

## HAZARDOUS CONDITIONS GUIDANCE NOTE

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It is expected that hazardous conditions related to the ongoing bushfires will continue for some weeks to come. Conditions are subject to change quickly and assessing this risk with respect to ongoing operations will continue to be challenging. This guidance note is intended to assist in making decisions during this period which ensure the safety of our people and partners are our utmost priority, whilst enabling the provision of our essential services where it is safe to do so. It has been produced with reference to advice from external experts in occupational hygiene, occupational physicians and industry best practice.

### *INCIDENT RESPONSE COMMITTEE*

In accordance with the State Incident Protocol, during periods of crisis a State Incident Response Committee involving senior management, operational management and safety is convened to assess and manage risk and operations. Decisions to suspend operations partially or fully are made by these teams, with approval from the relevant General Manager, Executive General Manager or Managing Director as required. You can access this team through your normal management line. This team also consults and advises relevant unions on a regular basis. This guidance note applies during the period the Incident Response Committee is convened to deal with the current bushfire crisis.

### *USE OF OFFICIAL RATINGS / WARNINGS AND ADVICE*

Various State and Territory fire, police, emergency services, health and environment departments and other relevant government departments or agencies issue ratings and warnings which should be used as primary sources of information when making decisions about operations during hazardous conditions. A list of resources is provided below.

We also recommend managers monitor local ABC radio stations and emergency alert apps to receive up to date information as conditions can change quickly.

### *USE OF AIR QUALITY INDEX (AQI)*

The AQI is an index of very fine airborne particles (invisible) that can cause health effects depending on the concentration in the air and the length of exposure. It is designed to protect the general public, ranging from the very young to the elderly and includes people with existing heart or lung illness. As can be seen in the chart below, the AQI outlines guidelines that can be used by the public. Occupational exposure standards for fine particles (which are designed for workplaces and relate to adult working populations) are significantly higher than the concentrations of fine particles used for determining the AQI (3,000 micrograms per cubic metre as opposed to 50 micrograms per cubic metre for the AQI). For the purposes of providing

guidance, we have utilised the far more conservative AQI index as it is readily available and does not require specific testing at each location. More detailed information on the AQI is contained below. You should access the relevant AQI information from the relevant authorities for your state each day to determine the rating for your area.

Advice provided to Australia Post by an independent occupational hygienist has indicated that hazardous AQI exposure levels are capable of being safely controlled by the correct use of a P2 mask. Toolbox talks have been delivered to relevant workers on the safe use of P2 masks.

### **HAZARDOUS CONDITIONS GUIDELINES**

- We recommend the following approach for our entire workforce as relevant. Whilst our contract delivery partners and LPOs will have their own safety plans and considerations to take into account, we recommend they also follow this advice in conjunction with their own assessment.
- Air Quality levels is only one factor for managers to take into account when making decisions about hazardous conditions. As always, you should consider all conditions that may impact on the ability for work to be safely performed such as fire ratings, visibility, heat, psychological safety and winds.
- You should continue to follow all other relevant policies and procedures such as the *Heat, Cold & UVR WHS Procedure* to ensure workers are adequately controlling issues such as hydration in heat affected areas.
- Specific roles have been identified in the guidelines for ease of use, however if a role is not specifically referenced, please refer to whether the tasks of a role are indoor or outdoor for guidance.
- Guidance should be considered in conjunction with all relevant local and individual conditions and with the safety of our people, partners and the community at the forefront.

## FOR HEALTHY INDIVIDUALS

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### INDOOR WORK

Air Quality Rating	PDO – MC, EDV	PDO – EMAB, Back Pack or Buggy	Transport (trucks, vans)	Mail Officers	PSOs
Very Good (0-33)	<ul style="list-style-type: none"> <li>All healthy individuals, working indoors are safe to continue working</li> </ul>				
Good (34-66)					
Fair (67-99)					
Poor (100-149)					
Very Poor (150-200)	<ul style="list-style-type: none"> <li>All healthy individuals, working indoors are safe to continue working</li> <li>Workers should consider their method of commute to work carefully and reduce their exposure as far as possible</li> <li>Ensure breaks are taken in air-conditioned, enclosed spaces</li> <li>Reduce physical exertion</li> </ul>				
Hazardous (200+)					

