Air Monitoring Summary Tables

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

Project Name:

From: **8/16/19 7:00** ***To:*** ***8/16/19 18:58***

On Site, Southwest Corner of Pile							
Instrument	**Analyte**	**Period Average Exceedances**	**Number of Readings**	**Number of Detections**	**Concentration Range**	**Period Average**	**Action Level (PEL/TLV/60 min AEGL)**
AreaRAE 1	VOC	No	606	1	0 - 1444 ppb	2.4 ppb	1,000 ppb
	CO	No	606	1	0 - 9 ppm	0 ppm	83 ppm
	H_2S	No	606	0	0 - 0 ppm	0 ppm	0.5 ppm
	O_2	No	606	606	20.9 - 20.9%	20.9%	<19.5 or >23%
	LEL	No	606	0	0 - 0%	0%	10%
	HCN	No	606	606	0.1 - 1.3 ppm	0.4 ppm	7.1 ppm%

Peacock Collision							
Instrument	**Analyte**	**Period Average Exceedances**	**Number of Readings**	**Number of Detections**	**Concentration Range**	**Period Average**	**Action Level (PEL/TLV/60 min AEGL)**
DustTrak 1	PM-2.5	Good	13,831	13,372	0 - 53 µg/m³	7.1 µg/m³	See SOG #: T106

On Site, Northwest Corner of Pile							
Instrument	**Analyte**	**Period Average Exceedances**	**Number of Readings**	**Number of Detections**	**Concentration Range**	**Period Average**	**Action Level (PEL/TLV/60 min AEGL)**
AreaRAE 2	VOC	No	603	5	0 - 1108 ppb	2.4 ppb	1,000 ppb
	CO	No	603	42	0 - 10 ppm	0.3 ppm	83 ppm
	H_2S	No	603	0	0 - 0 ppm	0 ppm	0.5 ppm
	O_2	No	603	603	20.4 - 20.9%	20.6%	<19.5 or >23%
	LEL	No	603	0	0 - 0 %	0%	10%
	HCN	No	603	219	0 - 1.1 ppm	0.1 ppm	7.1 ppm

Able Contracting Workshop, Northeast of Pile							
Instrument	**Analyte**	**Period Average Exceedances**	**Number of Readings**	**Number of Detections**	**Concentration Range**	**Period Average**	**Action Level (PEL/TLV/60 min AEGL)**
AreaRAE 3	VOC	No	607	1	0 - 93 ppb	0.2 ppb	1,000 ppb
	CO	No	607	0	0 - 0 ppm	0 ppm	83 ppm
	H_2S	No	607	0	0 - 0 ppm	0 ppm	0.5 ppm
	O_2	No	607	607	20.9 - 21.3%	21.1%	<19.5 or >23%
	LEL	No	607	0	0 - 0%	0%	10%
	HCN	No	607	605	0 - 0.6 ppm	0.3 ppm	7.1 ppm

Grace Costal Church							
Instrument	**Analyte**	**Period Average Exceedances**	**Number of Readings**	**Number of Detections**	**Concentration Range**	**Period Average**	**Action Level (PEL/TLV/60 min AEGL)**
DustTrak 3	PM-2.5	Moderate	693	693	3 - 20 µg/m³	9.2 µg/m³	See SOG #: T106

Forrest Concrete							
Instrument	**Analyte**	**Period Average Exceedances**	**Number of Readings**	**Number of Detections**	**Concentration Range**	**Period Average**	**Action Level (PEL/TLV/60 min AEGL)**
AreaRAE 4	VOC	No	606	0	0 - 0 ppb	0 ppb	1,000 ppb
	CO	No	606	1	0 - 4 ppm	0 ppm	83 ppm
	H_2S	No	606	0	0 - 0 ppm	0 ppm	0.5 ppm
	O_2	No	606	606	20.4 - 20.9%	20.7%	<19.5 or >23%
	LEL	No	606	0	0 - 0%	0%	10%
	HCN	No	606	0	0 - 0.1 ppm	0 ppm	7.1 ppm

