

# HAZELWOOD MINE FIRE INQUIRY: VICTORIAN GOVERNMENT IMPLEMENTATION PLAN

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# FOREWORD FROM VICTORIAN PREMIER

**THE HAZELWOOD MINE FIRE DEVASTATED THE LATROBE VALLEY. BURNING FOR 45 DAYS OVER FEBRUARY AND MARCH 2014, IT HIT LOCAL COMMUNITIES HARD AND LEFT RESIDENTS PHYSICALLY AND EMOTIONALLY EXHAUSTED.**

The Hazelwood Mine Fire devastated the Latrobe Valley. Burning for 45 days over February and March 2014, it hit communities hard and left residents physically and emotionally exhausted.

While the subsequent Hazelwood Mine Fire Inquiry ('the Inquiry') identified some of the shortcomings in the State's response, it wasn't enough. Local residents continued to have concerns about issues not fully addressed in the initial Inquiry.

Hearing these concerns, we committed to reopen the Inquiry. And that's exactly what we did in May 2015. The reopened Inquiry was asked to investigate:

- whether the Hazelwood Mine Fire led to increased deaths
- how to improve the health of the Latrobe Valley community
- options for rehabilitation of the Latrobe Valley coal mines.

Following its investigations, the Inquiry provided recommendations on how we can ensure the same mistakes are not made again.

Our response delivers on every one of those recommendations. It provides a clear plan to increase local health services, improve air quality monitoring and strengthen the regulation of the Latrobe Valley coal mines. In total, we are investing more than \$80 million to respond to the Hazelwood Mine Fire.

Over the next three years, we will:

- appoint a Latrobe Health Advocate to provide a trusted local voice
- establish a Latrobe Health Assembly, bringing together community and health services to identify health issues and develop local solutions
- increase funding for health services so local families get the help they deserve
- increase ambient air quality monitoring to give communities the information they need
- begin planning for rehabilitation of the Latrobe Valley coal mines
- increase the mine rehabilitation bonds so the community isn't left paying the bill when mines close
- establish a Latrobe Valley Mine Rehabilitation Commissioner to oversee this rehabilitation work.

All of this will happen in genuine partnership with local communities. It's what the residents of the Latrobe Valley deserve, and we're getting it done.



**The Honourable Daniel Andrews MP  
Premier of Victoria**

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# CHAPTER 1: GLOSSARY

## 1.1 Common terms used throughout this Plan:

<b>affirmations</b>	the commitments made by the Government, carrying the same weight as recommendations, which were affirmed by the 2014 and reopened Board of Inquiry in the Inquiry Reports
<b>AGL Loy Yang</b>	AGL Loy Yang Pty Ltd, operator of the Latrobe Valley Loy Yang Coal Mine
<b>Anglesea Coal Mine</b>	former operating mine adjacent to the Anglesea Heath, previously operated by Alcoa of Australia Limited
<b>Australian Paper</b>	Australian Paper Pty Ltd, operator of the Maryvale Mill paper recycling plant
<b>Batter Stability Project</b>	Latrobe Valley Brown Coal Mine Stability Research project, in partnership with Federation University and EnergyAustralia Yallourn Pty Ltd, launched in April 2016
<b>Community Smoke Health Standard</b>	<i>Community Smoke, Air Quality and Health Standard: Air quality assessment, forecasting and health protection messaging for particulate matter</i> , Version 1.0 (December 2015)
<b>Industry Integration Concept of Operations</b>	<i>Latrobe Valley Critical Infrastructure Major Emergency Guideline – Concept of Operations and Industry Integration for Incident Controllers</i> (Version No. 3, 23 March 2016)
<b>Death Investigations Report</b>	the report prepared by the reopened Board of Inquiry entitled <i>Hazelwood Mine Fire Inquiry Report 2015/16 Volume II – Investigations into 2009-2014 Deaths</i> , which was tabled in Parliament on 9 December 2015
<b>Emergency Management Planning Bill</b>	<i>Emergency Management Legislative Amendment (Planning) Bill 2016</i> (Vic)
<b>Emergency Management SAP</b>	Victorian Emergency Management Strategic Action Plan 2015-2018
<b>1986 Emergency Management Act</b>	<i>Emergency Management Act 1986</i> (Vic)
<b>2013 Emergency Management Act</b>	<i>Emergency Management Act 2013</i> (Vic)
<b>Energy Australia</b>	EnergyAustralia Yallourn Pty Ltd, operator of the Latrobe Valley Yallourn Coal Mine

