

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: 8/23/19
7:00

To: 8/23/19
19:00



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	772	1	0 - 72 ppb	0.09 ppb	1,000 ppb
	CO	No	772	6	0 - 5 ppm	0.03 ppm	83 ppm
	H ₂ S	Yes	772	3	0 - 1.8 ppm	0.004 ppm	0.5 ppm
	O ₂	No	772	772	20.9 - 20.9 %	20.9 %	<19.5 or >23%
	LEL	No	772	0	0 - 0 %	0 %	10%
	HCN	No	772	505	0 - 5.7 ppm	0.19 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	1,025	982	0 - 32 µg/m ³	6.2 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	Yes	777	15	0 - 1048 ppb	5.13 ppb	1,000 ppb
	CO	No	777	79	0 - 19 ppm	0.56 ppm	83 ppm
	H ₂ S	Yes	777	4	0 - 0.9 ppm	0.003 ppm	0.5 ppm
	O ₂	No	777	777	20.6 - 20.9 %	20.7 %	<19.5 or >23%
	LEL	No	777	0	0 - 0 %	0 %	10%
	HCN	No	777	130	0 - 3.1 ppm	0.1 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	1,118	1,118	2 - 38 µg/m ³	7.2 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	771	9	0 - 433 ppb	1.67 ppb	1,000 ppb
	CO	No	771	0	0 - 0 ppm	0 ppm	83 ppm
	H ₂ S	No	771	0	0 - 0 ppm	0 ppm	0.5 ppm
	O ₂	No	771	771	20.9 - 20.9 %	20.9 %	<19.5 or >23%
	LEL	No	771	771	2 - 3 %	2.5 %	10%
	HCN	No	771	193	0 - 0.6 ppm	0.08 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	1,082	1,016	0 - 111 µg/m ³	6.5 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	777	0	0 - 0 ppb	0 ppb	1,000 ppb
	CO	No	777	0	0 - 0 ppm	0 ppm	83 ppm
	H ₂ S	No	777	0	0 - 0 ppm	0 ppm	0.5 ppm
	O ₂	No	777	777	20.4 - 21.3 %	20.9 %	<19.5 or >23%
	LEL	No	777	0	0 - 0 %	0 %	10%
	HCN	No	777	386	0 - 1.6 ppm	0.31 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	733	122	0 - 154 ug/m3	10.3 ug/m3	See SOG #: T106

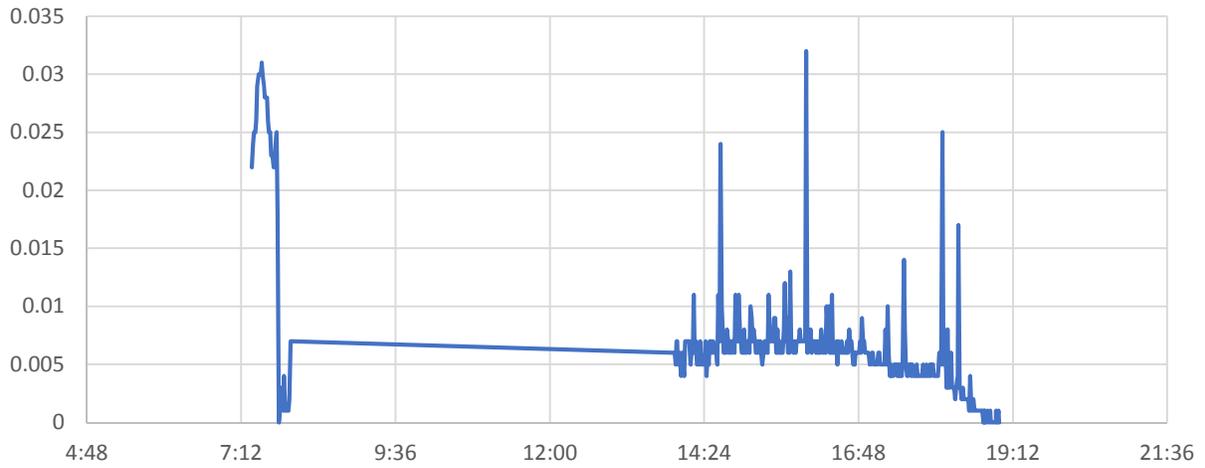
Brooke Mill Apartments							
Instrument	Analyte	Air Quality Index	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
EBAM 2	PM-2.5	Good	742	130	0 - 34 ug/m3	4.2 ug/m3	See SOG #: T106

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	387	125	0 - 121 ug/m3	15.8 ug/m3	See SOG #: T106