Sun City							
Instrument	**Analyte**	**Period Average Exceedances**	**Number of Readings**	**Number of Detections**	**Concentration Range**	**Period Average**	**Action Level (PEL/TLV/60 min AEGL)**
EBAM 1	PM-2.5	Moderate	664	418	0 - 104 µg/m³	12.9 µg/m³	See SOG #: T106

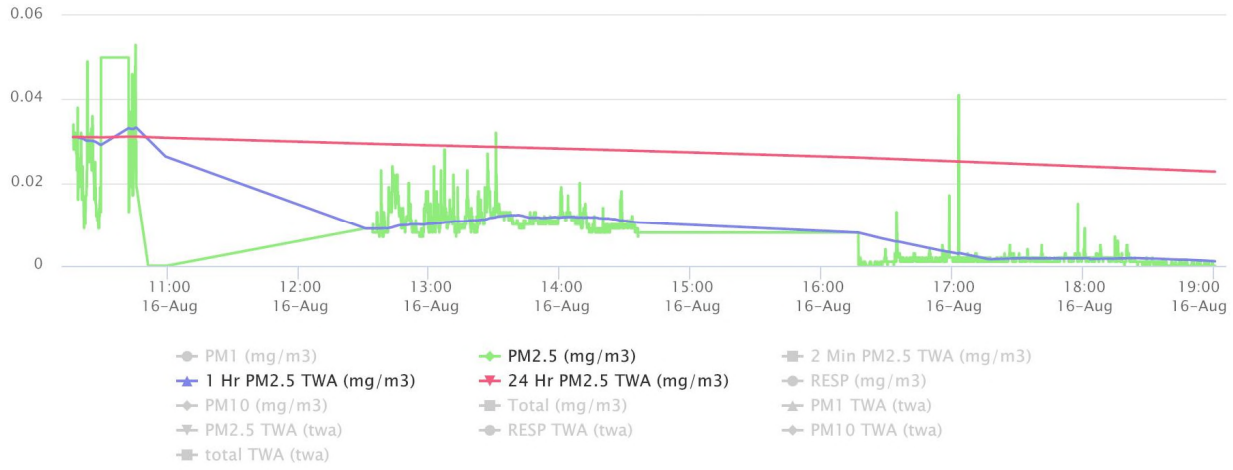
Brooke Mill Apartments							
Instrument	**Analyte**	**Period Average Exceedances**	**Number of Readings**	**Number of Detections**	**Concentration Range**	**Period Average**	**Action Level (PEL/TLV/60 min AEGL)**
EBAM 2	PM-2.5	Good	650	368	0 - 90 µg/m³	7.6 µg/m³	See SOG #: T106

EPA Mobile Command Post							
Instrument	**Analyte**	**Period Average Exceedances**	**Number of Readings**	**Number of Detections**	**Concentration Range**	**Period Average**	**Action Level (PEL/TLV/60 min AEGL)**
EBAM 3	PM-2.5	Moderate	739	452	0 - 135 µg/m³	14.4 µg/m³	See SOG #: T106

