

**Project Name:** Able Contracting Fire Site

**From:** 8/18/19  
19:00

**To:** 8/19/19  
7:00



On Site, Southwest Corner of Pile							
Instrument	Analyte	Action Level Exceedances	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
AreaRAE 1	VOC	No	13,060	569	0 - 272 ppb	2.35 ppb	1,000 ppb
	CO	No	13,060	266	0 - 6 ppm	0.07 ppm	83 ppm
	H <sub>2</sub> S	No	13,060	0	0 - 0 ppm	0 ppm	0.5 ppm
	O <sub>2</sub>	No	13,060	13,060	20.9 - 20.9 %	20.9 %	<19.5 or >23%
	LEL	No	13,060	0	0 - 0 %	0 %	10%
	HCN	No	13,060	13,055	0 - 1.4 ppm	0.39 ppm	7.1 ppm

Peacock Collision							
Instrument	Analyte	Air Quality Index	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
DustTrak 1	PM-2.5	Good	681	681	3 - 13 µg/m <sup>3</sup>	4.2 ug/m3	See SOG #: T106

On Site, Northwest Corner of Pile							
Instrument	Analyte	Action Level Exceedances	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
AreaRAE 2	VOC	No	12,794	4	0 - 152 ppb	0.02 ppb	1,000 ppb
	CO	No	12,794	2,800	0 - 22 ppm	1.12 ppm	83 ppm
	H <sub>2</sub> S	No	12,794	0	0 - 0 ppm	0 ppm	0.5 ppm
	O <sub>2</sub>	No	12,794	12,794	20.9 - 20.9 %	20.9 %	<19.5 or >23%
	LEL	No	12,794	0	0 - 0 %	0 %	10%
	HCN	No	12,794	10,538	0 - 1.6 ppm	0.25 ppm	7.1 ppm

Short Cut Road							
Instrument	Analyte	Air Quality Index	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
DustTrak 2	PM-2.5	Good	615	606	0 - 28 µg/m <sup>3</sup>	4.8 ug/m3	See SOG #: T106

Able Contracting Workshop, Northeast of Pile							
Instrument	Analyte	Action Level Exceedances	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
AreaRAE 3	VOC	No	12,871	1,251	0 - 156 ppb	3.27 ppb	1,000 ppb
	CO	No	12,871	0	0 - 0 ppm	0 ppm	83 ppm
	H <sub>2</sub> S	No	12,871	0	0 - 0 ppm	0 ppm	0.5 ppm
	O <sub>2</sub>	No	12,871	12,871	21.1 - 21.3 %	21.1 %	<19.5 or >23%
	LEL	No	12,871	0	0 - 0 %	0 %	10%
	HCN	No	12,871	11,266	0 - 0.8 ppm	0.16 ppm	7.1 ppm

Grace Costal Church							
Instrument	Analyte	Air Quality Index	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
DustTrak 3	PM-2.5	Good	681	681	4 - 19 µg/m <sup>3</sup>	5.8 ug/m3	See SOG #: T106

Forrest Concrete							
Instrument	Analyte	Action Level Exceedances	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
AreaRAE 4	VOC	No	12,813	0	0 - 0 ppb	0 ppb	1,000 ppb
	CO	No	12,813	0	0 - 0 ppm	0 ppm	83 ppm
	H <sub>2</sub> S	No	12,813	0	0 - 0 ppm	0 ppm	0.5 ppm
	O <sub>2</sub>	No	12,813	12,813	20.1 - 20.9 %	20.2 %	<19.5 or >23%
	LEL	No	12,813	0	0 - 0 %	0 %	10%
	HCN	No	12,813	0	0 - 0 ppm	0 ppm	7.1 ppm

Sun City							
Instrument	Analyte	Air Quality Index	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
EBAM 1	PM-2.5	Good	748	264	0 - 57 ug/m3	10.1 ug/m3	See SOG #: T106

