Air Monitoring Summary Tables

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

Project Name:

From: **8/17/19 7:00** ***To:*** ***8/17/19 18:59***

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	3,569	89	0 - 683 ppb	4 ppb	1,000 ppb
	CO	No	3,569	70	0 - 5 ppm	0.1 ppm	83 ppm
	H_2S	No	3,569	0	0 - 0 ppm	0 ppm	0.5 ppm
	O_2	No	3,569	3,569	20.9 - 20.9%	20.9%	<19.5 or >23%
	LEL	No	3,570	0	0 - 0%	0%	10%
	HCN	No	3,569	3,560	0 - 1.1 ppm	0.3 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	Moderate	735	735	6 - 42 µg/m³	12.5 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	3,569	89	0 - 683 ppb	4 ppb	1,000 ppb
	CO	No	3,569	70	0 - 5 ppm	0.1 ppm	83 ppm
	H_2S	No	3,569	0	0 - 0 ppm	0 ppm	0.5 ppm
	O_2	No	3,569	3,569	20.9 - 20.9%	20.9%	<19.5 or >23%
	LEL	No	3,570	0	0 - 0 %	0%	10%
	HCN	No	3,569	3,560	0 - 1.1 ppm	0.3 ppm	7.1 ppm

Short Cut Road

Instrument	Analyte	Period Average Exceedances	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
DustTrak 2	PM-2.5	Good	335	335	3 - 62 µg/m³	11.8 µg/m³	See SOG #: T106

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	3,043	7	0 - 117 ppb	0.1 ppb	1,000 ppb
	CO	No	3,043	0	0 - 0 ppm	0 ppm	83 ppm
	H_2S	No	3,043	0	0 - 0 ppm	0 ppm	0.5 ppm
	O_2	No	3,043	3,043	20.9 - 21.4%	20.9%	<19.5 or >23%
	LEL	No	3,043	0	0 - 0%	0%	10%
	HCN	No	3,043	1,910	0 - 0.9 ppm	0.1 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	Good	303	303	6 - 18 µg/m³	11.2 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	2,711	0	0 - 0 ppb	0 ppb	1,000 ppb
	CO	No	2,711	0	0 - 0 ppm	0 ppm	83 ppm
	H_2S	No	2,711	0	0 - 0 ppm	0 ppm	0.5 ppm
	O_2	No	2,711	2,711	20.1 - 20.9%	20.3%	<19.5 or >23%
	LEL	No	2,711	0	0 - 0%	0%	10%
	HCN	No	2,711	0	0 - 0 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	725	501	0 - 64 µg/m³	12.1 µg/m³	See SOG #: T106

Brooke Mill Apartments

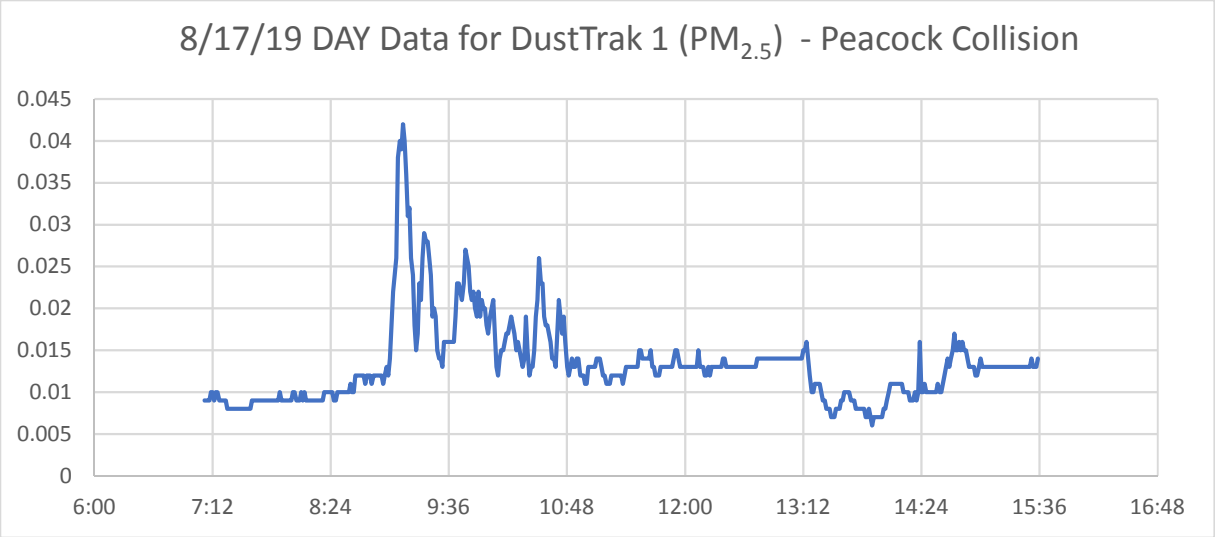
Instrument	Analyte	Period Average Exceedances	Number of Readings	Number of Detections	Concentration Range	Period Average	Action Level (PEL/TLV/60 min AEGL)
EBAM 2	PM-2.5	Good	721	439	0 - 46 µg/m³	7.1 µg/m³	See SOG #: T106