### OUTDOOR WORK

Air Quality Rating	PDO – MC, EDV	PDO – EMAB, Back Pack or Buggy	Transport (trucks, vans)
Very Good (0-33)	<ul style="list-style-type: none"> <li>All healthy individuals, working outdoors are safe to continue working</li> </ul>		
Good (34-66)			
Fair (67-99)			
Poor (100-149)			

Air Quality Rating	PDO – MC, EDV	PDO – EMAB, Back Pack or Buggy	Transport (trucks, vans)
Very Poor (150-200)	<p><b>All workers should:</b></p> <ul style="list-style-type: none"> <li>consider their method of commute to work carefully and reduce their exposure as far as possible</li> <li>ensure breaks are taken in air-conditioned, enclosed spaces</li> <li>ensure they are adequately hydrated</li> </ul> <p><b>Managers should:</b></p> <ul style="list-style-type: none"> <li>should ensure PPE such as P2 masks are available and staff are trained in their use</li> </ul>		
	<p><b>Workers should:</b></p> <ul style="list-style-type: none"> <li><b>compulsory</b> use of P2 masks when performing outside tasks</li> <li>reduce exertion levels where possible by taking longer and more frequent breaks in air-conditioned environments eg shopping centres, cafes, back at the facility whilst you are delivering</li> <li>ensure driving conditions such as visibility are safe and you drive to conditions</li> </ul> <p><b>Managers should:</b></p> <ul style="list-style-type: none"> <li>consider staffing levels and adjust where necessary to ensure longer breaks or shorter rounds are possible</li> <li>reduce exposure where possible via prescribing the use of alternative start/end of round transport eg taxis instead of public transport</li> </ul>	<p><b>Workers should:</b></p> <ul style="list-style-type: none"> <li><b>Optional</b> utilisation of P2 masks when performing tasks outside of vehicle</li> <li>ensure driving conditions such as visibility are safe and you drive to conditions</li> <li>take precautions such as ensuring air conditioning in a vehicle is on recycle mode, windows are up and monitor vehicle alert signals</li> </ul>	
Hazardous (200+)	As above for Very Poor rating.		<ul style="list-style-type: none"> <li><b>Compulsory</b> utilisation of P2 masks when performing tasks outside of vehicle</li> <li>Otherwise as above for Very Poor Rating</li> </ul>

***SENSITIVE INDIVIDUALS (E.G. ASTHMATICS, PREGNANT, PEOPLE WITH HEART CONDITIONS OR OTHER PULMONARY CONDITIONS, PEOPLE AGED OVER 65)***

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***INDOOR WORK***

Air Quality Rating	PDO – MC, EDV	PDO – EMAB, Back Pack or Buggy	Transport (trucks, vans)	Mail Officers	PSOs
Very Good (0-33)	All sensitive individuals, working indoors are safe to continue working				
Good (34-66)					
Fair (67-99)					
Poor (100-149)					
Very Poor (150-200)	<ul style="list-style-type: none"> <li>All sensitive individuals, working indoors are safe to continue working</li> <li>Workers should consider their method of commute to work carefully and reduce their exposure as far as possible.</li> <li>Ensure breaks are taken in air-conditioned, enclosed spaces</li> <li>Eliminate physical exertion</li> </ul>				
Hazardous (200+)					

***OUTDOOR WORK***

Air Quality Rating	PDO – MC, EDV	PDO – EMAB, Back Pack or Buggy	Transport (trucks, vans)
Very Good (0-33)	All sensitive individuals, working outdoors are safe to continue working		
Good (34-66)			
Fair (67-99)	All sensitive individuals, working outdoors are safe to continue working, but should reduce strenuous outdoor activities such as cycling or walking uphill		
Poor (100-149)			

