

# Air Monitoring Summary Tables

The table below summarize 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

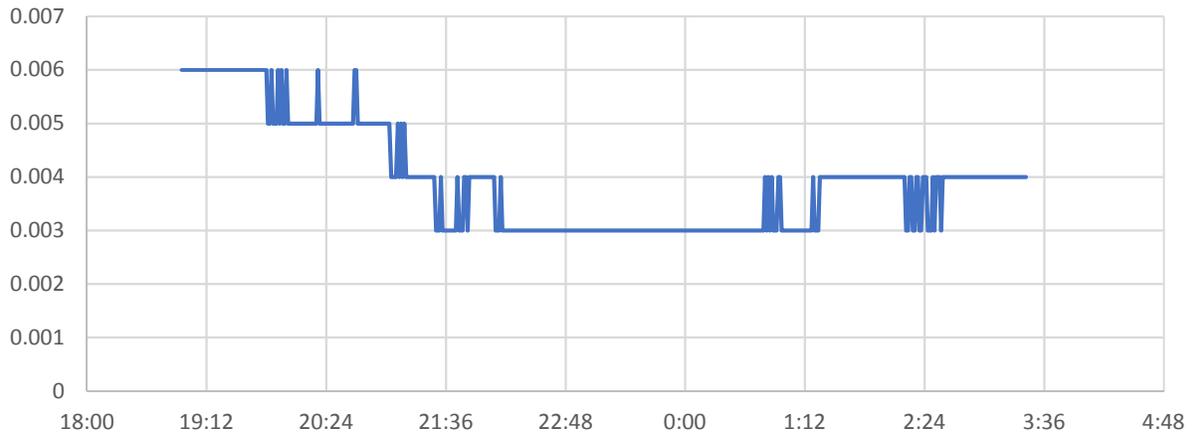
Brooke Mill Apartments							
Instrument	Analyte	Air Quality Index	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
EBAM 2	PM-2.5	Good	751	484	0 - 35 ug/m3	10 ug/m3	See SOG #: T106

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

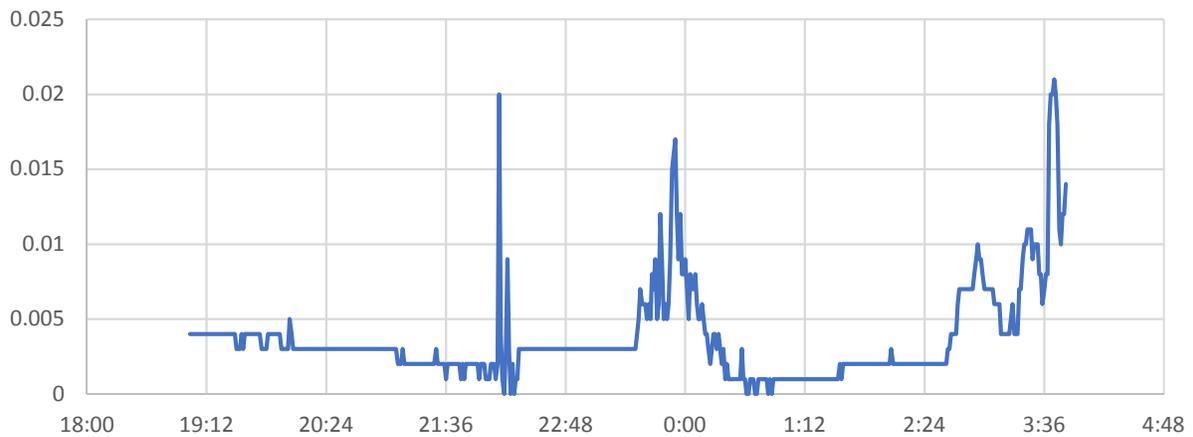
Notes:

- % Percent
- < Less than
- > Greater than
- AEGL Acute Exposure Guideline Levels for Airborne Chemicals
- CO Carbon monoxide
- H<sub>2</sub>S Hydrogen Sulfide
- HCN Hydrogen Cyanide
- LEL Lower Explosive Level
- min Minute
- O<sub>2</sub> 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/m<sup>3</sup> Micrograms per cubic meter
- µg Volatile organic compound

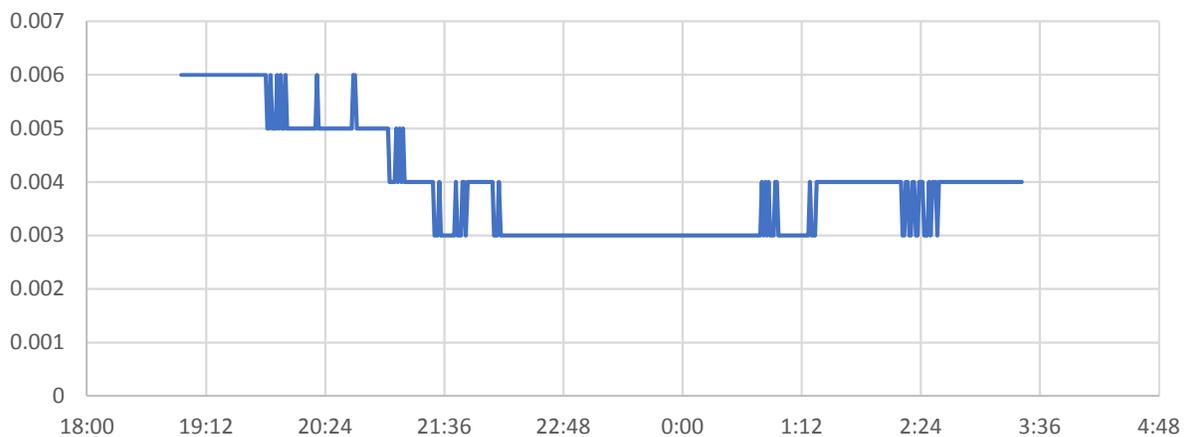
8/18/19 NIGHT Data for DustTrak 1 (PM<sub>2.5</sub>) - Sun



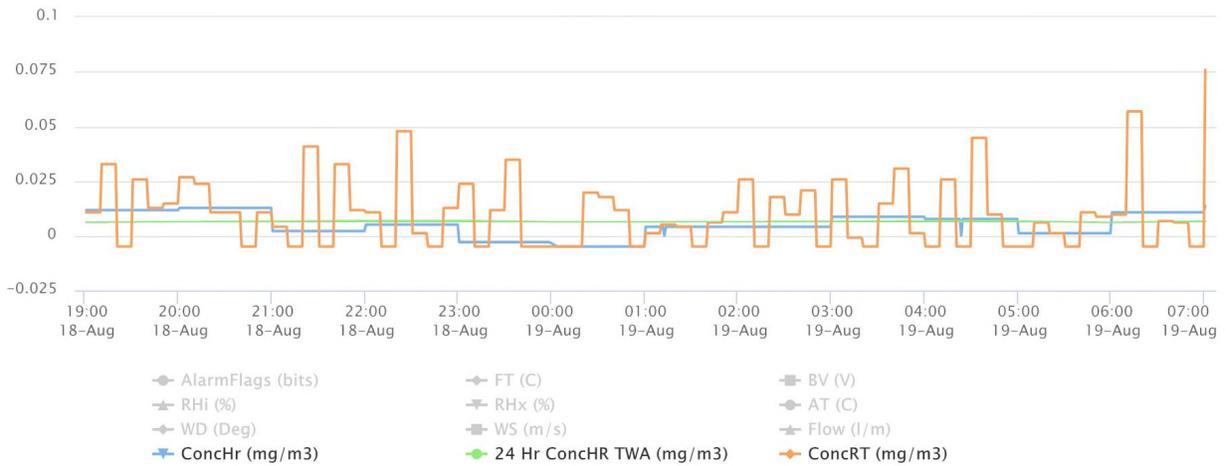
8/18/19 NIGHT Data for DustTrak 2 (PM<sub>2.5</sub>) - Short Cut