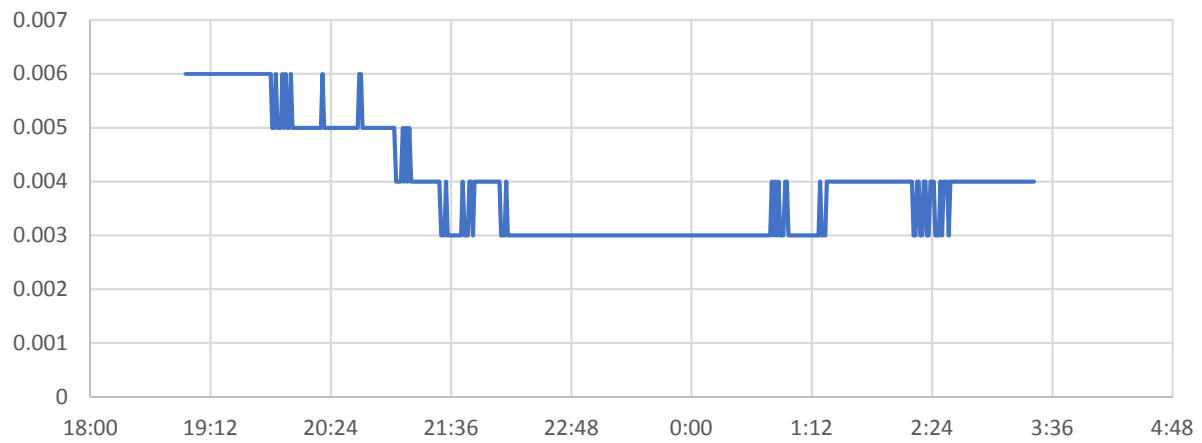
Brooke Mill Apartments							
Instrument	Analyte	Air Quality Index	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
EBAM 2	PM-2.5	Good	751	484	0 - 35 ug/m3	10 ug/m3	See SOG #: T106

EPA Mobile Command Post							
Instrument	Analyte	Air Quality Index	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
EBAM 3	PM-2.5	Moderate	737	126	0 - 82 ug/m3	13 ug/m3	See SOG #: T106

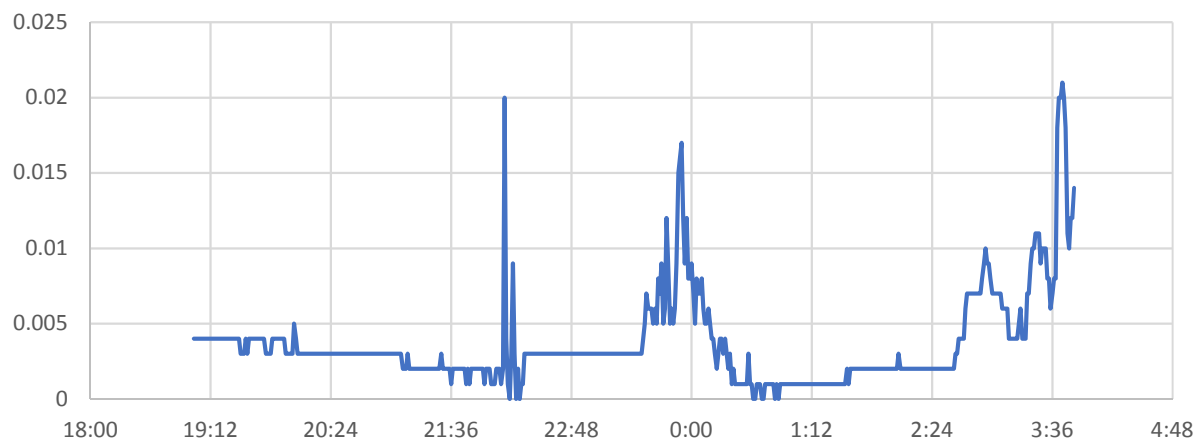
Notes:

%	Percent	O <sub>2</sub>	Oxygen
<	Less than	PEL	Permissible exposure limit
>	Greater than	ppb	Parts per billion
AEGL	Acute Exposure Guideline Levels for Airborne Chemicals	ppm	Parts per million
CO	Carbon monoxide	PM	Particulate matter
H <sub>2</sub> S	Hydrogen Sulfide	SOG	Standard Operating Guidelines
HCN	Hydrogen Cyanide	TLV	Threshold limit value
LEL	Lower Explosive Level	µg/m <sup>3</sup>	Micrograms per cubic meter
min	Minute	VOC	Volatile organic compound