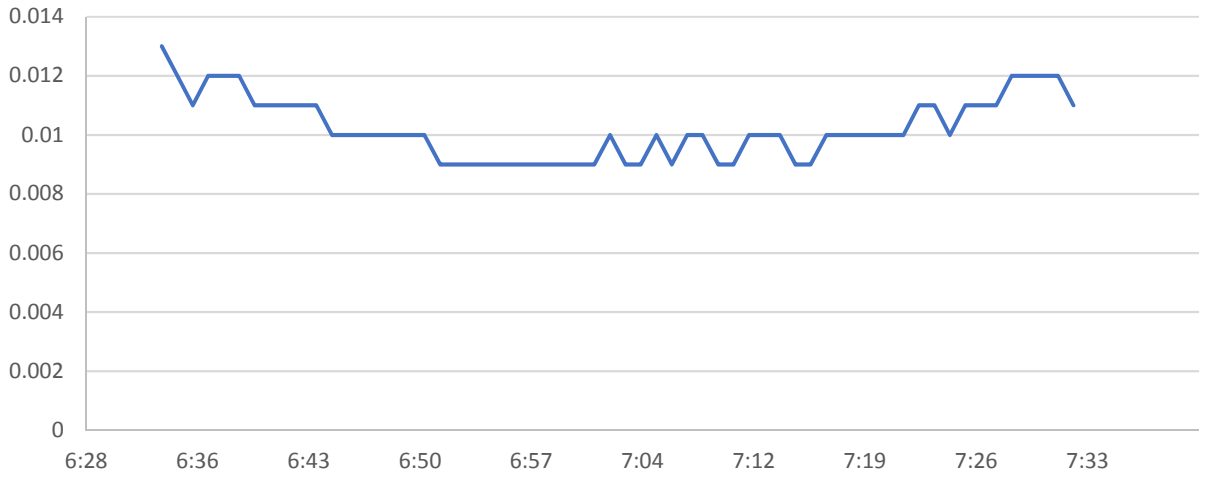
Notes:

%	Percent
<	Less than
>	Greater than
AEGL	Acute Exposure Guideline Levels for Airborne Chemicals
CO	Carbon monoxide
H_2S	Hydrogen Sulfide
HCN	Hydrogen Cyanide
LEL	Lower Explosive Level
min	Minute
O_2	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
VOC	Volatile organic compoud

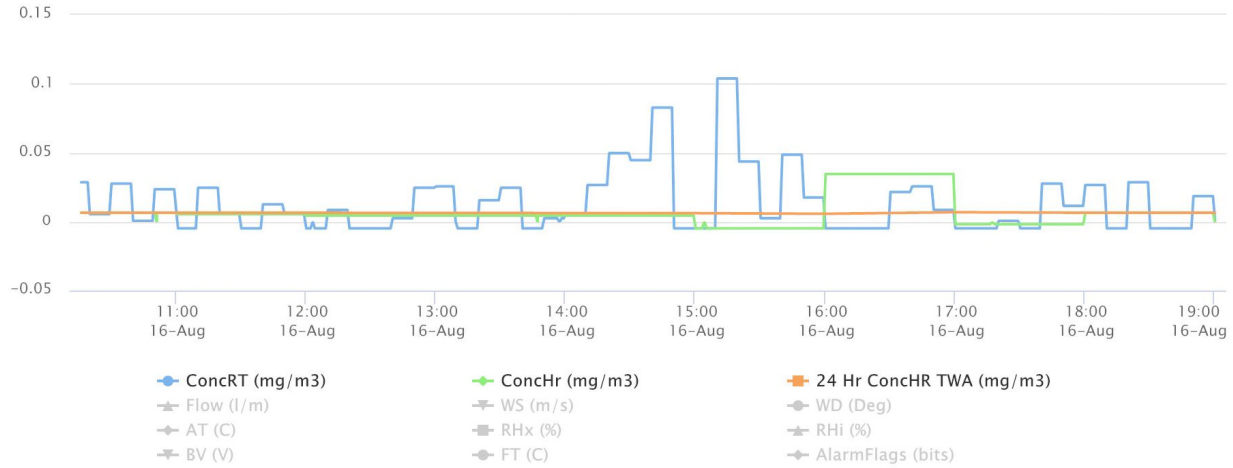
8/16/19 DAY Data for DustTrak 1 ($PM_{2.5}$) - Peacock Collision