Air Quality Rating	PDO – MC, EDV	PDO – EMAB, Back Pack or Buggy	Transport (trucks, vans)
Very Poor (150-200)	<p><b>Sensitive workers should:</b></p> <ul style="list-style-type: none"> <li>ensure driving conditions such as visibility are safe and drive to conditions</li> </ul> <p><b>Managers should:</b></p> <ul style="list-style-type: none"> <li>review routes to ensure no strenuous activity is required eg requirement to park and walk long periods</li> <li>cease outdoor duties for strenuous rounds</li> </ul>	<p><b>Managers should:</b></p> <ul style="list-style-type: none"> <li>review routes to ensure no strenuous activity is required eg uphill walking or cycling, long rounds,</li> <li>cease outdoor duties for strenuous rounds</li> </ul>	<p><b>Sensitive workers should:</b></p> <ul style="list-style-type: none"> <li>ensure driving conditions such as visibility are safe and drive to conditions</li> <li>take precautions such as ensuring air conditioning in a vehicle is on recycle mode, windows are up and monitor vehicle alert signals</li> </ul> <p><b>Managers should:</b></p> <ul style="list-style-type: none"> <li>review routes to ensure no strenuous activity is required eg requirement to park and walk long periods or uphill</li> </ul>
	<p><b>All sensitive workers should:</b></p> <ul style="list-style-type: none"> <li><b>compulsory</b> use of P2 masks when performing outside tasks</li> <li>consider their method of commute to work carefully and reduce their exposure as far as possible</li> <li>reduce exertion levels where possible by taking longer and more frequent breaks in air-conditioned environments eg shopping centres, cafes, back at the facility whilst they are delivering</li> <li>ensure they are adequately hydrated</li> <li>not perform any tasks that require strenuous physical activity and advise managers</li> </ul> <p><b>Managers should:</b></p> <ul style="list-style-type: none"> <li>should ensure PPE such as P2 masks are available and staff are trained in their use</li> <li>consider staffing levels and adjust where necessary to ensure longer breaks or shorter rounds are possible</li> <li>reduce exposure where possible via prescribing the use of alternative start/end of round transport eg taxis instead of public transport</li> </ul>		

Air Quality Rating	PDO – MC, EDV	PDO – EMAB, Back Pack or Buggy	Transport (trucks, vans)
Hazardous (200+)	<p><b>All sensitive workers should:</b></p> <ul style="list-style-type: none"> <li>• not perform any outdoor tasks</li> <li>• consider their method of commute to work carefully and reduce their exposure as far as possible. If a safe commute is not possible, sensitive workers should remain at home.</li> <li>• ensure breaks are taken in air-conditioned, enclosed spaces</li> <li>• ensure they are adequately hydrated</li> </ul> <p><b>Managers should:</b></p> <ul style="list-style-type: none"> <li>• ensure sensitive workers that are able to attend work are placed on indoor duties only and monitor their health carefully including directing them to return or remain at home if necessary</li> </ul>		

## SOURCES OF OFFICIAL INFORMATION

State or Territory	Fire	Air Quality	Other
ALL			<a href="#">Bureau of Meteorology</a>
ACT	<a href="#">Emergency Services Authority</a>	<a href="#">ACT Health: Public Health Alerts</a> <a href="#">ACT Health: Outdoor Smoke: Health Impacts</a>	
NSW	<a href="#">Rural Fire Service</a>	<a href="#">NSW Department of Planning, Industry &amp; Environment: Current and forecast air quality</a>  <a href="#">NSW Health: Bushfire Smoke Health Information</a>	
NT	<a href="#">Department of Environment &amp; Natural Resources: Bushfire Alerts and Warnings</a>	<a href="#">NT EPA: Air Quality Index Values</a> <a href="#">NT EPA: Air quality</a>	
QLD	<a href="#">Rural Fire Service</a>	<a href="#">Bushfire Smoke and Your Health</a>	
SA	<a href="#">South Australian Country Fire Service</a>	<a href="#">SA EPA: Air Monitoring</a> <a href="#">SA Health: Bushfires</a>	
TAS	<a href="#">TasALERT</a>	<a href="#">Department of Health: Bushfire Smoke and Your Health</a>	
VIC	<a href="#">Country Fire Authority</a>	<a href="#">EPA Victoria: AirWatch</a> <a href="#">EPA Victoria: Bushfire Smoke and Your Health</a> <a href="#">Department of Health</a>	
WA	<a href="#">Emergency WA</a>	<a href="#">WA Department of Health: Smoke Hazard from Bushfires</a>	

## AIR QUALITY INDEX (AQI)

A lower value indicates better air quality and a higher value, worse.