<b>ENGIE</b>	operator of the Latrobe Valley Hazelwood Coal Mine, formerly GDF Suez Australian Energy Pty Ltd
<b>EP Act</b>	<i>Environment Protection Act 1970</i> (Vic)
<b>ERR Action Plan</b>	Earth Resources Regulation Action Plan 2015-16
<b>Gippsland PHN</b>	Gippsland Primary Health Network
<b>Hancock Plantations</b>	Hancock Victorian Plantations Holdings, which owns and operates two plantations on land west and south-west of the Hazelwood Coal Mine
<b>Hazelwood Coal Mine</b>	the open cut coal mine at Hazelwood
<b>Hazelwood Mine Fire</b>	the fire at the Hazelwood Coal Mine in February and March 2014
<b>Health Improvement Report</b>	the report prepared by the Reopened Board of Inquiry entitled <i>Hazelwood Mine Fire Inquiry Report 2015/16 Volume III – Health Improvement</i> , which was tabled in Parliament on 10 February 2016
<b>Incident Controller</b>	the person accountable and responsible for the control of response activities across agencies responding to an incident at the Incident Management Team level, as defined in the State Emergency Response Plan at Chapter 3 of the <i>Emergency Management Manual of Victoria</i>
<b>Inquiry</b>	the 2014 and reopened Board of Inquiry
<b>Inquiry Reports</b>	the 2014 and reopened Boards of Inquiry Reports
<b>Latrobe MPHW Plan</b>	Latrobe Municipal Public Health and Wellbeing Plan, developed under section 26 of the <i>Public Health and Wellbeing Act 2008</i> (Vic)
<b>Latrobe Valley</b>	the geographical zone of the Latrobe City Council
<b>Latrobe Valley Coal Mines</b>	the three Latrobe Valley brown coal mines known as ‘Loy Yang’, ‘Yallourn’ and ‘Hazelwood’
<b>Latrobe Valley Coal Mine Taskforce</b>	Emergency Management Victoria: Coal Mine Emergency Management Taskforce, established in September 2014

<b>Loy Yang Complex Agreement</b>	Agreement between the State Electricity Commission of Victoria, Loy Yang Power Limited and Edison Mission EnergyAustralia Limited, 29 March 1997
<b>Mine Rehabilitation Report</b>	the report prepared by the reopened Board of Inquiry entitled <i>Hazelwood Mine Fire Inquiry Report 2015/16 Volume IV – Mine Rehabilitation</i> , which was tabled in Parliament on 14 April 2016
<b>MR(SD) Act</b>	<i>Mineral Resources (Sustainable Development) Act 1990</i> (Vic)
<b>MR(SD) Amendment Act</b>	<i>Mineral Resources (Sustainable Development) Amendment Act 2014</i> (Vic)
<b>MR(SD) Regulations</b>	<i>Mineral Resources (Sustainable Development) Regulations 2013</i> (Vic)
<b>OHS Act</b>	<i>Occupational Health and Safety Act 2004</i> (Vic)
<b>OHS Regulations</b>	<i>Occupational Health and Safety Regulations 2007</i> (Vic)
<b>Personal Hardship Assistance Program</b>	Victoria's program of financial support, provided to individuals and households to alleviate the personal hardship and distress suffered by eligible Victorians during or after an emergency event, administered by the Department of Health and Human Services
<b>Rapid Air Quality Monitoring Response Model</b>	a document model to inform decision making on deployment of rapid response air monitoring, which has been incorporated into JSOP 03:18
<b>Rehabilitation Bond</b>	a bond from a mine operator, held by the State under section 81 of the <i>Mineral Resources (Sustainable Development) Act 1990</i> (Vic) to guarantee rehabilitation of a mine site post closure
<b>reopened Board of Inquiry</b>	the 2015/16 Board of Inquiry into the Hazelwood Coal Mine Fire, comprising the Honourable Bernard Teague AO (Chair), Professor John Catford and Mrs Anita Roper
<b>Somerton Tip Fire</b>	the fire that began on 20 November 2015 at Ecotec Solutions refuse facility in Patullos Lane, Somerton
<b>Somerton Tip Fire Review</b>	the report commissioned by the Emergency Management Commissioner, entitled <i>Somerton Tip Fire: Operational Application of the Smoke Framework 2016</i>
<b>Standard for Managing CO Emissions</b>	<i>Standard for Managing Exposure to Significant Carbon Monoxide Emissions</i> , Emergency Management Victoria, July 2015
<b>State Smoke Framework</b>	<i>State Smoke Framework</i> , December 2015 – Update, Version 2.0
<b>State Smoke Working Group</b>	State Smoke Working Group (formerly the Emergency Response and Recovery Working Group), chaired by DHHS and EMV and reporting to the Hazelwood Mine Fire Inquiry Response Inter-departmental Committee