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	742	535	0 - 78 µg/m³	13.8 µg/m³	See SOG #: T106

Notes:

%	Percent	O_2	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_2S	Hydrogen Sulfide	SOG	Standard Operating Guidelines
HCN	Hydrogen Cyanide	TLV	Threshold limit value
LEL	Lower Explosive Level	µg/m³	Micrograms per cubic meter
min	Minute	VOC	Volatile organic compoud


8/17/19 DAY Data for DustTrak 1 (PM2.5) - Peacock Collision
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0.03
0.025
0.02
0.015
0.01
0.005
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7:12
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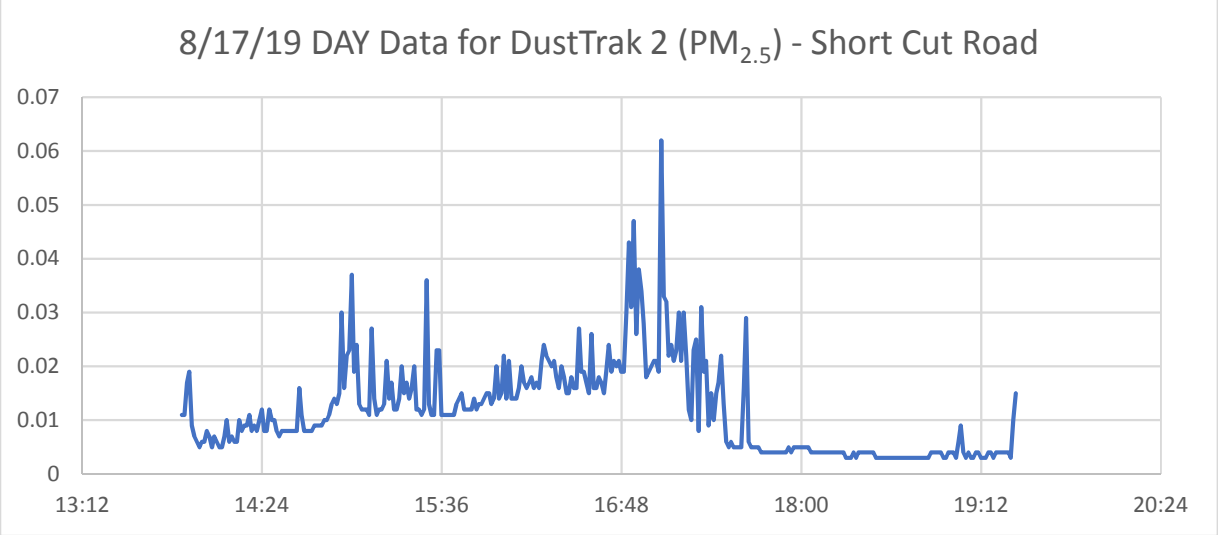
10:48
12:00
13:12
14:24
15:36
16:48