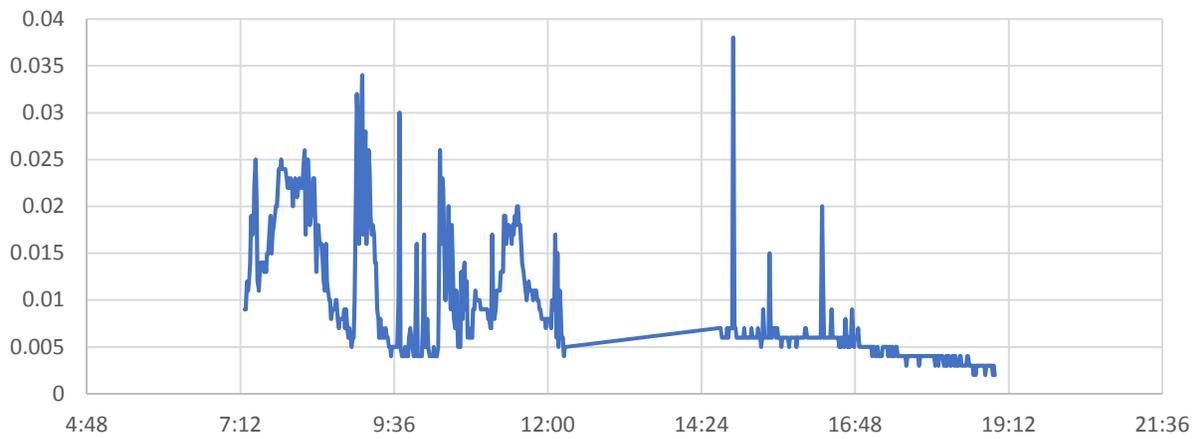
Notes:

- % Percent
- < Less than
- > Greater than
- AEGL Acute Exposure Guideline Levels for Airborne Chemicals
- CO Carbon monoxide
- H₂S Hydrogen Sulfide
- HCN Hydrogen Cyanide
- LEL Lower Explosive Level
- min Minute
- O₂ Oxygen
- PEL Permissible exposure limit
- ppb Parts per billion
- ppm Parts per million
- PM Particulate matter
- SOG Standard Operating Guidelines
- TLV Threshold limit value
- µg/m³ Micrograms per cubic meter
- µg Volatile organic compound

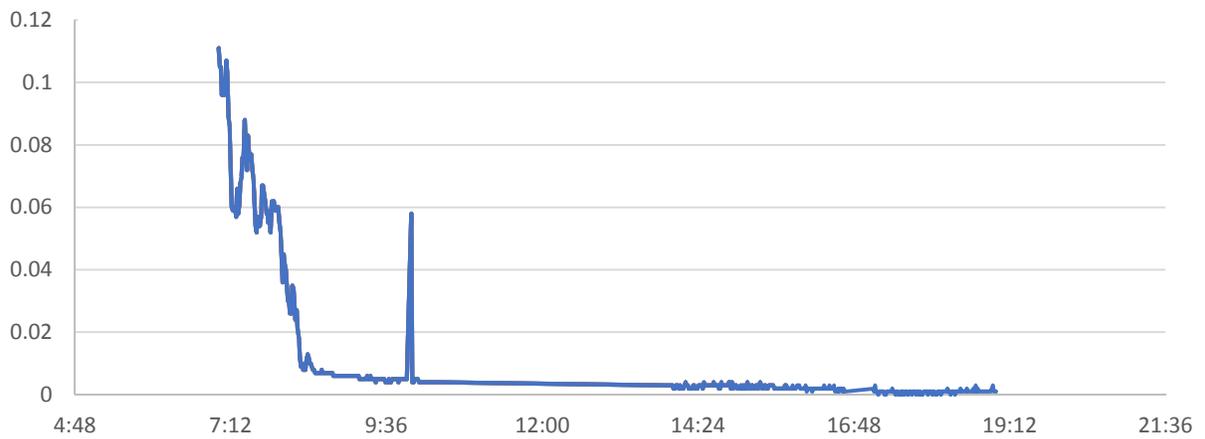
8/23/19 DAY Data for DustTrak 1 (PM_{2.5}) - Peacock Collision