<b>this Plan</b>	this document, entitled <i>Hazelwood Mine Fire Inquiry: Victorian Government Implementation Plan</i> (June 2016)
<b>VicEmergency</b>	Victoria's primary website for fire and flood warnings, which shows emergency incidents across Victoria on a real-time Google Map display
<b>Victorian Earth Resources Regulators Forum</b>	the Forum convened by Earth Resources Regulation, with the Department of Economic Development, Jobs, Transport and Resources, the Victorian WorkCover Authority and the Environment Protection Authority
<b>White Paper</b>	Victorian Emergency Management Reform White Paper (December 2012)
<b>Work Plan</b>	a work plan dictating the approved mining operations under a mining licence relating to a specific piece of land, under section 40 of the <i>Mineral Resources (Sustainable Development) Act 1990</i> (Vic)
<b>Work Plan Variation</b>	an approved variation to a Work Plan under section 41 of the <i>Mineral Resources (Sustainable Development) Act 1990</i> (Vic)
<b>WorkSafe</b>	Victorian WorkCover Authority
<b>2014 Board of Inquiry</b>	the Board of Inquiry into the Hazelwood Mine Fire, comprising the Honourable Bernard Teague AO (Chair), Professor John Catford and Ms Sonia Petering
<b>2014 Inquiry Report</b>	the report prepared by the Board of Inquiry entitled <i>Hazelwood Mine Fire Inquiry Report</i> (2014), which was tabled in Parliament on 2 September 2014
<b>2014 Inquiry Implementation Monitoring Progress Report</b>	the report prepared by the former Hazelwood Mine Fire Inquiry Implementation Monitor and the Inspector-General of Emergency Management entitled <i>Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management)</i> October 2015

1.2 Acronyms used throughout this Plan:

<b>AFAC</b>	Australasian Fire and Emergency Service Authorities Council
<b>ARGOS</b>	Accident Reporting and Guidance Operation System, utilised as a decision support system to calculate and display predictions of atmospheric hazards
<b>AIIMS</b>	Australasian Inter-service Incident Management System
<b>BAU</b>	business-as-usual
<b>CAFS</b>	Compressed Air Foam System
<b>CALD</b>	culturally and linguistically diverse
<b>CFA</b>	Country Fire Authority
<b>CGEIG</b>	Central Gippsland Essential Industries Group
<b>CHO</b>	Chief Health Officer
<b>CO</b>	carbon monoxide
<b>COAG</b>	Council of Australian Governments
<b>DEDJTR</b>	Department of Economic Development, Jobs, Transport and Resources
<b>DELWP</b>	Department of Environment, Land, Water and Planning
<b>DET</b>	Department of Education and Training
<b>DHHS</b>	Department of Health and Human Services
<b>DJR</b>	Department of Justice and Regulation
<b>DPC</b>	Department of Premier and Cabinet
<b>DTF</b>	Department of Treasury and Finance
<b>EM-COP</b>	Emergency Management Common Operating Picture
<b>EMC</b>	Emergency Management Commissioner
<b>EMJPIC</b>	Emergency Management Joint Public Information Committee
<b>EMMV</b>	Emergency Management Manual of Victoria
<b>EMV</b>	Emergency Management Victoria