8/17/19 DAY Data for DustTrak 2 (PM2.5) - Short Cut Road
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0.02
0.01
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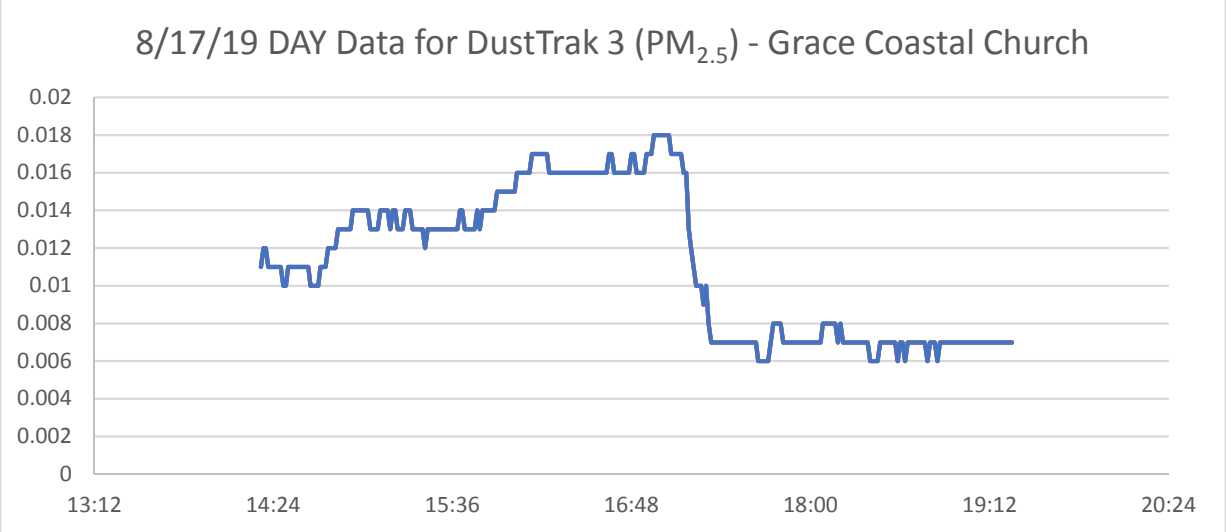
16:48
18:00
19:12
20:24