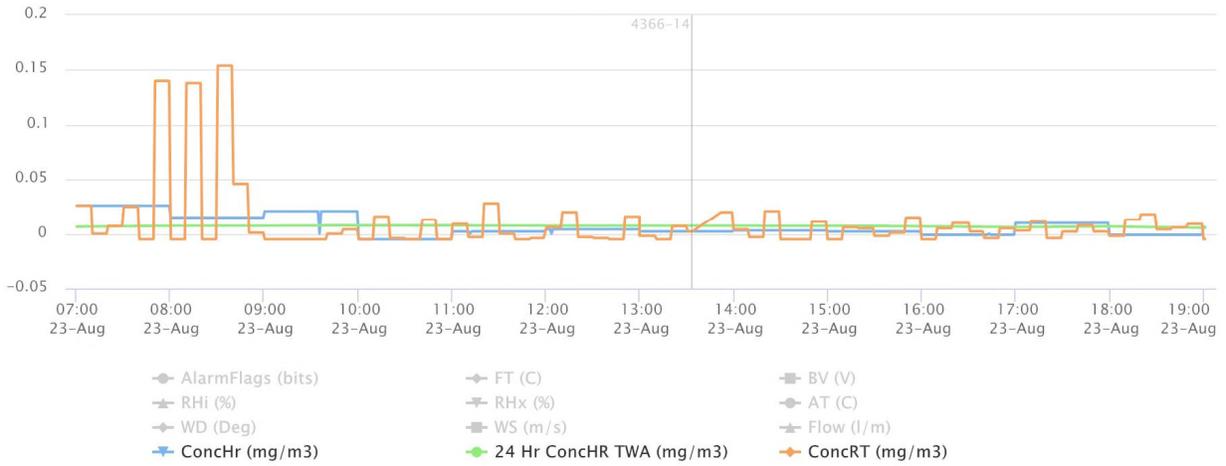
8/23/19 DAY Data for DustTrak 2 (PM_{2.5}) - Short Cut Road



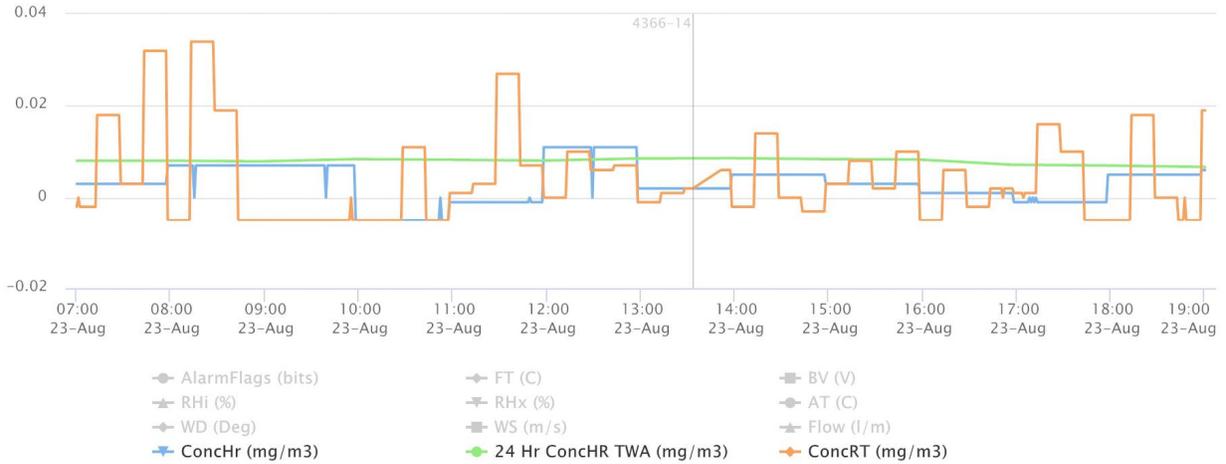
8/23/19 DAY Data for DustTrak 3 (PM_{2.5}) - Grace Costal Church



