

AIR QUALITY POLICY AT BISS PUXI (November 2019)

At times during the year we experience poor air quality in Shanghai and at BISS Puxi we place great value on the welfare of the children in our care. Through the work of the Air Quality Parent Group from 2017-2018, the ongoing commitment of school leadership and expert input from Environment Assured, we have guidelines in place to protect the health and safety of our children during their time at school.

We monitor the external air quality on the school grounds with our own high-specification monitors. Having these monitors in the immediate vicinity gives us far more accurate readings and allows for real-time adjustments, when compared to other sensors located many miles away that report on a constantly-updating, 24-hour average. It enables BISS Puxi to react quicker to both deteriorations and improvements in air quality, ensuring timely and appropriate air quality actions for all our students.

The current school policy has a scale ranging from 1 to 4 in place at the school which is triggered by increasing PM2.5 readings using our 3 onsite monitors. At each threshold, the school implements a series of measures to support the health and wellbeing of the students and staff at the school.

Level 4: All students stay indoors at breaktime and for PE lessons if the external air quality reading rises to Level 4. Students are actively encouraged to wear their air pollution masks on their journey to and from school and during break times.

Level 3: Students with respiratory problems or health issues affected by poor air quality may stay indoors. Students are actively encouraged to wear their air pollution masks on their journey to and from school and during break times. (Early Years students follow a free-flow play routine, as such EY teachers pay close attention to the Air Quality Level to ensure children do not spend an excessive amount of time outside if the air is Level 3 or above).

Level 2: All students access outdoor play. PE lessons may take place outside and pupil activities ensure that there are reduced exertion levels for pupils. Masks are not required.

Level 1: All outdoor activities take place, masks not required. PE lessons unrestricted.

At all times at the school:

- Windows and doors are kept closed throughout the campus to ensure the air purification systems run efficiency.
- Notices are placed at the main and side entrances of each campus alerting students, staff, parents and visitors as to the air quality level (ranging from 1 to 4).

INTERNAL AIR PURIFICATION SYSTEM:

BISS Puxi has invested in the most modern and innovative air purification systems available to us. Under the direction of Environment Assured a high-spec fresh-air, positive-pressure air purification system (over 170 machines) has been installed in all main classrooms, science labs, gymnasiums, the swimming pool and many smaller spaces too. External doors have been replaced with air-tight, self-closing doors.

Systems are 'guaranteed' to meet the most stringent of school regulations, set in collaboration with the Parent Air Quality Group. These regulations require the internal air to be below the recommended WHO standards of 10ug/m³ PM_{2.5} in real-time measurements. In reality, internal monitoring consistently shows most teaching spaces are **below 1ug/m³ PM_{2.5}**.

PERSONS RESPONSIBLE:

- The Principal and Heads of School are responsible for updating school policy in line with external, expert guidelines.
- Environment Assured is responsible for maintenance of the internal air purification system and the continuous, automated monitoring of the indoor air quality. They will ensure messages are automatically sent to the Facilities team and Heads of School in case of anomalous or high readings flagged by the monitoring system.
- Heads of School are responsible for monitoring alerts from the real-time monitoring system and ensuring any necessary remedial action is carried out in a timely fashion.
- All class teachers are responsible for making sure the windows and doors to their classroom are closed at all times, to ensure the air purification system can work efficiently.
- The reception desk staff are responsible for updating staff when there is a change in level and ensuring that the notices at all entrances to both buildings are updated.
- Class teachers are responsible for communicating quickly to children if outdoor play is cancelled and ensuring children know the indoor-play options.
- The security guards and ayis are responsible for ensuring external doors and windows are closed at all times in shared areas of the building; entrances/exits, corridors, staff room, meeting room, toilets etc.
- All staff are responsible for reporting any broken windows or doors to the Facilities Team as soon as it is noticed, as this prevents the air purification system functioning effectively.
- Admin staff are responsible for closing the windows and doors to their own offices.
- The Parent Air Quality Group is responsible for overseeing the implementation of policy and will have access to indoor monitoring results on a regular basis.

COMMUNICATION:

- The Principal and Heads of School are responsible keeping parents informed of the Air Quality Policy.
- Environment Assured is responsible for communicating with staff how the air purification system works and who staff can speak to if any questions or issues arise.
- Environment Assured is responsible for the communication of system maintenance requirements to the school Facilities Team if their involvement is necessary.
- The Senior Leadership Team is responsible for ensuring that correct training and policies are communicated to all staff, including new and temporary, in a timely fashion.
- Admin staff are responsible for communicating air quality Level information to all staff via email and updating notices to communicate the Level to all school users.

TRAINING AND INFORMATION SHARING:

- Staff will receive training on inset days and new members of staff that join during the year will be fully trained.
- Support staff (ayi and security guards) will be trained.
- Parents will be invited to Air Pollution Information Talks in the Autumn and Spring Terms.

POLLUTION MASKS:

- Masks are available for purchase in Chatterbox Café. The masks on sale are produced by The Cambridge Mask Co and each year students will design the images used on the masks through a competition with pupils that will promote awareness of the actions families can take to reduce the impacts of poor air quality. AQ Blue masks are also available; these masks are 'disposable' (20 hours of use).
- Students are encouraged to wear masks on their journey to and from school, and during outdoor playtimes when the air is Level 3 or above.
- Teachers will remind children to wear their masks where possible but we encourage children to take responsibility for their masks and to pay attention to the Level notification posters on external doors when going out to playtime.
- BISS Puxi does not formally endorse The Cambridge Mask Co or AQ Blue above other brands of pollution mask.

ACTIVITIES DURING INDOOR PLAYTIMES:

As far as possible we want children to remain motivated during indoor playtimes. While the school acknowledges the restrictions on indoor space a variety of activities are on offer. Children can spend time in their designated classroom with their friends, can visit the library or learning spaces and can play ball games and playground games in the gyms and other indoor sports areas. We try to limit the use of DVD's for indoor playtime but have educational series such as Blue Planet and Planet Earth that can be used if needed. iPads may be used occasionally for maths and similar educational games.

INTERNAL AIR QUALITY DEVELOPMENT PLAN:

- The Air Quality Development Plan is constantly evolving and progressing. In this initial phase, over 170 purification machines have been installed and cover all main teaching spaces, the gymnasiums, Primary library, Da Vinci Centre, swimming pool and Secondary science laboratories. The first series of door replacements covers most of the ground floor exterior doors and all main entrances and exits.
- Phase 2 of the project will extend the air purification system to encompass the Secondary library, Hamilton Centre, IB spaces, Secondary Theatre, Stage One and administrative offices. The door replacements will cover any ground floor doors not already changed and Primary building second floor exterior doors.