8/17/19 DAY Data for DustTrak 3 (PM2.5) - Grace Coastal Church
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0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
13:12
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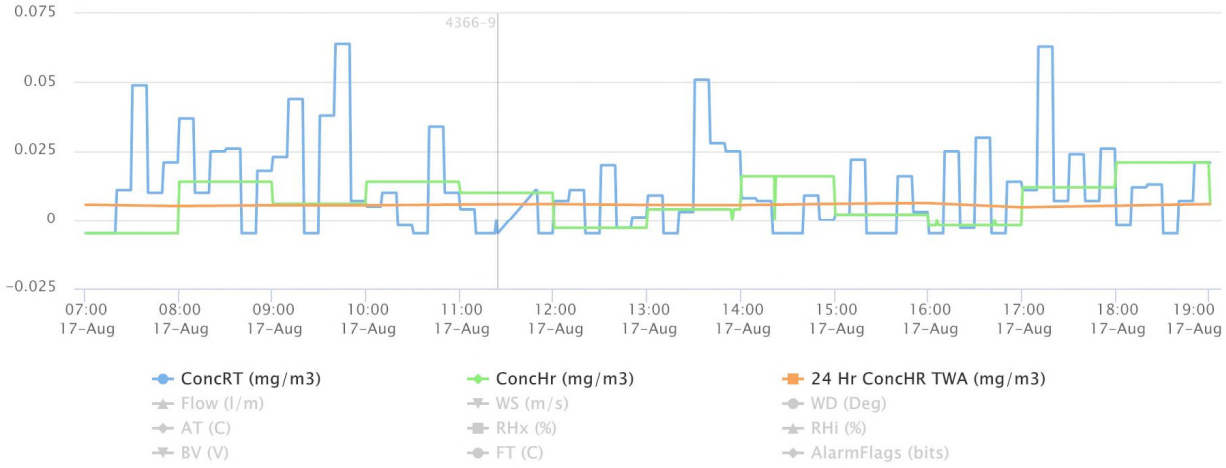
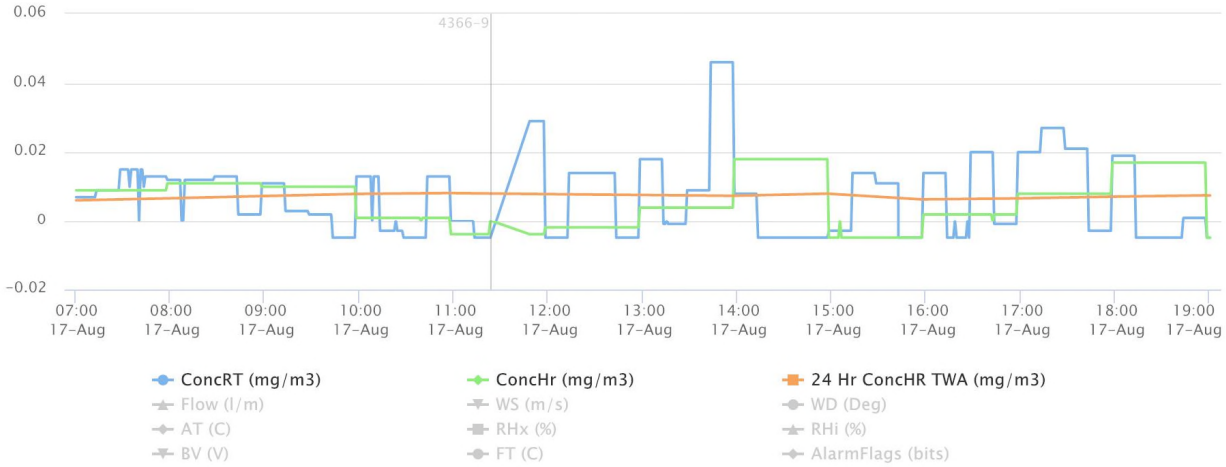
15:36
16:48
18:00
19:12
20:24

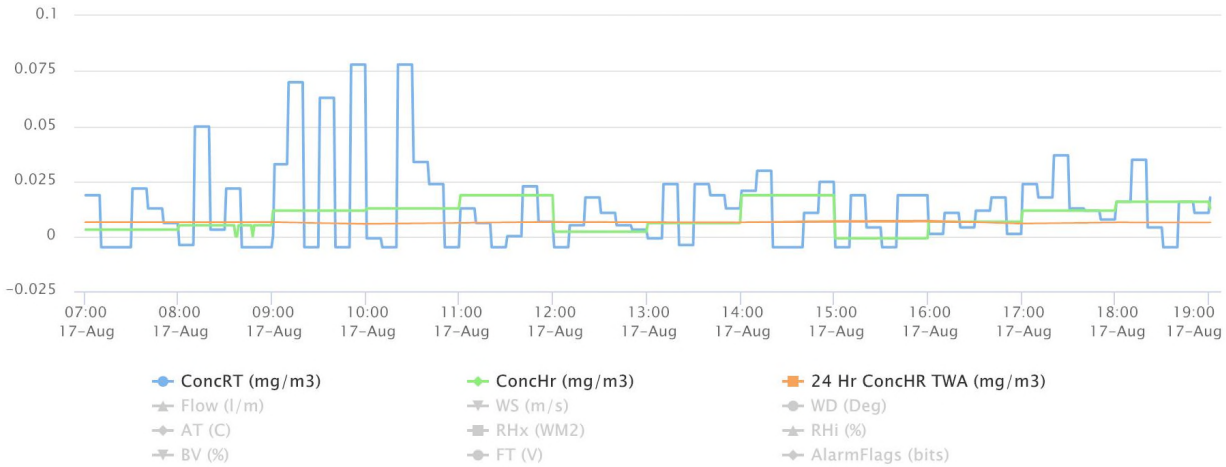
8/17/19 DAY Data for EBAM 1 (ConcRT) – Sun City