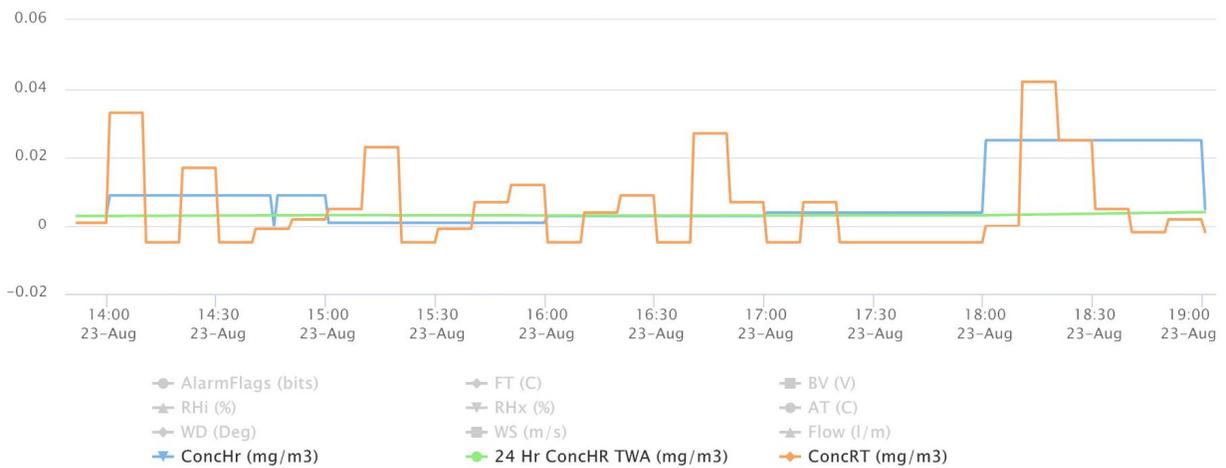
8/23/19 DAY Data for EBAM 1 (ConcRT) – Sun City



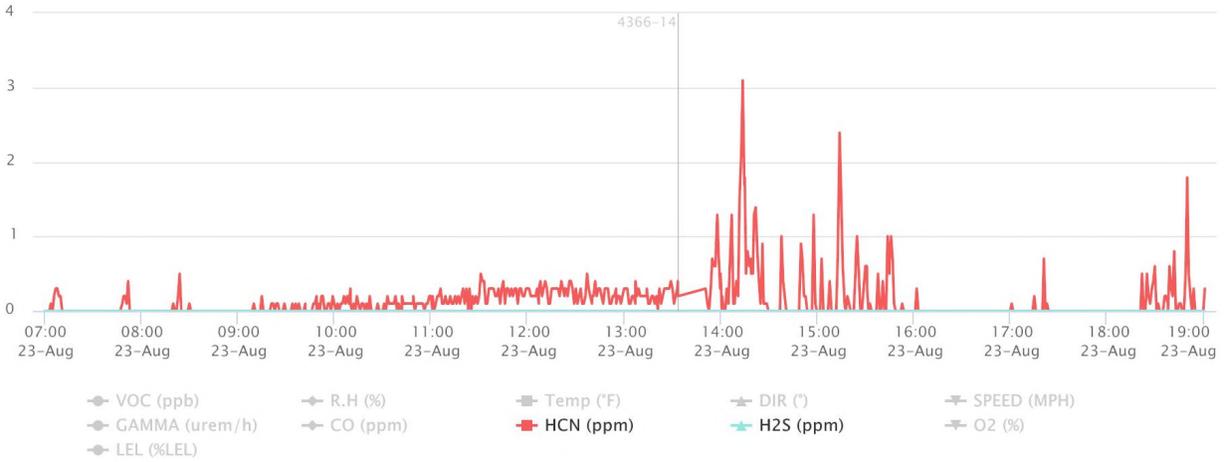
8/23/19 DAY Data for EBAM 2 (ConcRT) – Brooke Mill Apartments



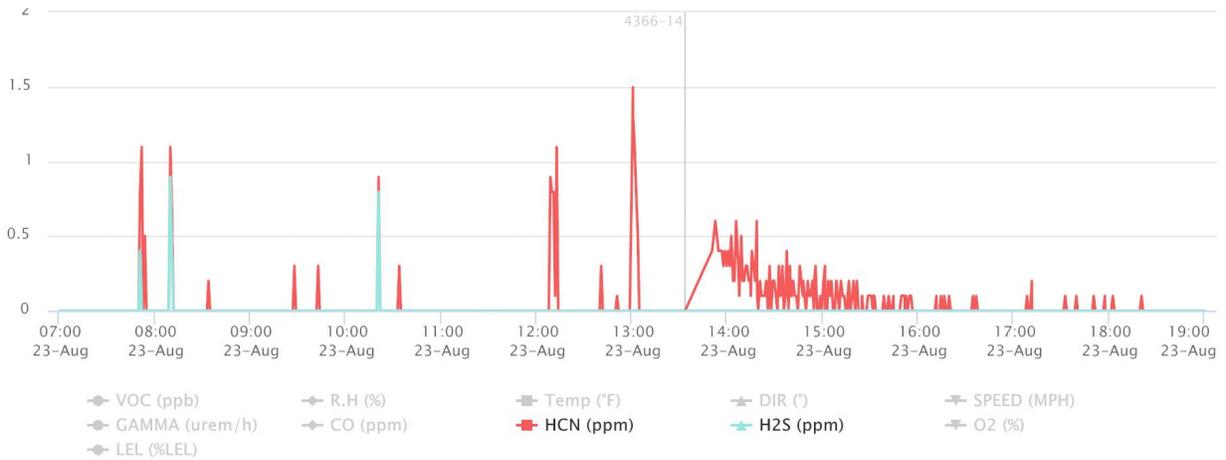
8/23/19 DAY Data for EBAM 3 (ConcRT) – EPA Mobile Command Post