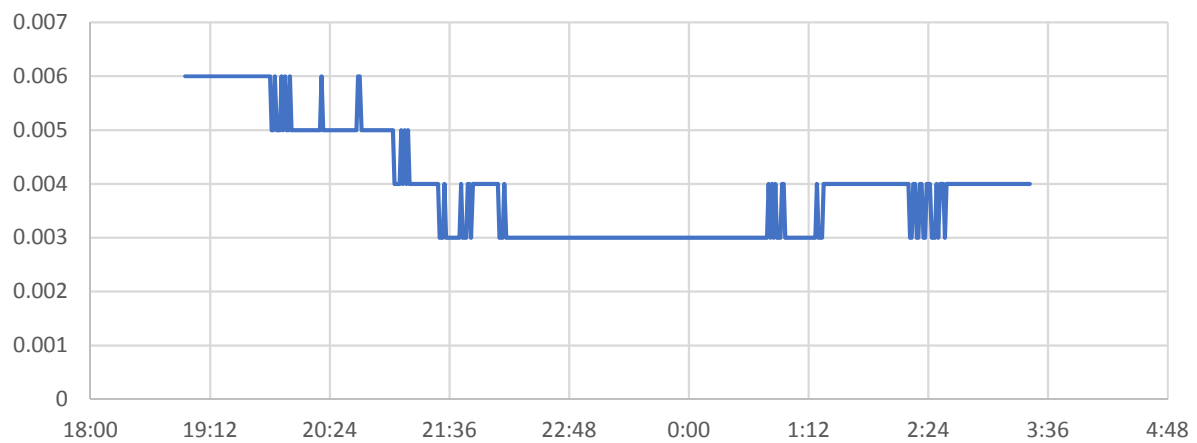
8/18/19 NIGHT Data for DustTrak 1 (PM<sub>2.5</sub>) - Sun



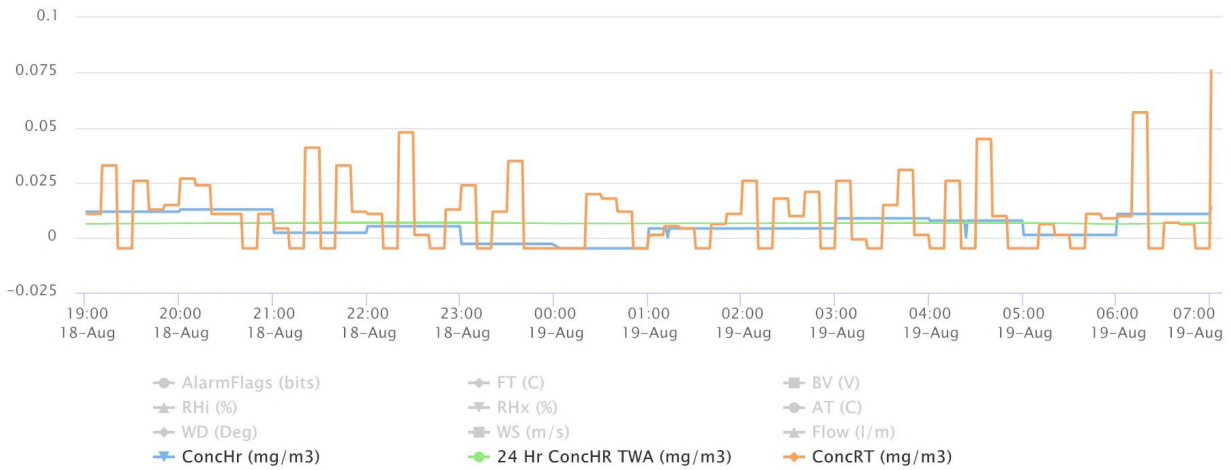
8/18/19 NIGHT Data for DustTrak 2 (PM<sub>2.5</sub>) - Short Cut