AQI	What action should people take?
<b>Very good</b> 0-33	Enjoy activities
<b>Good</b> 34-66	Enjoy activities
<b>Fair</b> 67-99	<b>People unusually sensitive to air pollution:</b> Plan strenuous outdoor activities when air quality is better
<b>Poor</b> 100-149	<b>AIR POLLUTION HEALTH ALERT</b> <b>Sensitive Groups:</b> Cut back or reschedule strenuous outdoor activities
<b>Very poor</b> 150-200	<b>AIR POLLUTION HEALTH ALERT</b> <b>Sensitive groups:</b> Avoid strenuous outdoor activities <b>Everyone:</b> Cut back or reschedule strenuous outdoor activities
<b>Hazardous</b> 200+	<b>AIR POLLUTION HEALTH ALERT</b> <b>Sensitive groups:</b> Avoid all outdoor physical activities <b>Everyone:</b> Significantly cut back on outdoor physical activities

The AQI uses several different parameters of air quality including fine particles, carbon monoxide and ozone. With smoke haze the most significant parameter of concern is fine particles. These invisible particles are measured as 10 micron diameter particles (PM10) and 2.5 micron particles (PM2.5). The standard used to calculate the AQI is 50 micrograms per cubic metre for PM10 and 25 micrograms per cubic metre for PM2.5. The AQI is calculated by dividing the measured concentration for each parameter by its standard and multiplying by 100. The parameter with the highest number is designated as the AQI for that region. So for a measured concentration of PM10 of 100 micrograms per cubic metre the AQI will be  $100 / 50 \times 100 = 200$ . From the chart below it can be seen that an AQI of 200+ requires everyone to cut back on outdoor physical activities.

Occupational exposure standards, on the other hand, are designed for the occupational environment and relate to an adult working population and specified as an 8-hour limit. They are designed for adult workers for a workshift unlike the AQI which protects the general population 24 hours per day. Occupational exposure standards for fine particles are very much higher than the concentrations of fine particles used for determining the AQI (3,000 micrograms per cubic metre as opposed to 50 micrograms per cubic metre). Putting this in context, in an occupational setting, fine particles at a concentration at the exposure standard would equate to an AQI of  $3,000 / 50 \times 100 = 6,000$ .]

## FIRE DANGER RATINGS

	WHAT DOES IT MEAN?	WHAT SHOULD I DO?
<b>CODE RED</b>	<p>These are the worst conditions for a bush or grass fire. Homes are not designed or constructed to withstand fires in these conditions.</p> <p>The safest place to be is away from high risk bushfire areas.</p>	<p>Leaving high risk bushfire areas the night before or early in the day is your safest option – do not wait and see.</p> <p>Avoid forested areas, thick bush and long, dry grass.</p> <p>Know your trigger – make a decision about:</p> <ul style="list-style-type: none"> <li>– when you will leave</li> <li>– where you will go</li> <li>– how you will get there</li> <li>– when you will return</li> <li>– what you will do if you cannot leave</li> </ul>
<b>EXTREME</b>	<p>Expect extremely hot, dry and windy conditions.</p> <p>If a fire starts and takes hold, it will be uncontrollable, unpredictable and fast moving. Spot fires will start, move quickly and will come from many directions.</p> <p>Homes that are situated and constructed or modified to withstand a bushfire, that are well prepared and actively defended, may provide safety.</p> <p>You must be physically and mentally prepared to defend in these conditions.</p>	<ul style="list-style-type: none"> <li>• Consider staying with your property only if you are prepared to the highest level. This means your home needs to be situated and constructed or modified to withstand a bushfire, you are well prepared and you can actively defend your home if a fire starts.</li> <li>• If you are not prepared to the highest level, leaving high risk bushfire areas early in the day is your safest option.</li> <li>• Be aware of local conditions and get information by listening to ABC Local Radio, commercial and designated community radio stations or Sky News TV, going to <a href="http://cfa.vic.gov.au">cfa.vic.gov.au</a>, <a href="http://emergency.vic.gov.au">emergency.vic.gov.au</a> or call the VicEmergency Hotline on <b>1800 226 226</b>.</li> </ul>

Source: <https://cdn.cfa.vic.gov.au/documents/20143/80821/Fire-Danger-Ratings-Brochure-Apr-2017.pdf/b253d413-aa46-600c-e529-e4f9e12fe36f> Fire Danger Ratings differ slightly in each state/territory, however Code Red and Catastrophic Ratings are similar in intent and meaning.