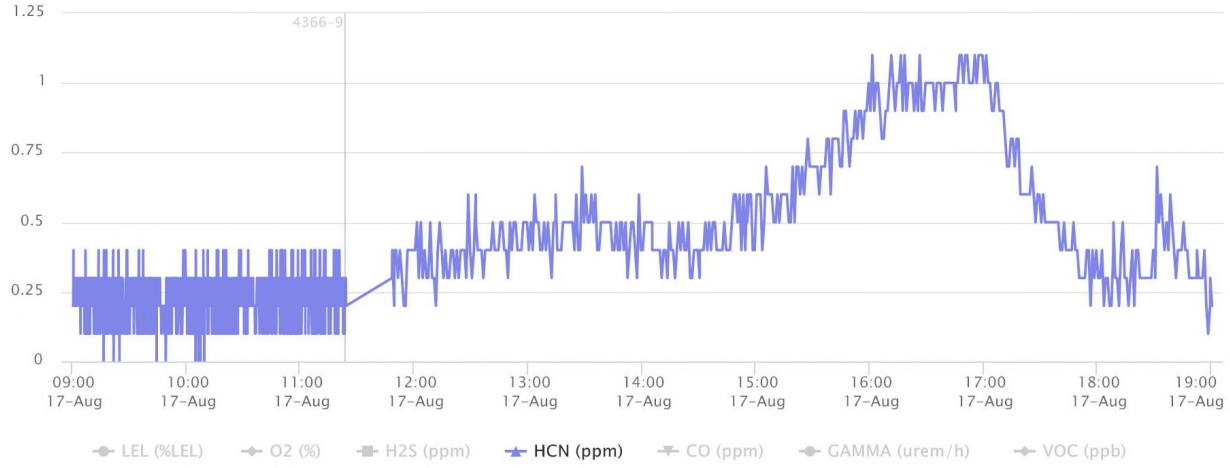
8/17/19 DAY Data for EBAM 2 (ConcRT) – Brooke Mill Apartments



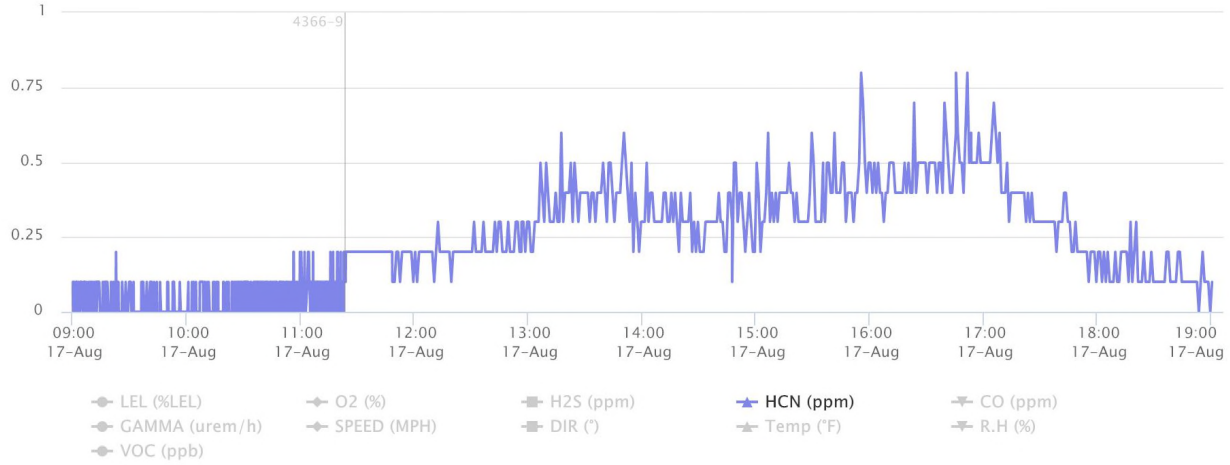
8/17/19 DAY Data for EBAM 3 (ConcRT) – EPA Mobile Command Post