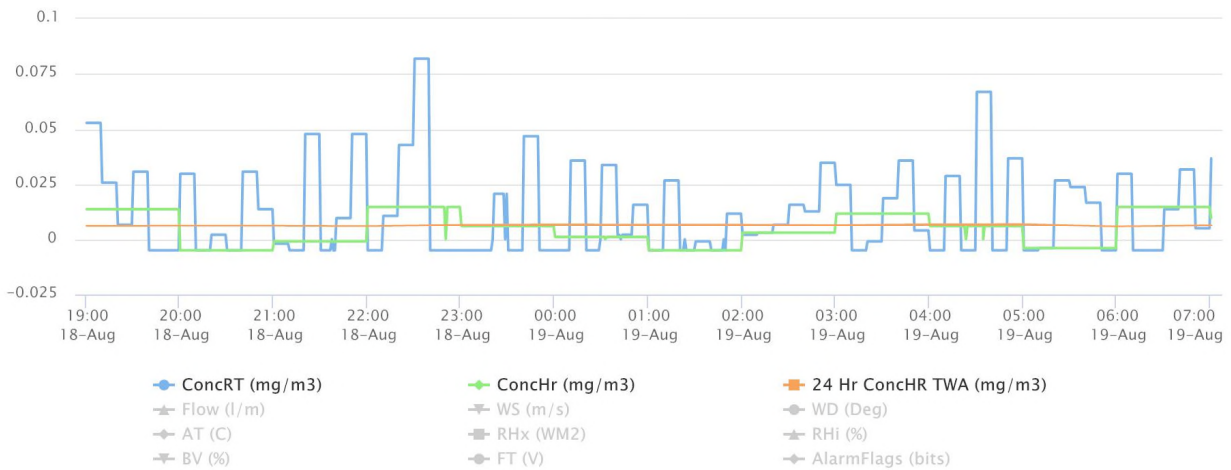
8/18/19 NIGHT Data for DustTrak 1 (PM<sub>2.5</sub>) - Sun



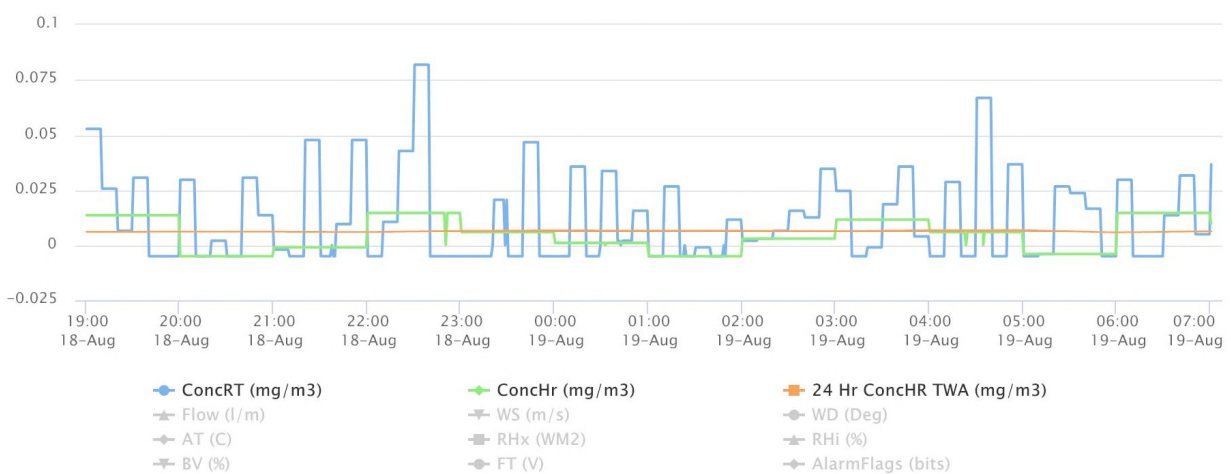
8/18/19 NIGHT Data for EBAM 1 (ConcRT) – Sun City