<b>EPA</b>	Environment Protection Authority Victoria
<b>ERR</b>	Earth Resources Regulation, the mining regulator in the Department of Economic Development, Jobs, Transport and Resources
<b>ERPP</b>	Earth Resources Policy and Programs, within the Department of Economic Development, Jobs, Transport and Resources
<b>HAZMAT</b>	hazardous materials
<b>ICC</b>	Incident Control Centre
<b>ICT</b>	information and communications technology
<b>IDC</b>	Hazelwood Mine Fire Inquiry Response Inter-departmental Committee, chaired by the Department of Premier and Cabinet
<b>IGEM</b>	Inspector-General for Emergency Management
<b>IMT</b>	Incident Management Team
<b>JSOP</b>	Joint Standard Operating Procedure
<b>JSOP 02.03</b>	Joint Standard Operating Procedure J02.03 – Incident Management Team Readiness Arrangements for Bushfire
<b>JSOP 03.18</b>	Joint Standard Operating Procedure J03.18 – Rapid Deployment of Air Quality Monitoring for Community Health
<b>JSOP 03.19</b>	Joint Standard Operating Procedure J03.19 – Managing Significant Community Exposures to Fine Particles from Smoke
<b>JSOP 03.20</b>	Joint Standard Operating Procedure J03.20 – Managing Significant Community Exposures to Carbon Monoxide from Smoke
<b>LGV</b>	Local Government Victoria
<b>LGWG</b>	Local Government Working Group
<b>MEMEG</b>	Municipal Emergency Management Enhancement Group
<b>MFB</b>	Metropolitan Fire Brigade
<b>MOU</b>	Memorandum of Understanding
<b>NEPC</b>	National Environment Protection Council
<b>NEPM (AAQ)</b>	National Environment Protection Measure (Ambient Air Quality)
<b>OHS</b>	occupational health and safety

<b>PM2.5</b>	particulate matter in the atmosphere that is smaller than 2.5 micrometres in size
<b>PM10</b>	particulate matter in the atmosphere that is smaller than 10 micrometres in size
<b>RAMP</b>	Risk Assessment and Management Plan
<b>REMP</b>	Regional Emergency Management Planning
<b>REMT</b>	Regional Emergency Management Team
<b>SCC</b>	State Control Centre
<b>SCRC</b>	State Crisis and Resilience Council
<b>SEPP (AAQ)</b>	State Environment Protection Policy (Ambient Air Quality)
<b>TRB</b>	Technical Review Board
<b>VicSES</b>	Victoria State Emergency Service



# 2



# CHAPTER 2: INTRODUCTION

- 2.1 The Government welcomes the reopened Inquiry Reports and is committed to working with the Latrobe Valley community to improve their health and wellbeing and modernise the regulation of the Latrobe Valley Coal Mines.
- 2.2 This Plan sets out the actions that will be taken by the Government to fulfil its commitment to implement the recommendations and affirmations of the Inquiry Reports.

