



# Panyaden

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## Panyaden Air Quality Management Guidelines

(These guidelines will be in place for the 2018/19 school year and are subject to final review)

### **PURPOSE**

The care and welfare of all Panyaden students, faculty and staff is our highest priority. These guidelines have been developed to provide clear action points when the local air goes above acceptable levels.

### **BACKGROUND**

The air pollution is a crisis disaster in Northern Thailand which affects to environmental, climate change, human health, socio economic aspect. Mostly air pollution in Northern Thailand was issued from open biomass burning in the area. Moreover, the transboundary pollution from neighboring countries, such as Myanmar, China, Laos and Indonesia is also important. Every year the burning season starts at different time. Evidence indicates that short term exposure can create health concerns, particular for children, the elderly, and people with compromised immune systems. Young children are at increased risk of these health effects because they tend to be more physically active, their lungs are still growing, and they are more likely to have asthma or acute respiratory illnesses which can be aggravated when pollution levels are high. PYD routinely monitors particle pollution, specifically Particulate Matter 2.5 (PM<sub>2.5</sub>). PM<sub>2.5</sub> are fine particulates in the air, which can get into the lungs and may even enter the bloodstream.

The Air Quality Index (AQI) was designed by the US Environmental Protection Agency (EPA) and is used to determine air quality. The EPA developed a series of levels (see below) to help the public better understand the impact of air pollution and determine when air pollution reaches unhealthy levels. PYD has aligned our practices with other international schools in Chiang Mai, China and SE Asia, based on information from the EPA and World Health Organization.

### **AIR QUALITY GUIDELINES FOR OUTDOOR ACTIVITIES & SPORTS**

**AQI 0-100** Air quality in this range is considered to be good to moderate and no action is necessary. AQI 101-150 Air quality in this range is considered unhealthy for sensitive groups.

The general public is not likely to be affected. Activities will continue as planned.

Those that fall into the “sensitive groups” category will be monitored by teachers and staff. PYD’s medical team will observe visitors to the clinic and report any respiratory issues to the Principals.

**AQI 101-150** Air quality in this range is considered unhealthy for sensitive groups. The general public is not likely to be affected. Activities will continue as planned. Those that fall into the “sensitive groups” category will be monitored by teachers and staff. PYD’s medical team will observe visitors to the clinic and report any respiratory issues to the Principals.



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**AQI 151-200** Air quality in this range is considered unhealthy for the general public. Therefore, strenuous activity should be reduced. At this level outdoor activities may be modified to low intensity and/or shorter time periods. Interscholastic games and competitions may see modifications. -See chart below-

**AQI 200-299** Air quality in this range is considered to be very unhealthy. At this level all outdoor activities will be held indoors or canceled. Outdoor field trip decisions will be based on the local air quality at destination.

**AQI 300-And Beyond** If the AQI exceeds 300, all students and school related personnel (except those necessary to maintain campus security) will remain indoors. This does not restrict students and staff from moving between buildings. Outdoor field trip decisions will be based on the local air quality at destination.

Panyaden Outdoor Activity Restrictions based on AQI			
AQI Level	Regular School hours	ES/MS/HS Practices	PE/Playtime /Tournaments
0-100	No modifications	No modifications	No modifications
101-150	Activities may be modified	Activities may be modified	No modifications
151-200	PE/Sports Modified or moved indoors	Reduced expose, longer breaks, fewer high exertion activities	Games may continue with modifications
201-300	All outdoor activities cancelled		
> 301	All students and staff to remain indoors unless moving between buildings. Further safety measures will be taken based on the situation.		

NB: Sensitive groups will be monitored at all times.

## Research links Listed Below:

<https://airnow.gov/index.cfm?action=aqibasics.aqi>  
<https://airnow.gov/index.cfm?action=aqibasics.particle>  
[http://www.who.int/phe/health\\_topics/outdoorair/en/](http://www.who.int/phe/health_topics/outdoorair/en/)  
<http://www.who.int/mediacentre/factsheets/fs313/en/>  
[https://www.cdc.gov/air/particulate\\_matter.html](https://www.cdc.gov/air/particulate_matter.html)

[https://www.saschina.org/uploaded/About\\_SAS/Air\\_Quality\\_Guidelines\\_5-20-16.pdf](https://www.saschina.org/uploaded/About_SAS/Air_Quality_Guidelines_5-20-16.pdf)  
<http://www.bcis.cn/en/air-quality>  
<https://th.usembassy.gov/message-u-s-citizens-air-quality-northern-thailand/>