

Holland
International
School

Haze Protocol





1. Overview

This protocol helps determine when activities must be held at school during times of haze.

2. Protocol details

2.1. Guide and Health Advisory for 1-hr PM_{2.5} Index

Bands and Descriptors for 1-hour PM_{2.5} Concentration Readings National environment advisory

Band 1 (normal) (0 - 55 µg/m³)	Band 2 (elevated) (56 - 150 µg/m³)	Band 3 (high) (151 - 250 µg/m³)	Band 4 (very high) (≥ 251 µg/m³)
Continue with normal activities	Reduce Strenuous outdoor activities for the next hour Vulnerable persons Avoid strenuous outdoor activities for the next hour	Avoid Strenuous outdoor activities for the next hour Vulnerable persons Avoid all outdoor activities for the next hour	Minimise All outdoor activities for the next hour Vulnerable persons Avoid all outdoor activities for the next hour

***Explanatory Notes:

Strenuous = involves a lot of energy or effort

Minimise = do as little as possible

Avoid = do not do

NOTE: The 24-hour PSI (Pollutant Standards Index) is an interpretation of the historical 24-hour average of PM_{2.5} concentrations, translated to the PSI using breakpoints that have been derived from health studies. The 24-hour PSI has an accompanying health advisory based on medical studies on long-term exposure.

The 1-hour PM_{2.5} concentration readings are meant to guide immediate personal activities which we will use for our day to day base.

Reference matrix to be used for IMMEDIATE outdoor activities

- The 1-hr PM_{2.5} (Particulate Matter 2.5) reading determines the amount/concentration of fine particles in the air, that can harm our respiratory system, especially the children and people with respiratory problems.
- PM_{2.5} refers to atmospheric particulate matter (PM) that have a diameter of less than 2.5 micrometres.



National Environment Agency (NEA) provides bands and descriptors to gauge the current air quality level based on the 1-hour PM2.5 concentration readings.

- If the 1-hour PM2.5 concentration levels stay within the "Normal" band for 24 hours, the 24-hour PSI will be in the "Good to Moderate" level (1 - 100).
- If the 1-hour PM2.5 concentration levels stay within the "Elevated" band for 24 hours, the 24-hour PSI will be in the "Unhealthy" level (101 - 200).
- If the 1-hour PM2.5 concentration levels stay within the "High" band for 24 hours, the 24-hour PSI will be in the "Very Unhealthy" level (201 - 300).
- If the 1-hour PM2.5 concentration levels stay within the "Very High" band for 24 hours, the 24-hour PSI will be in the "Hazardous" level (>300).

2.2. HIS Haze 24-hr PSI matrix to be used to plan for next day outdoor activities

MOH Haze Health Advisory

24-hour PSI	Healthy persons	Elderly, pregnant women, children	Persons with chronic lung disease, heart disease, or stroke
0 - 50 (Good)	Continue with normal activities	Continue with normal activities	Continue with normal activities
51 – 100 (Moderate)	Continue with normal activities	Continue with normal activities	Continue with normal activities
101 - 200 (Unhealthy)	Reduce prolonged or strenuous outdoor physical exertion	Minimise prolonged or strenuous outdoor physical exertion	Avoid prolonged or strenuous outdoor physical exertion
201 – 300 (Very Unhealthy)	Avoid prolonged or strenuous outdoor physical exertion	Minimise outdoor activity	Avoid outdoor activity



>300 (Hazardous)	Minimise outdoor activity	Avoid outdoor activity	Avoid outdoor activity
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***Explanatory Notes:

Prolonged = continuous exposure for several hours

Strenuous = involves a lot of energy or effort

Minimise = do as little as possible

Avoid = do not do

2.3. HIS Haze Policy Action Matrix

3.3.1 24 hrs- PSI VALUE 0 – 50 **Good PM2.5 0-55 Good**

School-Day Routines	Regular School Programme
PE & CCA Programme	All regularly scheduled activities continue
Community Gathering / Events	All regularly scheduled events continue
Class Trips / Overseas Trips	Field trips permitted
School Operations	Normal working conditions

3.3.2 24 hrs- PSI VALUE 51 - 100 **Moderate PM 56-150 Elevated**

School-Day Routines	• All regularly indoor scheduled activities continue. • During break times, strenuous play will be minimised. Outside breaktime reduced to half of it. • All the air conditioners will stay turned on as normal. Airpurifiers will be switched on. → This measure's final decision will consider the 1-hr PM2.5 reading.
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PE & CCA Programme	All regularly scheduled activities continue. Outside CCA's needs to be modified so the exercises are less strenuous.
Community Gathering / Events	All regularly scheduled events continue
Class Trips / Overseas Trips	Field trips are reviewed on a case-by-case basis and will be cancelled if considered unsafe.
School Operations	Normal working conditions. Access to N95 masks given to staff members working outdoors.

3.3.3 24 hrs- PSI VALUE 101 - 200 **Unhealthy PM2.5 151-250 High**

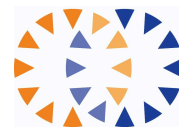
School-Day Routines	• All regularly indoor scheduled activities continue. • Home Based Learning (HBL) for vulnerable students is provided upon request and based on a written doctor's statement. • Closure of all outdoor play areas (including Mr Dola plein, outdoor play area preschool and big field) • Upon arrival at school, students immediately go to the classroom. • During break times, dedicated indoor spaces are provided as options for going outdoors. • Students' exposure to outside air is to be minimised. The front door will be closed, the roller blinds in the hallways will be shut, and all the windows will stay closed. All the air conditioners will stay turned on as normal. Airpurifiers will be switched on. → This measure's final decision will consider the 1-hr PM2.5 reading.
PE & CCA Programme	• All regularly indoor scheduled activities continue • Cancellation of all outdoor lessons and outdoor CCAs. If feasible, students will be moved to an indoor facility, such as a classroom.