## Background

- 2.3 The Hazelwood Mine Fire burnt for 45 days in February and March 2014 and impacted significantly on the town of Morwell and the wider Latrobe Valley.
- 2.4 In March 2014, the Governor in Council appointed a Board of Inquiry into the Hazelwood Mine Fire, chaired by the Hon Bernard Teague AO, to investigate the circumstances of and government response to the Hazelwood Mine Fire. The 2014 Inquiry Report was tabled in the Victorian Parliament on 2 September 2014.
- 2.5 The Government committed to implementing the 12 recommendations and 40 affirmations directed to the State in the 2014 Inquiry Report, allocating \$30 million in the 2015/16 Victorian Budget.<sup>1</sup> The 2014 Inquiry Report identified the need to increase the State's capability to respond to smoke events, improve the way we engage and communicate with the community and strengthen fire risk management at the Latrobe Valley Coal Mines.
- 2.6 Recognising the ongoing impact of the Hazelwood Mine Fire, the Government committed to re-opening the Inquiry to investigate:
  - whether the Hazelwood Mine Fire contributed to an increase in deaths
  - health improvement measures for the Latrobe Valley community
  - the adequacy of the Rehabilitation Bonds held for the operators of the Latrobe Valley Coal Mines
  - options for rehabilitation of the Latrobe Valley Coal Mines.<sup>2</sup>
- 2.7 On 26 May 2015, the Governor in Council appointed a Board of Inquiry into the Hazelwood Mine Fire, chaired by the Hon Bernard Teague AO, with Professor John Catford and Mrs Anita Roper.
- 2.8 The reopened Board of Inquiry delivered four reports, which were tabled in the Victorian Parliament on 2 September 2015, 9 December 2015, 10 February 2016 and 14 April 2016.
- 2.9 The Government committed to implementing the 32 recommendations and five affirmations directed to the State in the reopened Inquiry Reports, allocating \$51.2 million in the 2016/17 Victorian Budget.<sup>3</sup>

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1 Victorian Budget 2015/16, Service Delivery Budget Paper No. 3, pages 3, 12-15.

2 Labor Says Botched Mine Fire Response Must Never Happen Again", Putting People First, Victoria Labor, October 2014.

3 Victorian Budget 2016/17, Service Delivery Budget Paper No. 3, pages 19-22.

## This Plan

- 2.10 This Plan sets out the Government's commitments to improve community engagement and communication, innovate health delivery in the Latrobe Valley and modernise mine regulation.
- 2.11 The Government's actions to implement all recommendations and affirmations of the Inquiry Reports are set out in the following chapters:
- Chapter 3: Governance and Accountability
  - Chapter 4: Communications and Community Engagement
  - Chapter 5: Health in the Latrobe Valley
  - Chapter 6: Incident Air Quality and Wellbeing
  - Chapter 7: Latrobe Valley Coal Mine Regulation
  - Chapter 8: Latrobe Valley Coal Mine Rehabilitation Bonds
  - Chapter 9: Latrobe Valley Regional Rehabilitation Strategy
  - Chapter 10: Emergency Management Planning, Response and Recovery.
- 2.12 This Plan focuses on how implementation of the Inquiry Reports will lead to better outcomes for the community. The 'outcome for the community' statements, contained within each Chapter, are the Government's measure for successful implementation.
- 2.13 The reopened Board of Inquiry has framed its recommendations with flexibility so as not to limit their implementation.<sup>4</sup> This Plan complements the Government's \$40 million package to assist in diversifying the economy and creating jobs in the Latrobe Valley.<sup>5</sup>
- 2.14 The Deliverables Tables in Appendix 1 sets out ongoing and future Government action to implement the Inquiry Reports' recommendations and affirmations. The IGEM will monitor the delivery of the action items in the Deliverables Table, and provide annual progress reports until 2019.
- 2.15 Appendix 2 sets out the Inquiry Reports' recommendations and affirmations in full. It also lists:
- where a recommendation or affirmation from the 2014 Inquiry Report has been assessed as complete<sup>6</sup>
  - the page reference in this Plan where the actions to implement the recommendation or affirmation are detailed.

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4 Hazelwood Mine Fire Inquiry Report 2015/2016 Volume IV – Mine Rehabilitation, page 20.

5 Victorian Budget 2016/17, Service Delivery Budget Paper No. 3, pages 25 – 36.

6 As assessed in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General of Emergency Management) October 2015.





# 3



# CHAPTER 3: GOVERNANCE AND ACCOUNTABILITY

- 3.1 This chapter sets out the governance structure to coordinate and oversee the Government's implementation of the Inquiry Reports recommendations and affirmations and the mechanism in place to monitor and publicly report on progress.