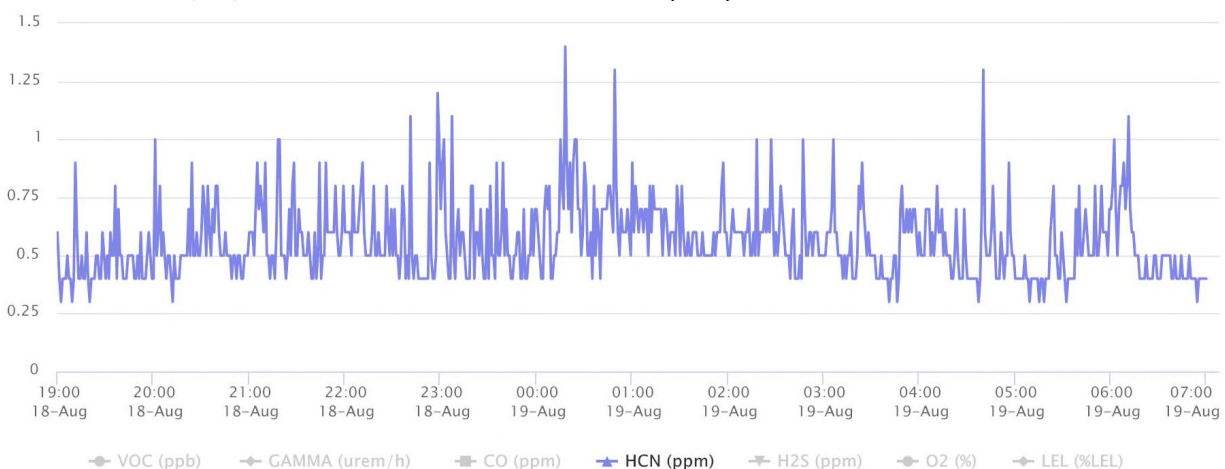
8/18/19 NIGHT Data for EBAM 2 (ConcRT) – Brooke Mill Apartments



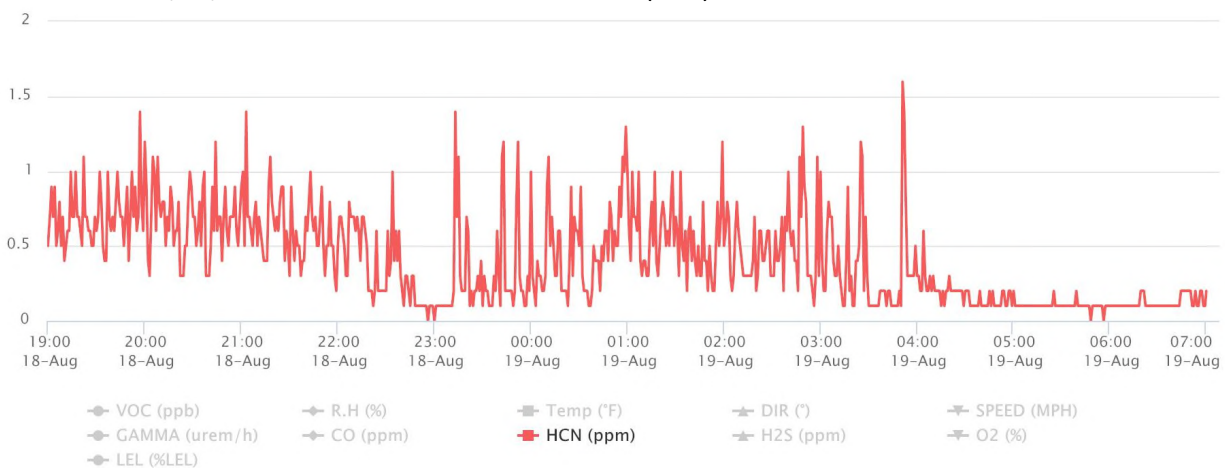
8/18/19 NIGHT Data for EBAM 3 (ConcRT) – EPA Mobile Command Post



