



HAZE ACTION PLAN

4th Edition, 16th September 2019

A. EXECUTIVE SUMMARY

This is the Singapore Dragon Boat Association (SDBA) action plan for Haze Management for Dragon Boating Activity.

SDBA adheres to the Haze Advisory issued by the National Environment Agency (NEA). Please refer to their website, www.haze.gov.sg

1. All dragon boat activity to cease at **PSI level >200 at either 1hr PM_{2.5} and/or 24hr readings.**
2. At PSI level 100 to 199, Teams are advised to review the condition and check on physical status of own crew. Whenever in doubt or undecided, all decision makers are advised to err on the side of safety and caution and cease the activity.

B. BACKGROUND

This plan shall be activated during the “haze months” as announced by the National Environmental Agency (NEA)

OR

When the reported PSI Level > 100.

C. WHEN TO USE 24HR and 1HR_{2.5} PSI READINGS

1. 24-HR PSI

The 24-hour PSI is an interpretation of the historical 24-hour average of PM_{2.5} concentrations. It is primarily used to advise on major decisions, e.g. School closure, etc. whereby the decision needs to be made in advance.

SDBA will use the 24-hour PSI advisory to decide on the advance cancellation (by 24-hours in advance) of ALL dragon boat activities and/or events.

Dragon Boat Teams may use the 24-hour PSI advisory to decide whether to proceed or cancel their dragon boating activity within the next 24 hours period.

2. 1-HR PM_{2.5}

The 1-hour PM_{2.5} concentration readings are a good indicator of the current air quality.

It should be noted that the 1-hour PM_{2.5} concentration readings can be volatile and tend to fluctuate over the day as it is more sensitive and therefore more accurate than the 24-hour PSI readings.

Therefore, the 1-hour PM_{2.5} concentration reading should be used to decide on immediate activities and/or course of action, i.e. water training session, etc.

SDBA will use the 1-hour PM_{2.5} concentration readings to decide on the immediate cancellation of ALL dragon boat activities (at short notice), on water and/or land (as long as the land activity is conducted outdoors).

Dragon Boat Teams MUST REFER to the 1-hour PM_{2.5} concentration readings on whether to proceed or cancel their dragon boat activities, on water and/or land (as long as the land activity is conducted outdoors).



D. ACTION PLAN

Phase	24-hour PSI & 1-hour PM _{2.5}	Status	Dragon Boat Activities (on water or on land)	Decision
0	GOOD (0 - 50)	Normal Activities	Proceed	
1	MODERATE (51 - 100)	Normal Activities	Proceed with care	Some people may show signs of sensitivity, i.e. running nose, eye irritation, etc. Team Managers, Captains, Trainers, Coaches or Authorized Person(s) <u>MAY</u> decide whether to proceed or cease the activity
2	UNHEALTHY (101 - 200)	<u>Healthy persons</u> should reduce prolonged or strenuous outdoor physical exertion <u>Persons with known medical conditions</u> (i.e. heart, chronic lung disease, asthmatic, etc.) should AVOID prolonged or strenuous outdoor physical exertion <u>Children, elderly and pregnant women</u> should minimized prolonged or strenuous outdoor physical exertion	Proceed with Caution & Care	Team Managers, Captains, Trainers, Coaches or Authorized Person(s) <u>ARE ADVISED TO</u> decide whether to proceed or cease the activity <i>If decided to proceed, assess the Risks and take mitigating measures:-</i> <ol style="list-style-type: none"> 1. <i>Persons with known medical conditions should be prevented from participating</i> 2. <i>Consider the wearing of face mask to help in filtering the air</i> 3. <i>Reduce/limit the dragon boat event/ activity sessions</i>



3	VERY UNHEALTHY (201 - 300)	<u>AVOID</u> prolonged or strenuous physical activities outdoors and/or at non-aircon indoor venues	Suspend and/or Stop all outdoor and/or non-aircon indoor dragon boating activities	No dragon boating activities
4	HAZARDOUS (Above 301)	No dragon boating event/activity permitted		

E. ADVISORY FOR DRAGON BOAT TEAMS

1. *If decision is to proceed with activity (when the 24-hour PSI and/or 1-hour PM2.5 Concentration readings are <200),* The Team Manager, Captain, Trainer, Coach and/or Authorized Person(s) to physically check that the crew member for first-indicator signs of respiratory distress, namely running nose, watery eyes, sore throat and coughing.
2. If all these symptoms are present, the affected crew member shall not be allowed to participate in the dragon boating activity.
3. During dragon boating activity, The Team Manager, Captain, Trainer, Coach and/or Authorized Person(s) to constantly monitor crew member(s) for respiratory distress, namely running nose, watery eyes, sore throat and coughing.
4. The Team Manager, Captain, Trainer, Coach and/or Authorized Person(s) to constantly monitor PSI level from NEA website, www.haze.gov.sg
5. During dragon boating activity, final decision to proceed or cease the activity will rest with the Team Manager and/or Authorized Person(s). In Team Manager's and/or Authorized Person(s) absence, final decision will rest with The Coach.
6. Crew Member who are asthmatic is required to have their 'Ventolin' inhaler with them while undergoing the dragon boating activity. Otherwise, they should be advised to refrain/abstain from participating in the activity.

7. Crew Members who are unwell (sick), on medication, recovering from an illness (counted as within 5 days after diagnosed with the illness/ailment or general feeling of unwell) or think/suspect that they are falling sick should abstain/refrain from participating in any dragon boating activity.
8. Whenever in doubt or undecided, all decision makers are advised to err on the side of safety and caution and cease the activity.

F. NATIONAL STANDARD

Health advisory issued by NEA at www.haze.gov.sg



HAZY? REFER TO THESE GUIDES TO PLAN YOUR ACTIVITIES

TO PLAN AHEAD, REFER TO THE 24-HOUR PSI FORECAST & HEALTH ADVISORY

Scientific studies on the health effects of particulate matter (PM) are based on 24-hour exposure and hence the 24-hour PSI forecast has a corresponding health advisory. Use this to plan ahead like going to work or school tomorrow.

24-hour PSI Forecast	Good 0 - 50	Moderate 51 - 100	Unhealthy 101 - 200	Very Unhealthy 201 - 300	Hazardous >300
HEALTHY PERSONS	Normal activities	Normal activities	Reduce prolonged or strenuous outdoor physical exertion	Avoid prolonged or strenuous outdoor physical exertion	Minimise outdoor activity
ELDERLY, PREGNANT WOMEN, CHILDREN	Normal activities	Normal activities	Minimise prolonged or strenuous outdoor physical exertion	Minimise outdoor activity	Avoid outdoor activity
PERSONS WITH CHRONIC LUNG DISEASE, HEART DISEASE	Normal activities	Normal activities	Avoid prolonged or strenuous outdoor physical exertion	Avoid outdoor activity	Avoid outdoor activity

Explanatory notes:
Reduce = do less **Minimise** = do as little as possible **Avoid** = do not do **Prolonged** = continuous exposure for several hours **Strenuous** = involving a lot of energy or effort

The impact of haze is dependent on one's health status, PSI, and the duration and intensity of outdoor activity. Reducing outdoor activities and physical exertion can help limit the ill effects. Persons who are not feeling well should seek medical attention. The 24-hour PSI forecast is only available during periods of transboundary haze.



G. CONCLUSION

1. SDBA first adopted this plan on 27th September 2015.
2. The Action Plan is in line with the prevalent authority (i.e. SportSg & National Environment Agency) advisories.
2. This plan was last reviewed (4th Edition) on Friday 6th September 2019

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