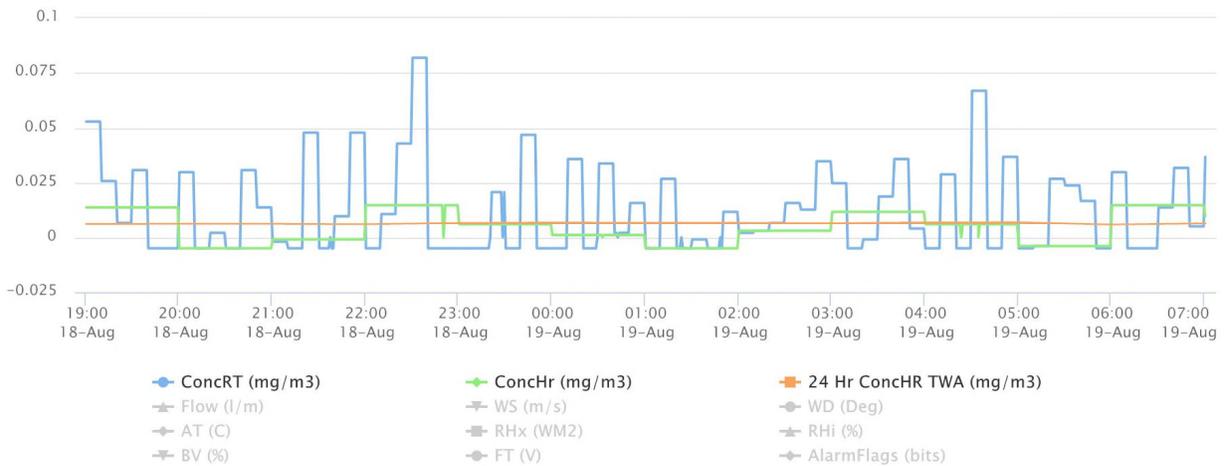
8/18/19 NIGHT Data for DustTrak 1 (PM<sub>2.5</sub>) - Sun



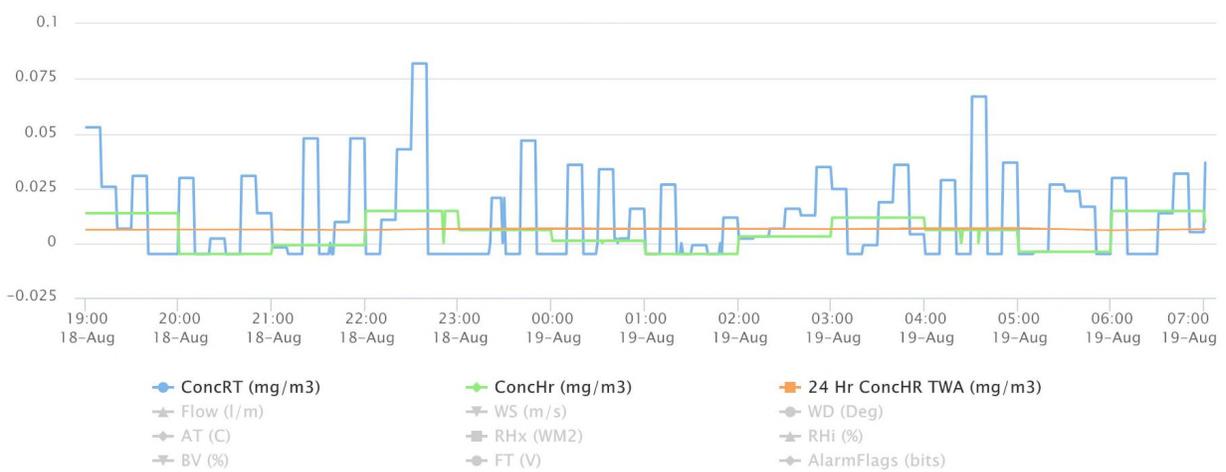
### 8/18/19 NIGHT Data for EBAM 1 (ConcRT) – Sun City