## COORDINATION

### OUTCOME FOR THE COMMUNITY

Successful implementation of the recommendation and affirmations of the Inquiry Reports as detailed in Appendix 1.

### Completed Government actions

- 3.2 The IDC oversees and coordinates the Government's actions to implement the recommendations and affirmations in the Inquiry Reports as outlined in this Plan.
- 3.3 The IDC's membership consists of senior representatives from Government departments and agencies with implementation responsibilities. DPC chairs the IDC with membership from CFA, DEDJTR, DELWP, DHHS, DTF, EMV, EPA, MFB and WorkSafe.
- 3.4 The IDC:
- has a Secretariat located within DPC
  - provides internal governance oversight of this Plan
  - meets on a quarterly basis, and more often as required
  - has subject matter working groups, which meet as required to address cross departmental and agency actions to implement this Plan
  - liaises with the IGEM on matters related to the implementation of the Inquiry Reports' recommendations and affirmations as set out in Appendix 1 of this Plan
  - reports to SCRC and a designated committee of Cabinet.
- 3.5 The structure of the IDC and its working groups at June 2016 is set out at Figure 3.1 below.
- 3.6 The IDC has three working groups:
- the Health and Wellbeing Working Group, chaired by DHHS, which oversees and coordinates implementation of actions and deliverables relating to health innovation and wellbeing as outlined in chapter 5 of this Plan. The Health and Wellbeing Working Group also provides an additional forum for broader communication about community engagement activities and strategies. The Health and Wellbeing Working Group has representation from DELWP, DET, DPC, EMV and EPA and meets quarterly in the Latrobe Valley, and more often as required
  - the Rehabilitation Working Group, chaired by DEDJTR, which is responsible for overseeing the preparation of the Latrobe Valley Regional Rehabilitation Strategy as outlined in chapter 9 of this Plan. The Rehabilitation Planning Working Group includes representatives from DEDJTR, DELWP, DPC and EPA and meets monthly in the Latrobe Valley
  - the State Smoke Working Group, co-chaired by DHHS and EMV, which oversees and coordinates implementation of actions and deliverables relating to the State Smoke Framework as outlined in chapter 6 of this Plan. The State Smoke Working Group has representation from Ambulance Victoria, CFA, DELWP, DPC, EPA, MFB and Victoria Police and meets at least monthly in Melbourne.

- 3.7 DPC participates in all IDC Working Groups as an observer in order to provide coordination and consistency.

### Future Government actions

- 3.8 The IDC will meet on a quarterly basis, and more often as required, until December 2019.
- 3.9 DPC will continue to chair and provide secretarial support to the IDC and its working groups.
- 3.10 Government departments and agencies are responsible for undertaking actions to implement the recommendations and affirmations in the Inquiry Reports, in accordance with the action items set out in the Deliverables Tables in Appendix 1 of this Plan.<sup>1</sup>