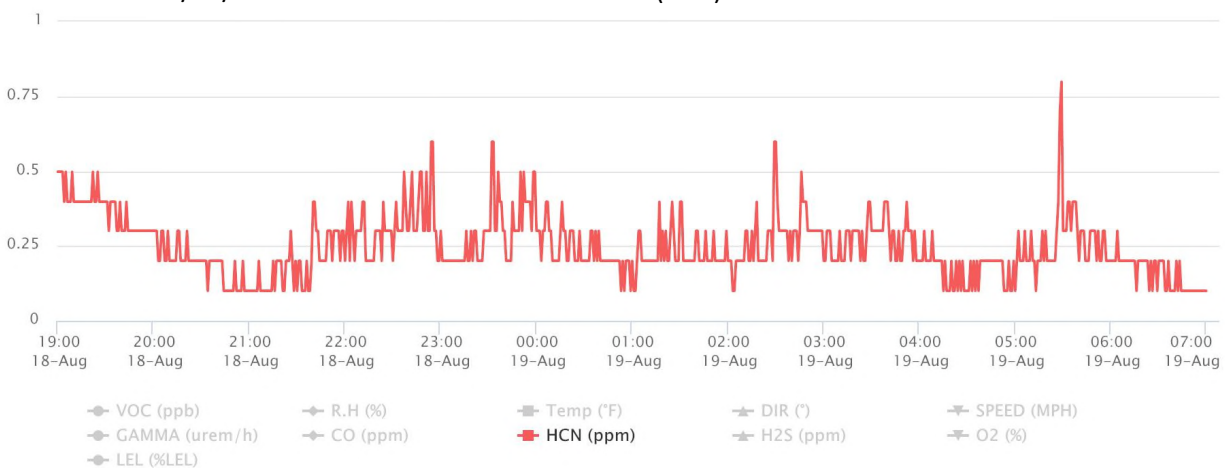
8/18/19 NIGHT Data for AREARAE PRO 1 (HCn) – Southwest of Pile



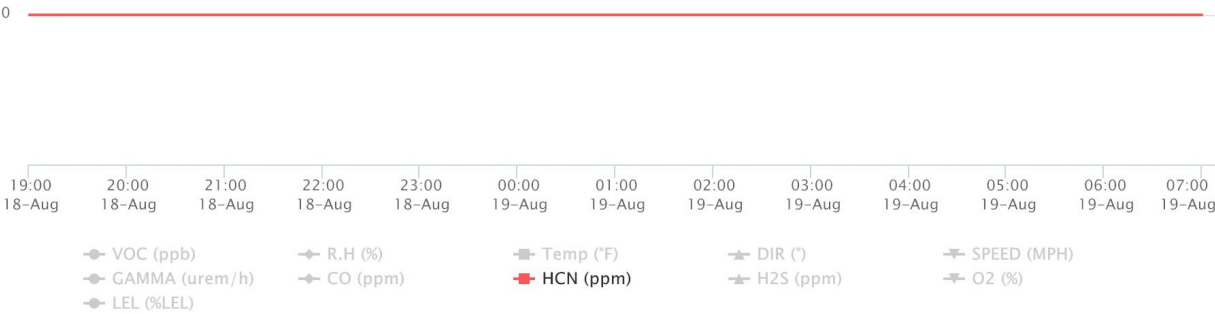
8/18/19 NIGHT Data for AREARAE PRO 2 (HCn) – Northwest of Pile



8/18/19 NIGHT Data for AREARAE PRO 3 (HCn) – Northeast of Pile



8/18/19 NIGHT Data for AREARAE PRO 4 (HCn) – Forrest Concrete



## Threshold Values and Air Quality Index Categories for PM2.5

Level of Health Concern	Particulate Matter ≤2.5 microns measured in µg/m <sup>3</sup>		Interpretation
	1 hour average	24 hour average	
Good	0.0-40.0	0.0-12.0	Air quality is considered satisfactory, and air pollution poses little or no risk
Moderate	40.1-80.0	12.1-35.4	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive groups	80.1-175.0	35.5-55.4	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	175.1-300.0	55.5-150.4	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	300.1-500.0	150.5-250.4	Health warnings of emergency conditions. The entire population is more likely to be affected.
Hazardous	>500.0	>250.5	Health alert: everyone may experience more serious health effects

- Threshold values taken from original EPA AQI online calculator found at [http://airnow.gov/index.cfm?action=resources.aqi\\_conc\\_calc](http://airnow.gov/index.cfm?action=resources.aqi_conc_calc) for PM2.5 (24 hour) and Idaho Department of Environmental Quality AQI for PM2.5 (1 hour) taken from <http://app.airsis.com/usfs/aqi.asp>.
- Recommendations are from the EPA Air Now web site.
- People who are unusually sensitive to air pollution are a subset of Sensitive Individuals. Unusually sensitive to air pollution can be defined as the very young, the elderly, pregnant women, and the immunocompromised.
- Sensitive individuals defined as people with lung disease, older adults and children who are at a greater risk from exposure to ozone; and persons with heart and lung disease, older adults and children who are at greater risk from the presence of particles in the air.