

Latrobe Valley air quality

27 February 2014

EPA Victoria, 200 Victoria Street, Carlton

FAQs



EPA Victoria is responsible for monitoring and testing air quality across the state. The data is provided to the Department of Health to assess human health impacts due to changes in air quality.

In response to the Hazelwood mine fire, EPA has increased air quality monitoring in the Latrobe Valley region and sent in scientific experts to closely monitor the air quality data.

EPA is issuing air quality updates twice daily which include advice for the local community in line with the current air quality. The updates are available online at epa.vic.gov.au, via EPA's Pollution Hotline 1300 EPA VIC (1300 327 842), or in person by speaking to an EPA ground staff member or public health officer in the Morwell area or at the Community Respite Centre.

For daily air quality forecasts:

Visit epa.vic.gov.au or call 1300 372 842

Why hasn't EPA delivered health based messages on its website or to the public?

EPA Victoria is the state's environmental regulator. Part of our role is to monitor pollution that enters the environment. In this case, we are monitoring the air quality that has been affected by the fire at the Hazelwood open cut mine. EPA provides smoke alerts and advisories via our website and the Department of Health uses this information to make decisions and issue health alerts.

The State Government has alerted residents of the primary health issue - particles in the air - through alerts and advisories on the radio, television and our website. Additionally, we have data streaming from our monitors to our website.

How dangerous is prolonged exposure to these substances to people and animals?

The Department of Health has indicated that that exposure as a result of this fire is not expected to

have long-term health effects. Ash is sticky and may get throughout your home, so some exposure is expected. You should practise good hygiene to avoid unnecessary exposure. For example, wash your hands and face before eating. Clean surfaces with damp cloths regularly.

What are the impacts of ash on babies?

The Department of Health has recommended to keep babies and young children away from ash or dusty conditions, to reduce skin, eye and throat irritation and unnecessary ingestion. Practise good hygiene, including washing toys.

Is it safe to stay indoors given that for many people their houses are old and the smoke and ash does get in?

The Department of Health has advised it is safe to stay indoors. Wipe surfaces with damp cloths. There is general advice on their website about cleaning up a smoke-affected home. www.health.vic.gov.au/environment/bushfires.htm

Where can members of the community have carbon monoxide levels tested?

It is not necessary to be tested for carbon monoxide exposure, but for those wanting to have their levels checked there are checks available from various medical clinics within Morwell.

Are there long-term health impacts associated with the smoke and ash?

The Department of Health advises that long-term health effects from the smoke and ash are unlikely as a result of the fire. However, it is important to follow advice about avoiding or reducing exposure to smoke. People should monitor their health and visit their GP when needed.

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Are there long-term impacts associated with the ash falling on people and their properties?

The Department of Health advises that long-term health effects from the ash are unlikely as a result of this fire.

Are children going to get sick if they exercise or play outdoors?

The Department of Health warns that children may experience the irritant and respiratory effects of smoke and ash. Reducing the amount of outdoor play will reduce exposure to the ash and smoke. Follow good hygiene practices such as washing your hands and face before eating.

School children are coming home covered in ash. Should they be kept at home?

Some schools are relocating their children to reduce their exposure to smoke and ash. There is no need to keep children at home unless the school has advised otherwise.

Where can the community get readings from the EPA monitors?

EPA has a dedicated web page for air monitoring and smoke forecasting in the Latrobe Valley. For current air quality information visit:

epa.vic.gov.au/aq-latrobe-valley-mine-fire/current-air-quality

We are making more information available on the web at epa.vic.gov.au, or by phone on 1300 EPA VIC (1300 372 842).

Does the EPA website have sufficient information on the testing results for Morwell?

We are working to expand the information available about the smoke - which includes our data on particles (both PM_{2.5} and PM₁₀) and carbon monoxide.

EPA has listened to community concerns. EPA responders and controllers have been installing new monitoring stations and mobile equipment and these were set up on Thursday 20 February.

Currently EPA is operating two monitoring stations in Morwell and one in Traralgon, with hourly data updates available on our website. Emergency services are also monitoring air

pollution at several other locations in Morwell.

To support these monitoring stations, we have EPA staff monitoring air with hand held devices. Vehicle-mounted measurements of air pollution also began on Thursday 20 February.

Is EPA testing in the correct places?

Yes. Based on our scientific expertise these are in the right places to capture the worst levels of particles, allowing us to inform the Department of Health and the emergency response team in Morwell. More monitors are being placed and mobile monitoring will enable wider and more targeted gathering of information.

Community members say there is more smoke around houses closer to the mine than where the monitors are placed (the Morwell police station)?

The monitoring stations are fanned out around town to measure the local impacts as effectively as possible. The large number of sites and the wide coverage of fixed and mobile monitoring will provide better understanding of the impacts and enable the provision of timely and relevant advice.

What about carbon monoxide?

We have two carbon monoxide monitors and we're arranging more to come. We are publishing our carbon monoxide readings on our website. Other information channels will also be used to ensure the community is kept informed. We will continue to monitor for this around the clock, along with the CFA.

