Hazelwood coal mine fire: Ash residue in Morwell roof cavities project

Community update No. 8 – February 2017

The Department of Health and Human Services (DHHS) has prepared the following information to provide an update on the 'Ash residue in Morwell roof cavities' project since January 2017. This update includes some information from the independent expert Senversa, including what the results from samples collected from houses in Morwell and Rosedale are showing.

About the project

The Hazelwood Mine Fire Inquiry recommended that the government collect and test any ash that may have settled in the roof cavities of houses in Morwell, publish the results of that analysis to the community and provide advice about any potential known or unknown health effects (Recommendation 9, Hazelwood Mine Fire Inquiry Report III).

The 'Ash residue in Morwell roof cavities' project will address this recommendation and through community forums allow government agencies to better understand the community's concerns about ash in roof cavities.

DHHS is leading the project, working closely with the community, Latrobe City Council and the Environment Protection Authority (EPA) Victoria.

Can I still be involved?

While the project is drawing to a close, community members can still participate by registering to receive monthly project updates, asking questions and providing feedback, and by attending community meetings.

We encourage everyone to stay involved with the project, even if your house was not selected for testing.

- Complete or download a registration form to receive updates at: www.health.vic.gov.au/ash-project
- Email us at: ashproject@dhhs.vic.gov.au
- Phone us on: 1300 761 874

How is the project going?

Collecting and analysing the samples

Senversa (the independent expert) completed the collection of samples from 50 houses in Morwell in September 2016 and 10 houses in Rosedale (the control site) in December 2016 for comparison.

A summary of results from the samples collected in Morwell and Rosedale are provided on page 2.

The results show that being exposed to the brown coal ash residue that may be present in some roof cavities is unlikely to affect health.

Community and stakeholder engagement

The department met with key stakeholder groups in Morwell in December 2016 to discuss the results.

We held four community forums in Morwell on 23 and 24 January 2017 to discuss the results from Morwell and Rosedale with the community. Thanks to everyone who attended and provided feedback.

Individual reports

During January and February 2017, Senversa visited individuals whose roof cavities were tested to provide individual reports and discuss the results.

Final results

What did Senversa test for?

Senversa tested the samples to see if the following chemicals were present and at what levels:

- 18 metals: antimony, arsenic, boron, barium, beryllium, cadmium, cobalt, chromium, copper, lead, manganese, mercury, nickel, selenium, strontium, titanium, vanadium and zinc
- Polycyclic aromatic hydrocarbons (PAHs).

Refer to Senversa's sampling plan for more information on why these chemicals were selected and how the sampling was done. This is available on the project webpage at: www.health.vic.gov.au/ash-project)

Analysing the results – what did they show?

- No ash residue from the Hazelwood coal mine fire was found in roof cavities in Rosedale but it was found in roof cavities in Morwell.
- There were three metals (lead, zinc and antimony) that exceeded Health Investigation Levels in some properties in both Morwell and Rosedale. A Health Investigation Level is a level above which further investigation may be needed to determine whether a significant health risk exists and does not mean that there are potential health risks.
- For the three metals, the concentrations appear to be associated with sources other than brown coal ash from the Hazelwood coal mine fire, that is:
  - Lead: high concentrations in older homes can be attributed to lead-based paint and/or petrol emissions of cars that up until 2002 used leaded petrol
  - Zinc: high concentrations in metal-roofed properties are likely to be due to the corrosion and degradation of metal roof materials
  - Antimony: higher concentrations were found in homes with foil insulation, which can contain antimony.
- Polycyclic Aromatic Hydrocarbons (PAHs) were not detected at levels of concern in any of the Morwell properties tested.
- The results show that being exposed to the brown coal ash residue that may be present in some roof cavities is unlikely to affect health.
- However, the presence of any dust in roof cavities may cause respiratory effects (such as coughing, sneezing or irritation to the eyes, throat and nasal passage) if the dust is disturbed and inhaled. In addition, roof dust may also contain other hazardous materials or chemicals that should be avoided, for example asbestos if there are asbestos containing materials present.

See page 3 for advice about hazards in roof cavities.

Next steps

Final project report

The final project report is expected to be available in March 2017. Senversa will provide recommendations to the government about what was found in the roof cavities of Morwell and Rosedale.

Community members provided feedback at the September community forums about how the final report should be published and promoted. We have used your suggestions to inform our publication plan as follows:

- An executive summary of the report will be sent to everyone who registered to receive updates. A request form for a copy of the full report will be included with this mail out.
- The executive summary will be available online and we will provide hard copies to local community groups and community hubs, such as the library, RSL, and council offices for people to collect.
- The full report will be available online and hard copies will be available by request. The report will be published on Australian recycled paper. Anyone can request a copy by:
  - emailing ashproject@dhhs.vic.gov.au
  - phoning 1300 761 874
  - returning the request form included with the summary version.

The government will consider Senversa's recommendations and communicate its response to the report to the community.

The department will work with the community and stakeholders to develop a simplified version of the report, as well as other education tools where appropriate.

Hazards in roof cavities – advice for householders

The department has information for householders about hazards in roof cavities and steps to take to protect your health.

What hazards may exist in your roof cavity?

Your roof cavity may contain various materials including fibreglass fibres, building materials containing asbestos, lead dust from pollution, droppings from animals, fungal spores, pesticides or general household dust.

Natural events and industrial activities in your local area may affect the amount and types of materials that can accumulate in your roof cavity. In certain parts of Victoria, dust from local industry and/or ash from fires may enter your roof cavity.

Could hazards in my roof cavity pose a risk to my health or safety?