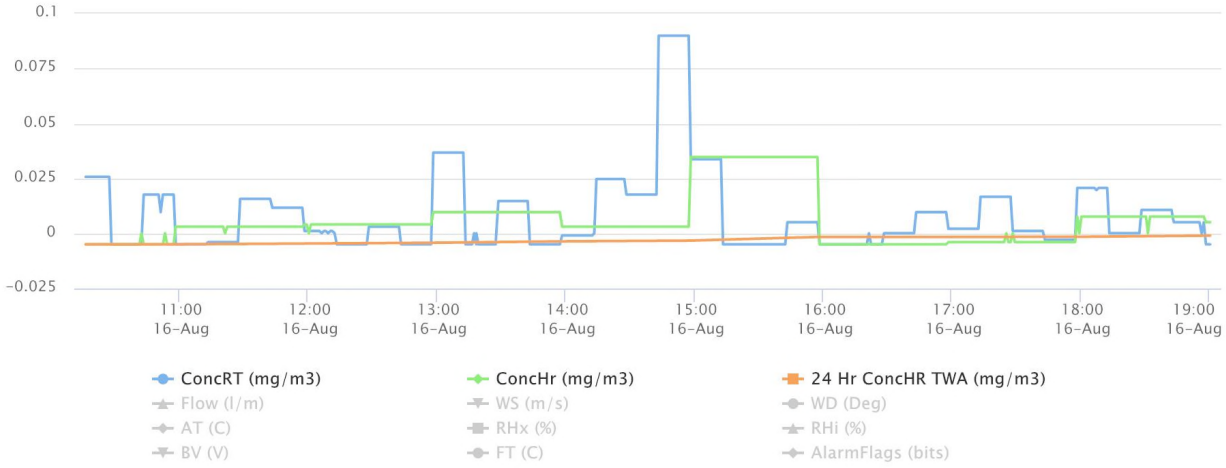
8/16/19 DAY Data for DustTrak 3 ($PM_{2.5}$) – Grace Costal Church



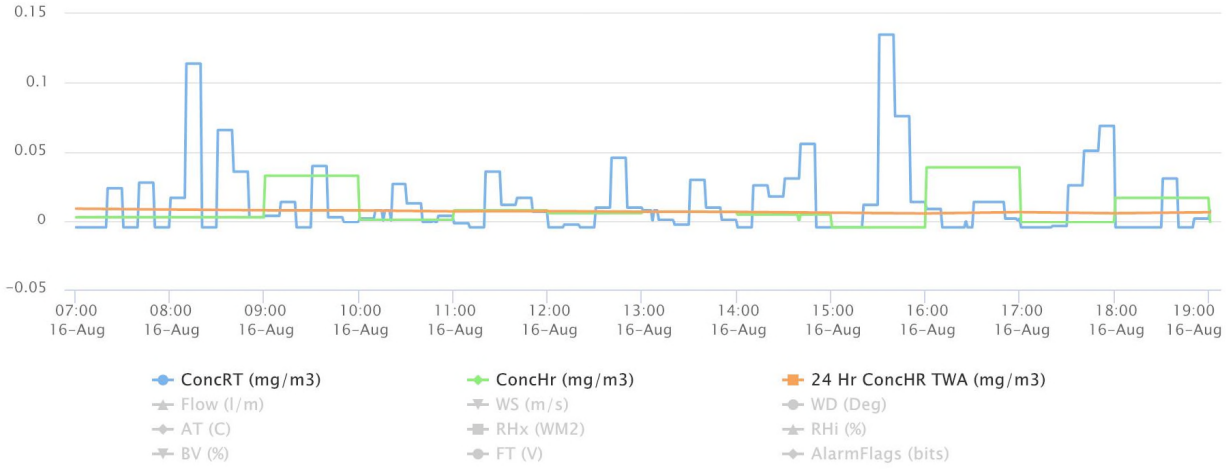
8/16/19 DAY Data for EBAM 1 (ConcRT) – Sun City



