

Air pollution: protocols and arrangements for the protection of members of the school community at the French International School of Bangkok (2024-2025)

Dear Madam, Dear Sir,

We have observed an increase in pollution levels throughout Bangkok over the past few days. In anticipation of this continuing, we would like to remind you of the measures taken and the protocols applied at the LFIB.

1) Pollution Rate Indicators

The city of Bangkok has deployed in many areas stations of pollution sensors that allow regular communications of pollution levels. The reference station for the LFIB is that of the IQAIR company installed in our school, which publishes online the measurement every hour.

The reference rate is the measurement of the PM 2.5 concentration. This level is measured regularly throughout the day. When the measured level reaches the threshold set in our protocol, an email is sent to inform the staff. A new communication takes place in case of a change in the rate (increase or decrease outside the threshold).

The pollution indicator can be consulted freely on the IQAIR website:

<https://www.iqair.com/thailand/bangkok/wang-thonglang/lycee-francais-international-de-bangkok-lfib>

These measurements are also transparently displayed at the entrances to the school on large screens.

2) Installation of anti pollution filters in all rooms

All the rooms, the classrooms, the BCD, the CDI, and the offices are equipped with anti pollution (3M) filters. During each school break, all air conditionings and compressors are serviced and the filters are changed.

During the implementation of the pollution protocol, when the "unhealthy" threshold is reached, regular measurements are taken in various classrooms of each building. to check the efficiency of the air filtration.

It should be noted that air extractors in classrooms create air-vacuuming when the doors are opened, allowing the pollution to enter the room. This is why it is very important to reduce door opening times as much as possible.

3) Installation of air purifiers in the classrooms and at the kindergarten

In addition to the 3M filters, the kindergarten classrooms and dormitories are also equipped with purifiers of different brands. This was done at the start of the 2019 school year in order to carry out differentiated measurements and make a comparison. These measurements showed that the addition of a purifier in a room already equipped with a 3M filter does not result in any significant change. It is therefore not necessary to combine the two devices in the entire school site.

4) Le protocole en vigueur au LFIB

PM2.5 (µg/m³) US AQI	Classification	Description	Actions
0 – 9.1 0 – 50	Good	Air quality is considered satisfactory and the atmospheric pollution causes little or no risk.	For all : normal activities
9.2 – 35.4 51 – 100	Moderate	The air quality is acceptable. However, there may be a moderate health issue for some people (vulnerable persons).	For students with respiratory conditions: control and observation For all : normal activities
35.5 – 45.2 101 – 125	Unhealthy for vulnerable groups Phase 1	Monitoring symptoms in children at risk. Others are not likely to be affected.	For students with respiratory conditions: Adjustment of sports activities Recreation and outdoor games limited For all : normal activities
45.3 – 55.4 126 – 149	Unhealthy for vulnerable groups Phase 2	Everyone can be affected by certain adverse health effects: children, active adults, as well as people with respiratory diseases, such as asthma, should limit prolonged outdoor efforts.	For students with respiratory conditions: Sports activities stopped No recreation or outdoor games For others: outdoor activities adjusted
55.5 – 100 150 – 174	Unhealthy Phase 1	The harmful effects of pollution are felt.	For students with respiratory conditions: Stop sports activities No recreation or outdoor games For kindergarten students: Outdoor sports activities stopped No recreation or outdoor games For others: Maintenance of low intensity and short duration sports activities in adapted rooms Maintenance of recreation with mask
101 – 125.4 175 – 200	Unhealthy Phase 2	The harmful effects of pollution are felt.	For all: Stop sports activities No recreation or outdoor games Mandatory mask wearing outdoor
125.5 – 225.4 201 – 300	Very unhealthy	Health warnings relating to emergency conditions. The entire population is likely to be severely affected and suffer from serious health effects.	For all: Confinement in adapted rooms when arriving at school Mandatory mask wearing outdoor
> 225.5 > 301	Hazardous	Health Alert: everyone can suffer from serious health effects. Emergency condition affecting the entire population of Bangkok.	School closing at the request of the local authorities and the French Embassy

5) Mandatory wearing of a protective mask

From $55.5 \mu\text{g}/\text{m}^3$ (and up to $101 \mu\text{g}/\text{m}^3$), only students with masks will be allowed to stay in outdoor recreation. Students without masks will not be allowed to have outdoor recreation.

It is the parents' responsibility to provide their child(ren) with the mask of their choice; the school leaves it up to the families to choose the model to be used. It is also advisable to bring spare masks. **The school will not distribute masks to students.**

6) Safe confinement spaces

When sports and other outdoor recreation or activités are not possible, some confinement areas are able to shelter the students. These rooms are fully equipped for the protection of our students against air pollution.

- Kindergarten: the multi-activities room (salle de motricité)
- Elementary School: the library (BCD), the multi-purpose room (salle polyvalente) and the gymnastics room
- Middle School: the study room (salle de permanence)
- High School: the foyer des lycéens

The school's gymnasium is equipped with air conditioning and air filtration systems. It can also be used as a confinement area when the pollution index is high.

When the levels of PM 2.5 concentration are above $101 \mu\text{g}/\text{m}^3$, all sports activities will be stopped, students will stay with their teachers in filtered classrooms or containment rooms (in secondary schools).

Finally, I would like to assure you that the Management Team is fully committed to this issue.