Where are the monitoring stations?

Our monitoring network includes one station at Traralgon two in Morwell.

Emergency services have also set up four fixed carbon monoxide monitors in Morwell and EPOs are conducting hand-held monitoring at several locations.

Additionally, we have mobile monitors sweeping through the town and surrounding areas to collect information on carbon monoxide. Sampling is also being undertaken for ash.

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Can people in public housing who do not have alternative accommodation options (no relatives, friends who can provide accommodation) access alternatives?

The Victorian Department of Human Services has opened a community respite centre in the Latrobe Valley, where residents can seek temporary respite from the smoky conditions caused by the Latrobe Valley mine fires.

The centre is operating in the Moe Town Hall, Albert Street, from 9am to 7pm

It will remain open subject to local demand.

The centre will offer a cool air-conditioned space where anyone can take a break away from the smoky conditions.

Representatives from the following organisations will be present:

- Latrobe City Council
- Red Cross
- Victorian Council of Churches
- Ambulance Victoria
- Environment Protection Authority (EPA)
- Department of Health
- Victoria's fire services.

What is the impact of the smoke and ash on water supplies?

Gippsland Water does not expect there to be any impact on water supplies as a result of smoke and ash in the area. Treated water storages are all protected by floating covers.

There has been no impact on water treatment facilities and none is expected.

What about the effects of livestock and pets?

If you are concerned consult a vet or phone the Department of Environment and Primary Industries on 136 186.

Why are you always talking about southern Morwell? What about the rest of the town and surrounding suburbs?

Air monitoring stations (both permanent and additional mobile ones) are operating in lots of areas - you can find out where here:

epa.vic.gov.au.

Our focus has been on southern Morwell because that has been the area of greatest concern. If anything was to change we would move the mobile monitors and be informing the community (through TV, radio, Facebook, emergency services websites, Twitter and other means) and out there talking to residents of other areas also.

You keep using technical, complicated language. Are you covering up by using complex language?

We're doing our best to keep it simple - community safety is our main concern whenever we issue information. This is a very complex fire involving lots of technical issues. EPA Victoria is committed to providing information that is as clear and accessible as possible.

What are these air quality standards EPA keeps talking about?

Everyone can potentially be affected by air pollution when concentrations of pollutants are very high. Research shows that different groups of people are sensitive to different types of air pollution.

The pollutant of most concern in Morwell at the moment is small particles in the air (measured by PM₁₀ and PM_{2.5}). These particles at high levels may affect older adults, children and people with asthma, lung and cardiovascular (heart) disease.

The data on EPA's website looks as if we have exceeded air quality standards. Is that right?

Data readings are the actual scientific measurements for each air pollutant. The data readings are recorded in different units of measure, depending on the type of pollutant.

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Pollutant	Units used for air quality data
Ozone	ppb (parts per billion)
Nitrogen dioxide	ppb (parts per billion)
Visibility reduction	n/a
Carbon monoxide	ppm (parts per million)
Sulfur dioxide	ppb (parts per billion)
Particles	$\mu\text{g}/\text{m}^3$ (micrograms per cubic metre)

Data readings are converted into Air Quality Index (AQI) values. To do this, we first calculate an index for each pollutant, by dividing by the standard, and multiplying by 100:

Index for each pollutant = data reading divided by the standard x 100

The Air Quality Index for a measurement site is the highest value of all the individual pollutant index values. This is used to give an overall air quality rating, such as VERY GOOD, GOOD, FAIR, POOR or VERY POOR.

When air quality is POOR or VERY POOR, this means air quality standards have been exceeded.

Why did it take you so long to start monitoring air quality?

It didn't take us long. In fact, there are now two new air monitoring stations in Morwell, in addition to a permanent station at Traralgon. Further mobile stations were set up shortly after the fire started and EPA has more than doubled its monitoring of air quality in the area. There are stations fanned out across the valley, giving us a very good picture and predictive ability.

Where is the mine in all this? Why aren't we hearing from them?

The emergency services are managing this fire in conjunction with the mine.

Is carbon monoxide carried in smoke/ash?

Carbon monoxide is present in the smoke. All fires produce some carbon monoxide.

Because raised levels of carbon monoxide can have significant impacts on human health, we're also monitoring for it independently, and putting raw data to the website so you can see how results are tracking against the national health-based standard (which is nine parts per million, averaged over eight hours.)

Are there masks available to the public and do they work?

Residents can pick up a P2 face mask (the same type of mask used by firefighters) from any of the information points listed below:

- Moe Town Hall respite centre, Albert Street, 9am - 7pm.
- Static CFA information bus, Elgin Street between Tarwin Street and Chapel Street (near the Morwell Coles), 9am - 5pm.
- Community Health Assessment Centre, Ambulance Victoria Gippsland Regional Office, 2 Saskia Way in Morwell (next to the Mid-Valley Shopping Centre), 8am - 8pm.
- Mobile information points. Call the Victorian Bushfire Information Line on 1800 240 667 or Latrobe City Council on 1300 367 700 for details.