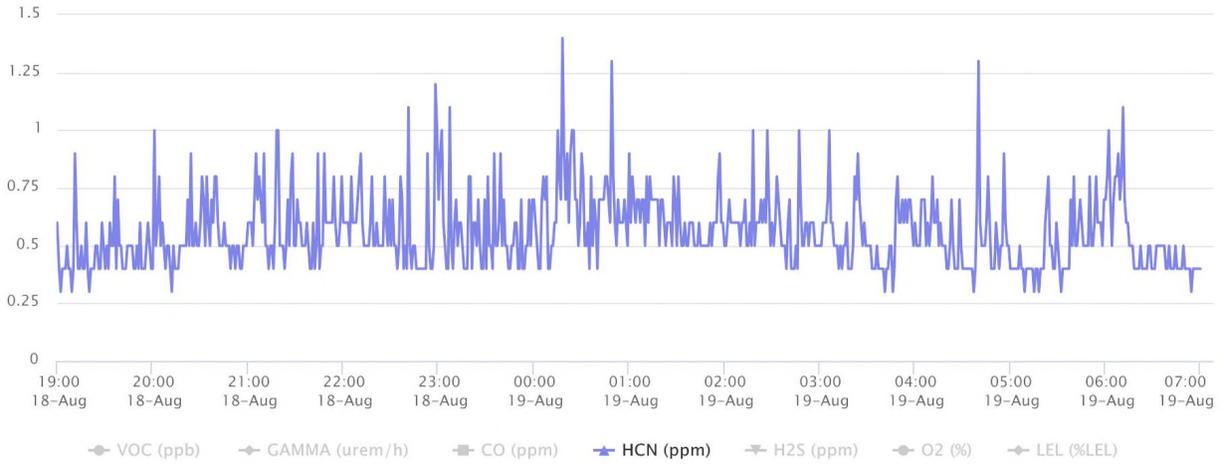
### 8/18/19 NIGHT Data for EBAM 2 (ConcRT) – Brooke Mill Apartments



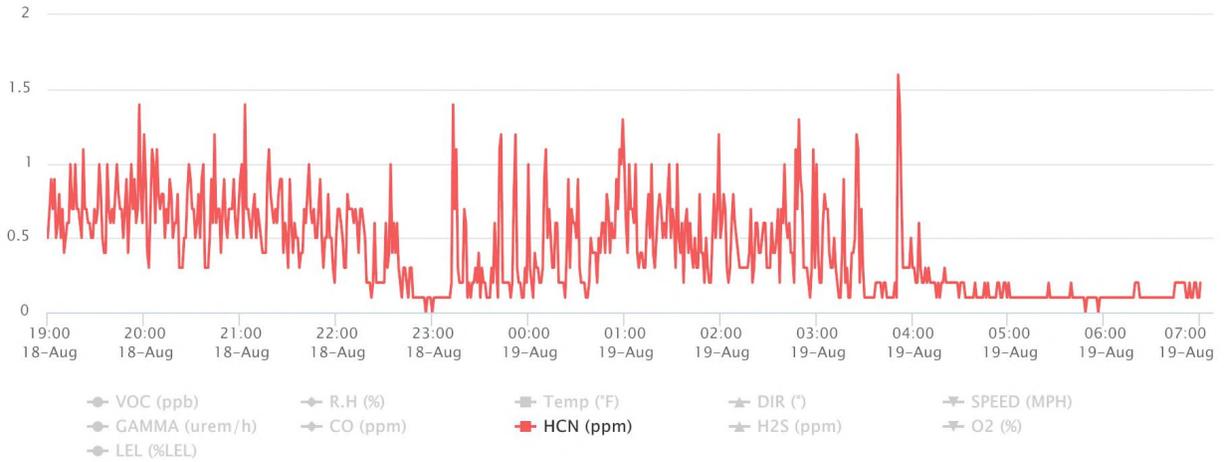
### 8/18/19 NIGHT Data for EBAM 3 (ConcRT) – EPA Mobile Command Post



