

# Air Monitoring Equipment

April 23, 2019

Type of Site	General Pollutant Type	Specific Pollutant Type	Sampling Method	Equipment Type	Analysis Method	Sampling Frequency
Portable Trailer	Particulate Matter	PM10	Louvered PM10 Inlet	Met One BAM 1020 or similar	Beta Attenuation	Continuous
		PM2.5	Very sharp cut cyclone	Met One BAM 1020 or similar	Beta Attenuation	Continuous
		Black Carbon	Aethalometer	Magee AE33 or similar	Optical Absorption	Continuous
		Organic Carbon/ Elemental Carbon	Total Carbon Sampler	Magee TCA-08 or similar	Combustion/ CO2 Detection	Continuous
		Toxic Metals	TBD	Filter Based Sampler	TBD	Samples (e.g. 3 hours, 12 hours, 24 hours); Requires Lab Analysis
	Gaseous	Nitrogen Oxides (NOx/NO2)	Sensor	T200UP or similar	Photolytic - Chemiluminescence	Continuous
		Ozone	Sensor	TAPI 400E or FEM equivalent	Ultraviolet Absorption	Continuous
	Toxics Chemicals	VOC - EPA TO-15 Compound List including BTEX	6L Pressurized Canisters	Xontek Model 901 Canister Sampler or similar	EPA TO-15	Samples (e.g. 3 hours, 12 hours, 24 hours); Requires Lab Analysis
		Carbonyls	DNPH Cartridges	Xontek Toxic Air Sampler or similar	TO-11A	Samples (e.g. 3 hours, 12 hours, 24 hours); Requires Lab Analysis
	Meteorological (Weather)	Wind Direction	Sensor	Met One Weather Station or similar	Multiple	Continuous
		Wind Speed				
		Temperature				
		Humidity				
Low Cost Sensor	PM 2.5	Multiple	Purple Air, Clarity, or similar	Light Scattering	Continuous	
	PM 10					
Stand Alone Professional/ Mid-Grade equipment	Gaseous & Particulate Matter; Some weather	Multi-pollutants & some weather info	Multiple sensors	Aeroqual AQM65 or similar	Multiple	Continuous
	Particulate Matter	PM10	Very sharp cut cyclone	Met One BAM 1020 or similar	Beta Attenuation	Continuous
		PM2.5	Very sharp cut cyclone	Met One BAM 1020 or similar	Beta Attenuation	Continuous
		Black Carbon	Aethalometer	Magee AE33 or similar	Optical Absorption	Continuous
		Toxic Metals	TBD	Filter Based Sampler	TBD	Samples (e.g. 3 hours, 12 hours, 24 hours); Requires Lab Analysis
Low Cost	Particulate Matter	PM10	Sensor	Purple Air, Clarity, or similar	Light Scattering	Continuous
		PM2.5				
	Ozone	N/A	Sensor	TAPI 430 or similar	Ultraviolet Absorption	Continuous