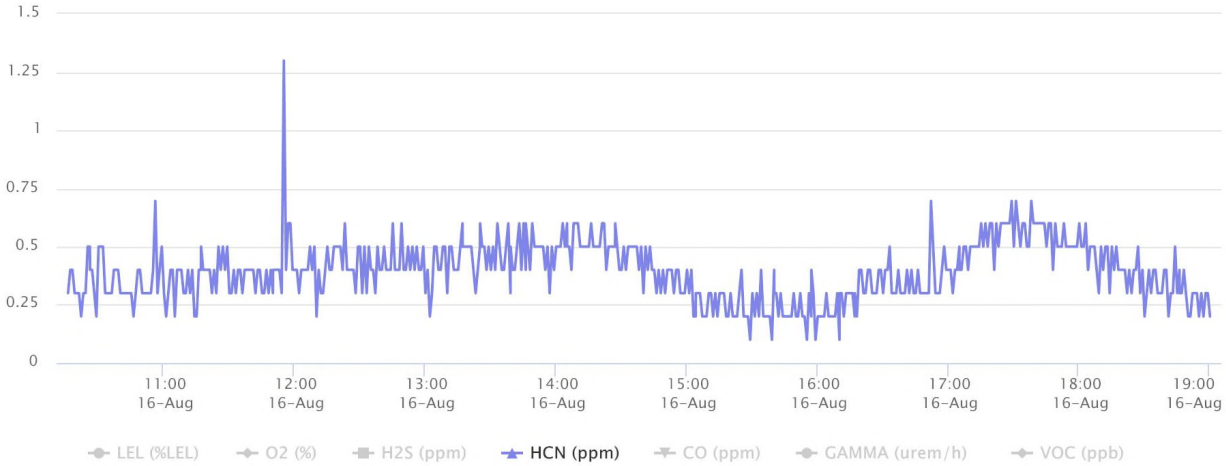
8/16/19 DAY Data for EBAM 2 (ConcRT) – Brooke Mill Apartments



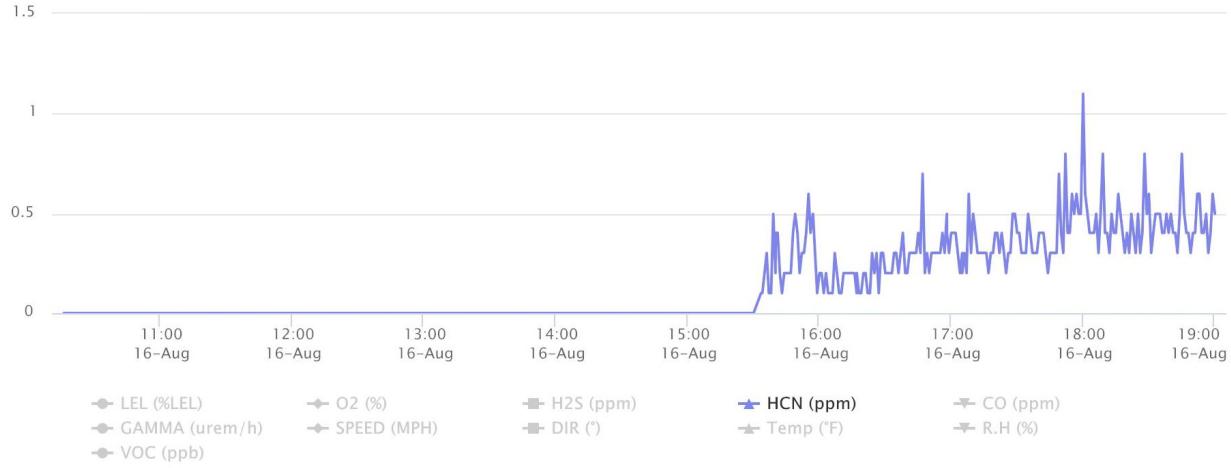
8/16/19 DAY Data for EBAM 3 (ConcRT) – EPA Mobile Command Post