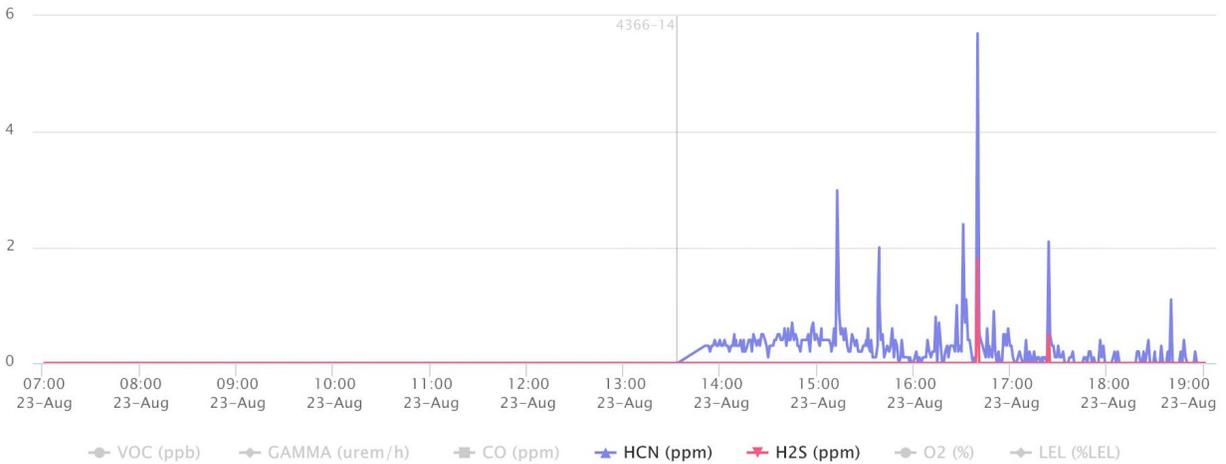
8/23/19 DAY Data for AREARAE PRO 1 (HCn) – Southwest of Pile



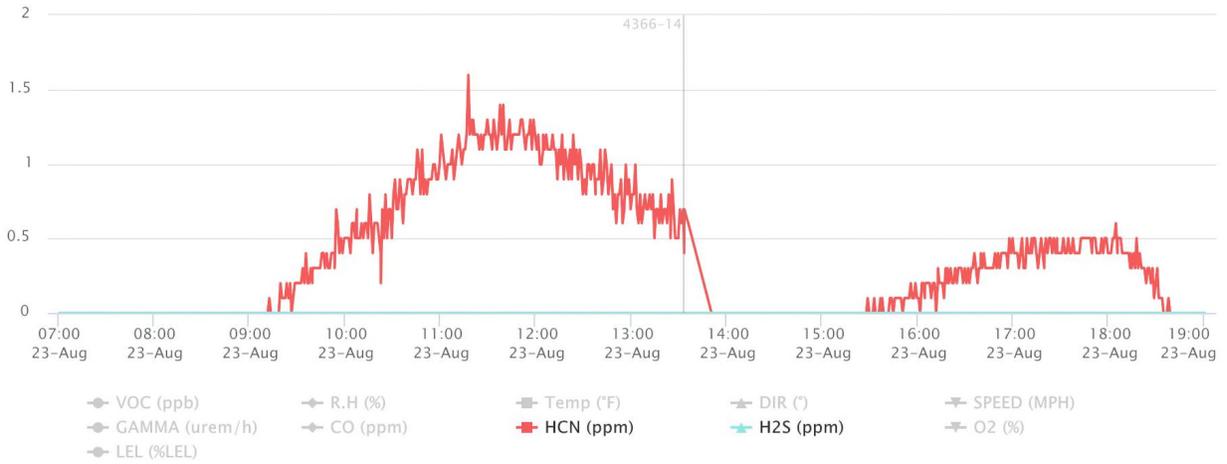
8/23/19 DAY Data for AREARAE PRO 2 (HCn) – Northwest of Pile



8/23/19 DAY Data for AREARAE PRO 3 (HCn) – Northeast of Pile



8/23/19 DAY 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 $\mu\text{g}/\text{m}^3$		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 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.