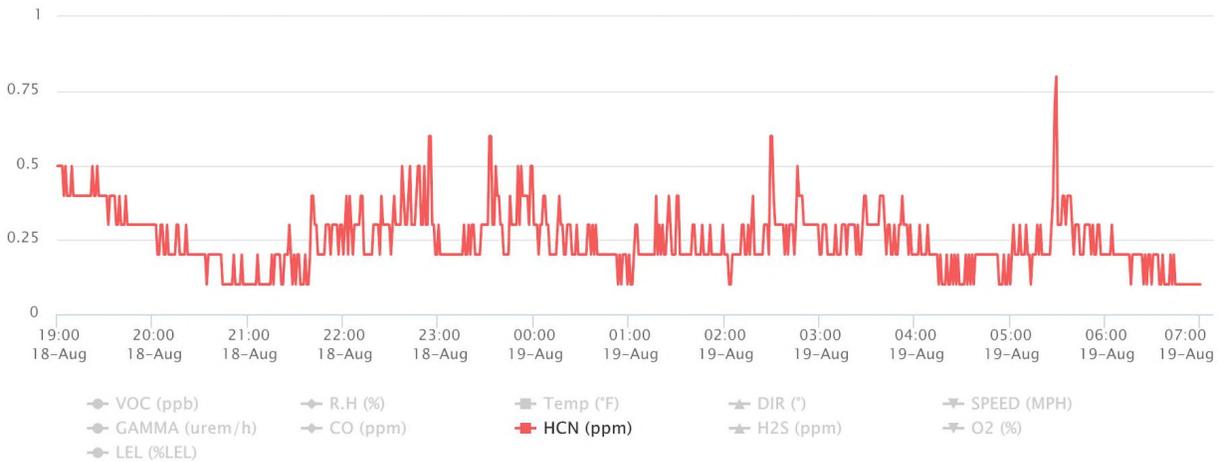
8/18/19 NIGHT Data for AREARAE PRO 1 (HCn) – Southwest of Pile



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

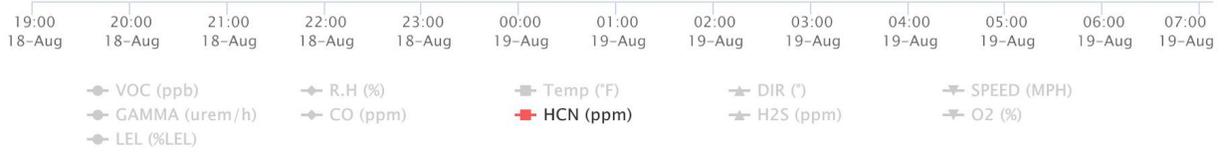


8/18/19 NIGHT Data for AREARAE PRO 3 (HCn) – Northeast of Pile



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

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

Level of Health Concern	Particulate Matter $\leq 2.5$ microns measured in $\mu\text{g}/\text{m}^3$		Interpretation
	1 hour average	24 hour average	
<b>Good</b>	0.0-40.0	0.0-12.0	Air quality is considered satisfactory, and air pollution poses little or no risk
<b>Moderate</b>	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.
<b>Unhealthy for Sensitive groups</b>	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.
<b>Unhealthy</b>	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.
<b>Very Unhealthy</b>	300.1-500.0	150.5-250.4	Health warnings of emergency conditions. The entire population is more likely to be affected.
<b>Hazardous</b>	>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.