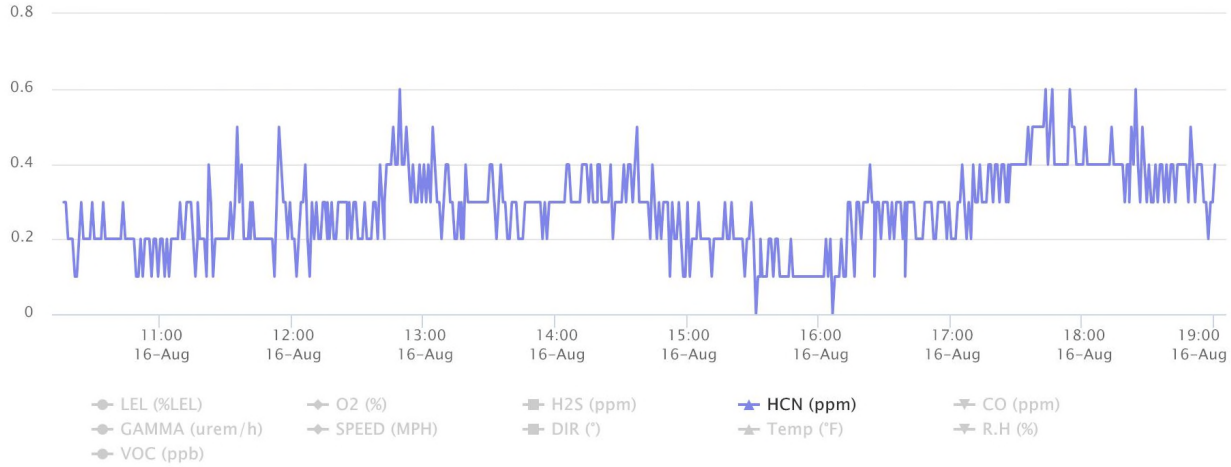
8/16/19 DAY Data for AREARAE PRO 1 (HCn) – Southwest of Pile



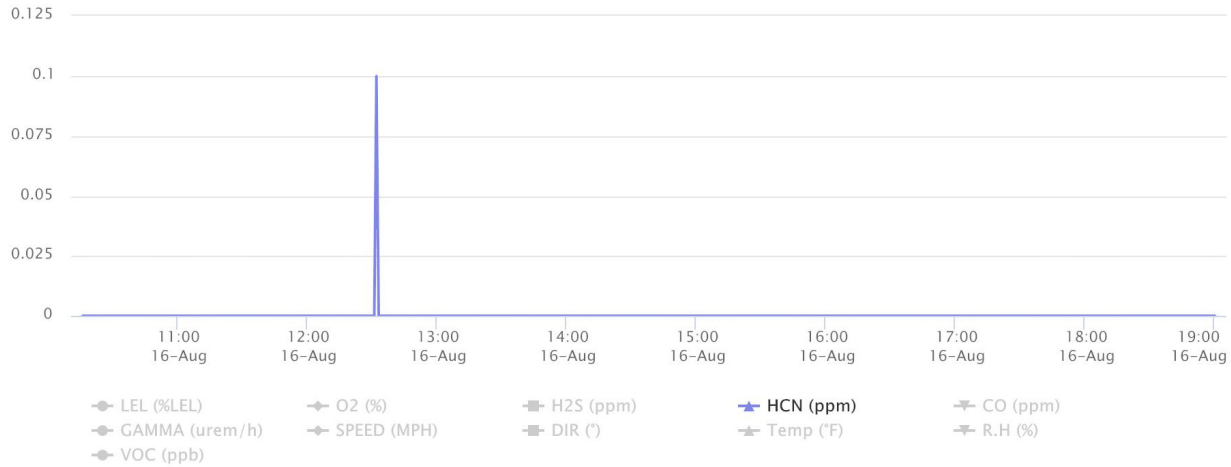
8/16/19 DAY Data for AREARAE PRO 2 (HCn) – Northwest of Pile



8/16/19 DAY Data for AREARAE PRO 3 (HCn) – Northeast of Pile



8/16/19 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 µg/m3		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.