

Latrobe Valley air quality

24 February 2014

EPA Victoria, 200 Victoria Street, Carlton

FAQs



EPA Victoria has given residents impacted by the Hazelwood open cut mine fire direct access to important air quality monitoring data on a dedicated page:

www.epa.vic.gov.au/ag-latrobe-valley-mine-fire

EPA now has air monitoring stations fanned across the Latrobe Valley giving us an increasingly broad view and predictive ability.

In addition to the new community website, EPA officers are at the respite centres offering information to the public on air quality monitoring activity.

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

EPA has alerted residents of the primary health issue, particulates through alerts and advisories on the radio, television and our website - additionally, we have data streaming from our monitors. Department of Health are provided with this information and make decisions and health alerts based on this data.

Are there poisonous substances (in addition to CO) such as heavy metals in the smoke and the ash?

Victoria has brown coal which contains oxides including calcium, aluminum, potassium, sodium, iron and magnesium. Reported analyses of brown coal do not indicate the presence of heavy metals such as mercury, arsenic and lead. Ash has the potential to act as a mild skin, eye or throat irritant. Local samples of the ash are being analysed by EPA.

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

It is not expected that exposure as a result of this fire will have long term health effects. Ash is sticky and may be throughout your home and therefore some exposure is expected. You should practise good hygiene to avoid unnecessary exposure. For example, wash hands and face

before eating. Clean surfaces with damp cloths regularly.

What are the impacts of ash on babies?

It is not recommended that babies and young children play in ash or dusty conditions, to reduce the skin, eye and throat irritation and unnecessary ingestion. Practice 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?

It is safe to stay indoors. Wipe surfaces with damp cloths. The Department of Health has general advice on the website about cleaning up a smoke-affected home.

www.health.vic.gov.au/environment/bushfires.htm

Where can members of the community have CO levels tested?

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

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

Long term health effects from the smoke and ash are unlikely as a result of the fire. However, it is important to follow health 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?

Long term health effects from the ash are unlikely as a result of this fire.

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

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 hands and face before eating.

School children are coming home covered in ash. Will they suffer health impacts? Should they be kept at home?

Children may experience the irritant and respiratory effects of smoke and ash. Reducing the amount of outdoor play will reduce the exposure to the ash. 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?

We have doubled monitoring efforts and we are making more information available on the web www.epa.vic.gov.au or 1300 EPA VIC (1300 372 842)

There will be a new mobile air monitoring station outside the police station from tomorrow that will be providing more data to EPA to inform the Health Department and Incident Management Team.

There will be more information to come, priority has been to get the lab on site and start monitoring the air.

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

We are increasing the amount of information about the smoke - which includes our data around PM2.5 small particles, PM10 large particles.

EPA has listened to the community concerns. EPA responders and controllers have been installing new monitoring stations and mobile equipment and these were set up Thursday (20/02) with available data about carbon monoxide in the next few days.

To support the six monitoring stations, we have EPA staff monitoring air with hand held devices and will have vehicle-mounted information that began Thursday (20/02) afternoon.

Is the EPA testing in the correct places?

Yes, based on our scientific expertise these are in the right place to capture the worst levels of particles, allowing us to inform the Department of Health and emergency response in Morwell. More monitors are being placed and mobile monitoring will enable wider and 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 represent the local impacts as effectively as possible. The large number of sites and the wide dispersion 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. These are our own and we will be pushing this information on to the web and other channels to reach the community. We will continue to monitor for this around the clock along with CFA.

Where are the monitoring stations?

Our monitoring network includes a fixed particulate station at Traralgon, two more are online in Morwell and two more coming online.

There are also four fixed carbon monoxide monitors in Morwell and EPOs are conducting hand held monitoring at several locations.

A portable particulate monitor will be added

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tomorrow, as will indoor monitoring in a public building in Morwell.

Additionally, we will have mobile monitors sweeping through the town and surrounding areas to collect information on ash and carbon monoxide.

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

The Victorian Department of Human Services has opened a community respite centre this afternoon 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-7pm

It will remain open subject to local demand.

The centre will offer a cool air conditioned space where any resident 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 DEPI on 136 186.

Are there poisonous substances, not just carbon monoxide in the air or the smoke and ash?

Victoria has brown coal which contains oxides including calcium, aluminium, potassium, sodium, iron and magnesium. Reported analyses of brown coal do not indicate the presence of heavy metals such as mercury, arsenic and lead. Ash has the potential to act as a mild skin, eye or throat irritant. Local samples of the ash are being analysed by EPA.

Will my long term health be impacted?

It is not expected that exposure as a result of this fire will have long term health effects. Ash is sticky and may be pervasive in your home and therefore some exposure is expected. You should practise good hygiene to avoid unnecessary exposure. For example, wash hands and face before eating. Clean surfaces with damp cloths regularly.

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

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: www.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 (through TV, radio, Facebook, emergency services websites, Twitter etc.) 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 -

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community safety is top of mind whenever we issue information - but this is a very complex fire involving lots of technical points.

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 prevalent air pollutant in Morwell as a result of the mine fire is small particles (PM10 and PM2.5). These particles at elevated levels may affect older adults, children and people with asthma, lung and cardiovascular (heart) disease.

The data on EPA's website looks alarmingly 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.

Pollutant	Units used for air quality data
Ozone	pphm (parts pre hundred million)
Nitrogen dioxide	pphm (parts per hundred million)
Visibility (as Bsp)	10-4 m ⁻¹
Carbon monoxide	ppm (parts per million)
Sulfur dioxide	pphm (parts per hundred million)
Particles	→g/m ³ (micrograms per cubic metre)

Data readings are converted into AQI values by using a formula; this means that the AQI is a derived value (that just means it's based on the formula):

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

Because data readings have different underlying units of measure, it is difficult to compare the various pollutants. After we derive the AQI values we have a standardised set of values that we can then compare and present. This is why, when EPA presents raw data on the webpage, it should not be taken as an Indexed value - you're not comparing apples with apples.

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

It didn't take us long. In fact, there are two permanent air monitoring stations in Morwell and Traralgon. Additional mobile stations were set up shortly after the fire started and the EPA has more than doubled its monitoring of air quality in the area. We have 14 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 different from smoke/ash - if you see smoke, that doesn't mean that carbon monoxide is present as well.

While it's not a direct association, we can use the plume modelling we're doing for particle pollution from the mine fire, to give us a good indication of when the odourless gas carbon monoxide may be having an impact, and urge people to take shelter.

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 of 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 one of the information points listed below:

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- **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.**