Hazards in roof cavities that are not disturbed and can be isolated from residents do not pose a health risk.

However householders may be putting themselves at risk when entering a roof cavity and doing work. There are risks of physical injury (for example falls and electrocution) and potential risks from skin contact or breathing in various materials. It is important to be aware of any risks and the steps you can take to keep safe.

What can I do to protect myself and my family?

The best course of action is to not disturb any dust or other materials in your roof cavity.

If you must enter your roof cavity or renovate your home, follow these steps to protect yourself and your family:

Before going into a roof cavity:

- turn the electricity off
- use a torch to identify possible hazards
- beware of high temperatures (possible risk of heat exhaustion)
- think about the type and location of insulation materials, electrical wiring and water or gas piping.

Many homes built before the 1990s contain asbestos cement materials particularly in eaves, ceilings, man-hole covers or asbestos heater flues.

Make sure you know the safe handling procedures if there is any possibility of handling asbestos-containing materials.

Advice about asbestos in the home is available on the Better Health Channel at: https://www2.health.vic.gov.au/public-health/environmental-health/environmental-health-in-the-home/asbestos-in-the-home

While working in a roof cavity:

- wear appropriate safety equipment such as:
  - a P1 or P2 face mask that meets Australian Standard AS/NZS 1716. These are available from local hardware stores
  - appropriate gloves and footwear
  - long-sleeved, loose-fitting clothes.
- keep the work area clear of waste and dust, and place waste in thick plastic bags.
- take care when accessing and walking across the work area to avoid tripping over debris, roof trusses, or ceiling materials.
- make sure you don't come in contact with, or damage, any electrical cables or equipment. If any electrical cable or equipment is damaged, stop work and engage a licensed electrical contractor.
- contact your local council for advice about additional protection that may be required if you have an asbestos cement roof or concerns that asbestos building materials in the roof cavity are in poor condition.
- do not use a household vacuum cleaner in roof spaces. They can release dust that may contain hazardous materials into the air.
- advise contractors doing work in roof spaces of any known hazards.

After going into a roof cavity:

- dispose of debris, waste and disposable safety equipment appropriately (seek advice from local council)
- shower and wash any non-disposable clothing separately.

More information is available online at: https://www2.health.vic.gov.au/public-health/environmental-health/environmental-health-in-the-home/hazards-in-roof-cavities

More information

Department of Health and Human Services

Community updates and resources will be published on a dedicated project page at: www.health.vic.gov.au/ash-project

Questions about the project can be directed to: ashproject@dhhs.vic.gov.au or 1300 761 874.

The answers to community questions are available in the Frequently asked questions (FAQs) at: https://www2.health.vic.gov.au/emergencies/hazelwood/ash-project-faq

Stay up to date with social media:

- Twitter: @VicGovDHHS #MorwellAshProject
- Facebook: www.facebook.com/VicGovHealth

EPA Victoria

For more information about the EPA's environmental monitoring program in Morwell and surrounding areas call EPA on 1300 372 842 or visit http://www.epa.vic.gov.au/hazelwood

Hazelwood Mine Fire Inquiry

For more information on the Hazelwood Mine Fire Inquiry visit www.hazelwoodinquiry.vic.gov.au

Senversa

More information about Senversa is available at www.senversa.com.au

Project timeline

February 2014	Hazelwood coal mine fire burned for at least 45 days until 10 March 2014.
March 2014	Hazelwood Mine Fire Board of Inquiry established.
May 2015	Hazelwood Mine Fire Inquiry reopened.
February 2016	*Hazelwood Mine Fire Inquiry Report 2015/2016 Volume lll – Health Improvement* (Inquiry Report III) tabled in the Parliament of Victoria. This report includes Recommendation 9, relating to the Ash residue in Morwell roof cavities project.
April 2016	The Victorian Premier and Minister for Health announced that the Government had accepted all recommendations from Inquiry Report III, including the testing and analysis of ash residue in roof cavities, on 15 April 2016.
May 2016	The 2016-17 Budget allocated funding to support the implementation of the recommendations in Inquiry Report III (including Recommendation 9).
June 2016	Planning was underway to implement the project, including the development of a dedicated website and generic email address to facilitate the recruitment of houses for testing, and engagement of an independent expert.
July 2016	The procurement process to engage an independent expert closed on 22 July 2016.
August 2016	The successful independent expert (Senversa) was engaged via a DHHS contract. Contracts are published on www.tenders.vic.gov.au.
September 2016	Community forums were held in Morwell. Senversa developed the *Sampling and Analytical Quality Plan* that sets out how houses were selected for testing. Senversa began collecting samples in Morwell in late-September 2016.
October 2016	Senversa finished collecting samples from all of the 50 selected houses in Morwell.
November 2016	Senversa began collecting samples from Rosedale (control site) in late-November. Samples from Morwell were tested.
December 2016	Senversa provided preliminary results of the testing for Morwell only. Sampling was completed in Rosedale and those samples were tested. Senversa analysed and compared the results.
January 2017	Community forums were held in Morwell to discuss the final results and possible next steps. Senversa started visiting people whose houses were tested to discuss the results and provide the individual reports.
February 2017	Senversa completed individual visits with people whose houses were tested.
March 2017	The final project report is expected to be available in March 2017. This will be promoted to the community in a number of ways.
April 2017 onwards	The department will develop a simplified summary of the report and other education tools.

To receive this publication in an accessible format phone 1300 761 874, using the National Relay Service 13 36 77 if required, or email environmental.healthunit@dhhs.vic.gov.au

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