

## FAQ's from WTS

### ***Where can I view the data from the embassy AQM?***

The data is posted live on the EPA's Airnow website. To see the data from the Pristina embassy, click on 'US Embassies and Consulates' and scroll over to Pristina on the embedded map. The Airnow website can be found at: <https://airnow.gov/index.cfm?action=airnow.main>

### ***What is being measured at the AQM site?***

The AQM site at the Pristina embassy is collecting Particulate Matter (PM 2.5 micron) that is 2.5 micrometers and less in diameter and is measured in micrograms/cubic meter.

### ***What is Particulate Matter and where does it come from?***

Particulate matter are the particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. Particles can be suspended in the air for long periods of time forming from reactions in the atmosphere (vehicle and power plant emissions) or can be from a direct event such as a forest fire.

### ***Why is monitoring PM2.5 relevant to me?***

PM2.5 can present health effects to our heart and respiratory system. The smaller the particle, the greater the health risk. Small particles, such as PM2.5 (1/30<sup>th</sup> the diameter of the average human hair diameter), pose the greatest problems because they can get past your body's defense mechanisms and get deep into your lungs and some may even get into your bloodstream.

Scientific studies have linked long-term particle pollution, especially fine particles, with significant health problems including:

- Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing
- Decreased lung function
- Aggravated asthma
- Development of chronic respiratory disease in children
- Development of chronic bronchitis or chronic obstructive lung disease
- Irregular heartbeat
- Nonfatal heart attacks
- Premature death in people with heart or lung disease, including death from lung cancer

Short-term exposure to particles (hours or days) can:

- Aggravate lung disease causing asthma attacks and acute bronchitis
- Increase susceptibility to respiratory infections
- Cause heart attacks and arrhythmias in people with heart disease

Even if you are healthy, you may experience temporary symptoms, such as:

- Irritation of the eyes, nose and throat
- Coughing
- Chest tightness
- Shortness of breath

***What type of instrument is being used and is it reliable?***

The site is using two Met One Beta Attenuation Monitors (BAM), which are EPA approved FEM (Federal Equivalency Method) units according to EPA specifications. The BAM-1020 is certified Class III FEM for PM2.5 continuous monitoring (EQPM-0308-170). The BAM-1020 is the most widely used FEM PM25 device for state regulatory agencies in the US.

To further improve reliability of data, our site at the embassy has deployed two units, side-by-side to collocate the data.

***So the AQM site on the embassy is reading PM25, how does this relate to the Air Quality Index (AQI) reading I see on the Airnow website?***

The AQM site on the embassy is measuring the concentration of a single air pollutant; particulate matter PM2.5. The AQI value is a unit less index established by the EPA to create awareness of health effects from five major air pollutants: ground level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide.

Each pollutant has its own equation to convert its concentration into the unit less 0-500 AQI scale. The AQI value reported is determined by the pollutant with the highest index. For AQM sites only measuring one pollutant such as ours, the AQI value will always correlate to the PM2.5 levels.

The purpose of the AQI is to help you understand what local air quality means to your health. To make it easier to understand, the AQI is divided into six categories:

Air Quality Index (AQI) Values	Levels of Health Concern	Colors
<i>When the AQI is in this range:</i>	<i>..air quality conditions are:</i>	<i>...as symbolized by this color:</i>
<b>0 to 50</b>	<b>Good</b>	<b>Green</b>
<b>51 to 100</b>	<b>Moderate</b>	<b>Yellow</b>
<b>101 to 150</b>	<b>Unhealthy for Sensitive Groups</b>	<b>Orange</b>

<b>151 to 200</b>	<b>Unhealthy</b>	<b>Red</b>
<b>201 to 300</b>	<b>Very Unhealthy</b>	<b>Purple</b>
<b>301 to 500</b>	<b>Hazardous</b>	<b>Maroon</b>

Each category corresponds to a different level of health concern. The six levels of health concern and what they mean are:

- "Good" AQI is 0 to 50. Air quality is considered satisfactory, and air pollution poses little or no risk.
- "Moderate" AQI is 51 to 100. Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people. For example, people who are unusually sensitive to ozone may experience respiratory symptoms.
- "Unhealthy for Sensitive Groups" AQI is 101 to 150. Although general public is not likely to be affected at this AQI range, people with lung disease, older adults and children are at a greater risk from exposure to ozone, whereas persons with heart and lung disease, older adults and children are at greater risk from the presence of particles in the air.
- "Unhealthy" AQI is 151 to 200. Everyone may begin to experience some adverse health effects, and members of the sensitive groups may experience more serious effects.
- "Very Unhealthy" AQI is 201 to 300. This would trigger a health alert signifying that everyone may experience more serious health effects.
- "Hazardous" AQI greater than 300. This would trigger a health warnings of emergency conditions. The entire population is more likely to be affected.