

# Air Pollution

(Last Updated: November 2019)

## Mission statement

**This policy document has been created to advise staff on preventative measures when air pollution levels reach unhealthy levels.**

The official source of air pollution data used by the school is:

<http://aqicn.org/city/bangkok/>

In appendix A are the appropriate behaviours as suggested by the AQICN website. The closest official monitoring site to the school in Klong Chan where

there is considerable traffic . The school is away from main roads and is likely to have a lower index than those quoted from nearby. However, we should err on the side of caution and use the Klong Chan data when making decisions. The school's response to high AQI is more cautious than the procedures in other schools and agencies around the world, but we must consider the effect on children's long term health. Cancelling outdoor play, staying indoors for long periods of time and causing panic that we are "breathing toxic air" has a more detrimental effect on health than the AQI level. Unfortunately due to social media gossip and poorly understood facts about health, people will overestimate some risks and underestimate others.

At Ascot we have an Air Visual AQI monitor outside the PE office. Care must be taken when interpreting the AQI data, there are often local effects such as rush hour and activity in the school carpark at the start and end of the day. A problem which exacerbates the AQI is when parents leave engines running in the car park, numerous requests have been made and signs are in the car park, but this problem has not been solved.

The trends of the data must be looked at, rather than a snapshot; the air does not suddenly become toxic at AQI levels of 150, long term patterns are important.

AQI	Pollution levels	School actions
0-50	Good	School activities are unaffected
51-100	Moderate	School activities are unaffected. Monitor and observe EY students who have respiratory conditions
101-150	Unhealthy for Sensitive groups	Students with asthma and other respiratory conditions should avoid getting out of breath during PE lessons and ECAs
151-200 Yellow flag	Unhealthy	Flag ceremony cancelled. EY and KS1 students , no outside play, outdoor ECA or PE lessons. KS2 students outside play at break and lunchtime limited to 20 minutes. KS2 and SY students PE lessons modified to no heavy exercise, lessons should be inside where possible. <b>SMS sent to all parents informing them of actions .</b> Recommend purchase and use of N 95 masks.
201-300 Red flag	Very Unhealthy	All outdoor activities cancelled. <b>SMS sent to all parents reminding them of the policy.</b>
300+	Hazardous	School may be closed and work sent online.

## Appendices

Appendix 1	AQI data
Appendix 2	Letter to be sent home when levels reach 150
Appendix 3	EPA link to AQI (USA)
Appendix 4	<a href="https://www.epa.gov/indoor-air-quality-iaq/ozone-generators-are-sold-air-cleaners">https://www.epa.gov/indoor-air-quality-iaq/ozone-generators-are-sold-air-cleaners</a>

### Appendix 1

Precautions during periods of air pollution and health implications:

<http://aqicn.org/city/bangkok/>

AQI	Air Pollution Level	Health Implications	Cautionary Statement (for PM2.5)
0 - 50	Good	Air quality is considered satisfactory, and air pollution poses little or no risk	None
51 -100	Moderate	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.	Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
101-150	Unhealthy for Sensitive Groups	Members of sensitive groups may experience health effects. The general public is not likely to be affected.	Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
151-200	Unhealthy	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects	Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion
201-300	Very Unhealthy	Health warnings of emergency conditions. The entire population is more likely to be affected.	Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
300+	Hazardous	Health alert: everyone may experience more serious health effects	Everyone should avoid all outdoor exertion

## Appendix 2

**ENGLISH**

Dear Parents

The air pollution levels in Bangkok are rising , particularly the PM2.5 and PM10 levels. While we cannot stop ourselves and the children being exposed to this, there are positive steps we can do to help clean the air in our home and work environments as well as making sure we are protected while outdoors.

Some effective ways to help improve the air quality at home and work are:

- Making sure air conditioners are cleaned regularly and properly.
- Clean surfaces with non-toxic chemicals

Wearing a mask can protect against PM2.5 and PM10 - these particles are very small and harmful. Regular masks do not work. Masks need to be a little tight against the face and cover both your nose and mouth. Some good masks are:

- Style Seal - <https://www.style-seal.com/>
- 3M - <https://www.lrmsafety.com/products/3m-9322>

The schools policy on air pollution is summarised below:

AQI	Pollution levels	School actions
0-50	Good	School activities are unaffected
51-100	Moderate	School activities are unaffected. Monitor and observe EY students who have respiratory conditions
101-150	Unhealthy for Sensitive	Students with asthma and other respiratory conditions should avoid getting out of

	groups	breath during PE lessons and ECAs
151-200	Unhealthy	Flag ceremony cancelled. EY and KS1 students , no outside play, outdoor ECA or PE lessons. KS students outside play at break and lunchtime limited to 20 minutes. KS2 and SY students PE lessons modified to no heavy exercise, lessons should be inside where possible. <b>SMS sent to all parents informing them of actions .</b> Recommend purchase and use of N 95 masks.
201-300	Very Unhealthy	All outdoor activities cancelled. <b>SMS sent to all parents reminding them of the policy.</b>
300+	Hazardous	School may be closed and work sent online.

## THAI

### เรียนผู้ปกครอง

ระดับค่ามลพิษทางอากาศในกรุงเทพมหานครกำลังเพิ่มสูงขึ้น โดยเฉพาะฝุ่นละอองขนาด 2.5 และ 10 ไมครอน (PM2.5 และ PM10) ซึ่งส่งผลกระทบต่อการทำกิจกรรมในชีวิตประจำวันโดยไม่อาจหลีกเลี่ยงได้ การดูแลปกป้องตนเองจากมลพิษทางอากาศที่เกิดขึ้น จึงจำเป็นต้องทำให้อากาศภายในบ้านและที่ทำงานสะอาดขึ้น

วิธีที่มีประสิทธิภาพในการช่วยปรับปรุงคุณภาพอากาศที่บ้านและที่ทำงานให้ดีขึ้น คือ

- ตรวจสอบให้แน่ใจว่าได้ทำความสะอาดเครื่องปรับอากาศอย่างถูกต้องสม่ำเสมอ
- ทำความสะอาดพื้นผิวภายนอกเครื่องปรับอากาศด้วยสารเคมีที่ปลอดภัย

การสวมหน้ากากป้องกันฝุ่นละอองสามารถป้องกัน PM2.5 และ PM10 ได้ - อนุภาคของฝุ่นละอองนี้มีขนาดเล็กมาก และเป็นอันตราย ซึ่งหน้ากากแบบปกติจะไม่สามารถป้องกันได้ โดยต้องสวมหน้ากากให้แนบสนิทกับใบหน้า ครอบคลุมทั้งจมูกและปาก หน้ากากที่แนะนำให้ใช้มีดังนี้

- Style Seal - <https://www.style-seal.com/>
- 3M - <https://www.lrmsafety.com/products/3m-9322>

ส่วนมาตรการของโรงเรียนในการรับมือกับมลพิษทางอากาศมีดังนี้

AQI	ระดับค่ามลพิษ	มาตรการของโรงเรียน
0-50	คุณภาพอากาศดี	สามารถทำกิจกรรมการแจ้งได้ตามปกติ
51-100	คุณภาพอากาศปานกลาง	สามารถทำกิจกรรมการแจ้งได้ตามปกติ ควรเฝ้าระวังสำหรับนักเรียนชั้น 1 - 4 ที่เป็นโรคระบบทางเดินหายใจ
101-150	เริ่มมีผลกระทบต่อสุขภาพของกลุ่มเสี่ยง	นักเรียนที่เป็นโรคหอบหืด หรือโรคระบบทางเดินหายใจ งดการเรียน §1 และ §2 กลางแจ้ง