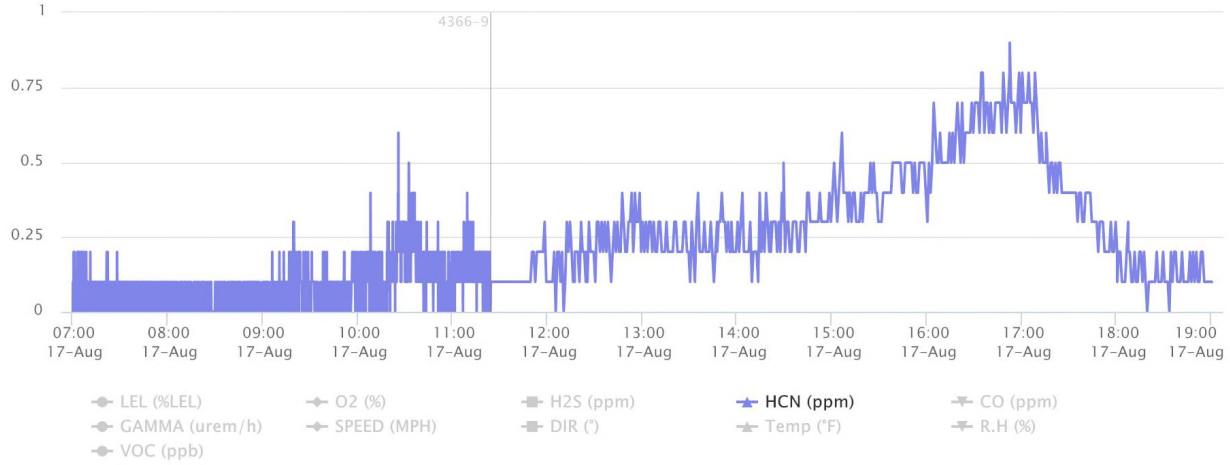
8/17/19 DAY Data for AREARAE PRO 1 (HCn) – Southwest of Pile



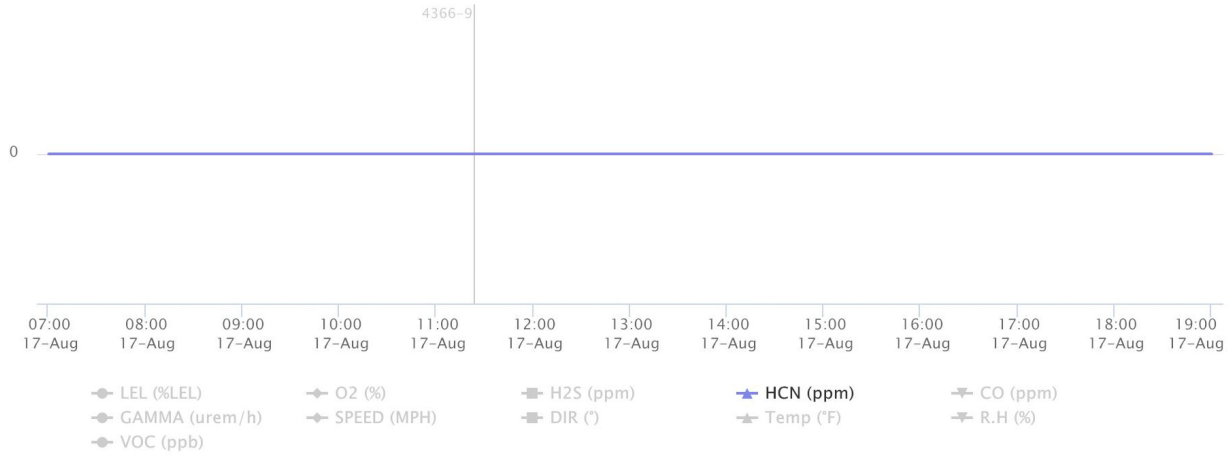
8/17/19 DAY Data for AREARAE PRO 2 (HCn) – Northwest of Pile



8/17/19 DAY Data for AREARAE PRO 3 (HCn) – Northeast of Pile



8/17/19 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.