	The final decision of this measure will take into account 1-hr PM2.5 reading. - Based on ACSIS guidelines, outdoor ACSIS matches may be cancelled. - AC SIS = Athletic Conference of Singapore International Schools, of which the HIS is a member school.
Community Gathering / Events	All regularly scheduled indoor community events other than sports events will continue.
Class Trips / Overseas Trips	Field trips are reviewed on a case-by-case basis and will be cancelled if considered unsafe.
School Operations	- All bus routes run according to the normal schedule. - Normal working conditions except for staff working outdoors. - Access to N95 masks given to staff members working outdoors. - Staff working outdoors to conduct light duties only.

3.3.4 24 hrs- PSI VALUE **201 - 300 Very Unhealthy PM 2.5 >251 Very High**

School-Day Routines	- All regularly indoor scheduled activities continue. - Home Based Learning (HBL) for vulnerable students is provided upon request and based on a written doctor's statement. - Students' exposure to outside air is to be minimised. The front door will be closed, the roller blinds in the hallways will be shut, and all the windows will stay closed. All the air conditioners will stay turned on as normal. Airpurifiers will be switched on. - Closure of all outdoor play areas (including Mr Dola plein, outdoor play area preschool and big field) UPON ARRIVAL AT SCHOOL: - Upon arrival at school students immediately go to the classroom.
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	● BREAKTIME AND LUNCHTIME: ○ Students must remain indoors during break times. ○ Lunch is consumed indoors → This measure's final decision will consider the 1-hr PM2.5 reading.
PE & CCA Programme	● All regularly indoor scheduled activities continue ● Cancellation of all outdoor lessons and outdoor CCA. Students will be moved to an indoor facility for supervised activities if feasible. Otherwise it will be cancelled. ● Based on ACSIS guidelines, outdoor ACSIS will be cancelled. ○ ACSIS = Athletic Conference of Singapore International Schools of which the HIS is a member school.
Community Gathering / Events	The school will consider cancelling special events and community gatherings on a case-by-case basis.
Class Trips / Overseas Trips	Field trips are reviewed on a case-by-case basis and cancelled if considered unsafe.
School Operations	● All bus routes run according to the normal schedule ● Normal working conditions except for staff working outdoors ● Access to N95 masks given to staff members working outdoors ● Staff working outdoors to conduct light duties only ● Follow Risk Assessment by MOM guidelines (https://www.mom.gov.sg/haze/guidelines-on-protecting-employees-from-haze)

3.3.5 24 hrs- PSI VALUE **>300 Hazardous**

- Possible cancellation of all school activities and campus closure for students and/or staff.



- Due to haze, any decision to close the school will be made based on NEA readings, considering MOE's guidelines/directions. The Principal makes the final decision.
- **In case the campus stays open:**
 - All measures as per 24 hrs-PSI 201–300. Additionally, all special events and community gatherings are to be cancelled.
HIS will consider additional guidelines from the MOM concerning additional mitigating measures for staff working outdoors when the health advisory for the next day indicates that the air quality will be at a hazardous level.



The following flowchart will be used for Daily planning:

Nea- PM2.5 readings	NEA guidelines	Health concerns	CCA programme	Staff	Communication
0-55 Normal	Continue with normal activities	Normal	All regularly scheduled activities continue	Normal duties	None
56-100 Elevated	Reduce strenuous outdoor activity for the next hour.	Outside play and physical activities continue as modified program (ie no strenuous play) monitor students with health issues, take more fluids. Classrooms are closed and air purifiers are on.	All regularly scheduled activities continue. Outdoor sport CCA reduce strenuous activity	Normal duties. Security, maintenance and cleaning staff issued with N95 masks if requested while working outdoors.	Announcement board showing the PM2.5 reading so everybody can act.
101-150 Elevated	Reduce strenuous outdoor activity for the next hour.	Outside play and physical activities continue as modified program (ie no strenuous play.reduce outside play until 15 minutes) monitor students with health issues, take more fluids. Classrooms are closed and air purifiers	All regularly scheduled activities continue. Outdoor sport CCA reduce strenuous activity	Normal duties. Security, maintenance and cleaning staff issued with N95 masks if requested while working outdoors.	Announcement board showing the PM2.5 reading so everybody can act.



		are on.			
151-250 High	Children avoid all outdoor activity for next hour	All above and furthermore no outside play. Classrooms are closed and air purifiers are on. Doors and shutters down	Outdoor CCA moved indoors when possible otherwise canceled. Other CCA can continue.	All above and vulnerable staff to avoid all outdoor activity for the next hour.	All above, community will be informed by Seesaw.
>250 Very High	Minimise all outdoor activity for the next hour.	All above and minimise outdoor activities. Outdoor field trips canceled.	All above.	Normal duties. Security, maintenance and cleaning staff issued with N95 masks while working outdoors.	All above.



Revision history

Version	Date	Author/Owner	Approval Authority	Summary of change
2.1	03-10-2023	Health coordinator	Management team	New protocol
2.2	11-09-2026	Health Coordinator		Adjustment PM2/5 readings