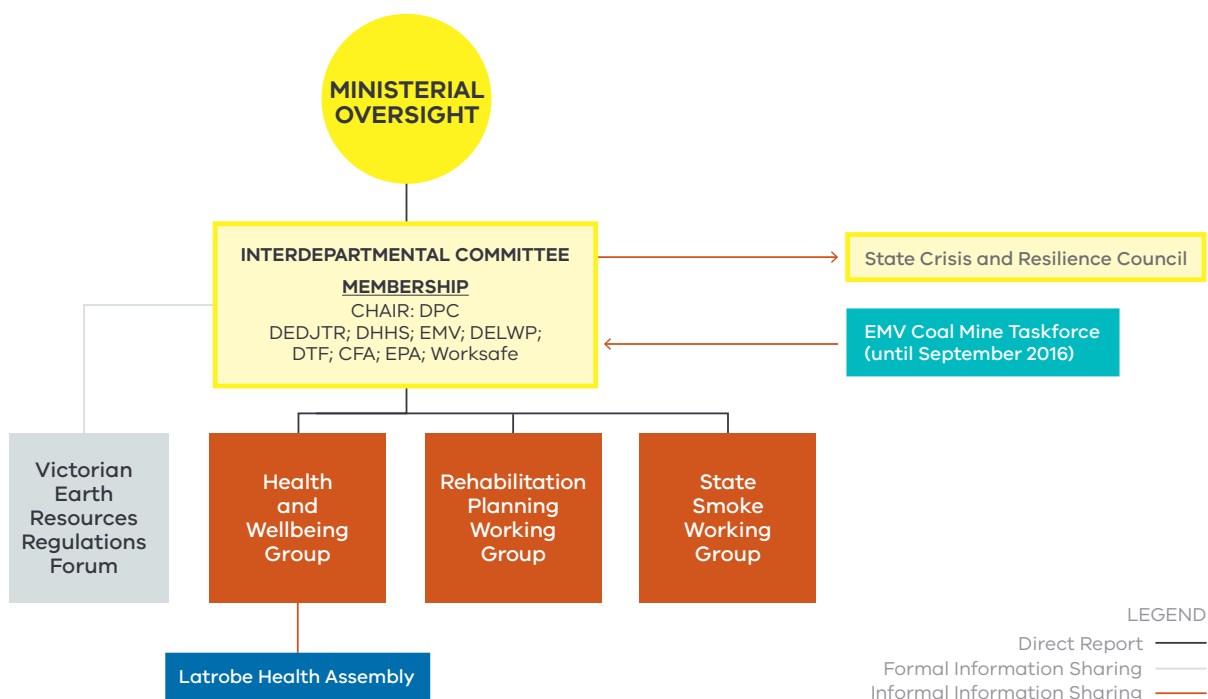


Figure 3.1: Governance structure for the Government's implementation of the Inquiry Reports' recommendations and affirmations

## MONITORING

- 3.11 This section sets out the mechanisms in place to monitor and publicly report on progress of implementation, which relates to:
- recommendation 1 of the 2014 Inquiry Report
  - recommendation 5 of the Death Investigations Report
  - recommendation 1 of the Health Improvement Report
  - recommendation 1 of the Mine Rehabilitation Report.

### OUTCOME FOR THE COMMUNITY

Annual progress reports on the implementation of the Inquiry Reports' recommendations and affirmations are publicly available, providing assurance to the Victorian community that the Government is meeting its commitment.

<sup>1</sup> The IDC does not assume the obligations of departments and agencies under this Plan.



### Future Government actions

- 3.12 The IGEM will monitor Government actions to implement the recommendations and affirmations in the Inquiry Reports, as set out in the Deliverable Table in Appendix 1.
- 3.13 The IGEM will also monitor:
- the six recommendations and 17 affirmations directed to the operator of the Hazelwood Coal Mine, ENGIE (formerly GDF Suez), in the 2014 Inquiry Report
  - the recommendations and affirmations directed to non-Government organisations and the Latrobe Valley Coal Mines in the reopened Inquiry Reports.
- 3.14 The IGEM's legislated objectives are to:
- provide assurance to the Government and the community in respect of emergency management arrangements in Victoria
  - foster continuous improvement of emergency management in Victoria.
- 3.15 Under the Emergency Management Act, the IGEM can monitor and report on implementation of recommendations from reports in relation to the emergency management sector, in whole or in part, at the request of the Minister for Emergency Services.
- 3.16 The Minister for Emergency Services requested the IGEM begin monitoring implementation of all recommendations and affirmations of the 2014 <sup>2</sup> and reopened Inquiry Reports.<sup>3</sup>
- 3.17 The IGEM will monitor progress of Government actions to implement the recommendations and affirmations as set out in the Deliverables Table in Appendix 1, until 2019.

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<sup>2</sup> The Minister for Emergency Services made two requests to the IGEM: first, to begin monitoring implementation of the 2014 Inquiry Report recommendations and affirmations by Government, in January 2016; and secondly, to begin monitoring implementation of the 2014 Inquiry Report recommendations and affirmations by ENGIE, in February 2016.

<sup>3</sup> The Minister for Emergency Services requested that the IGEM begin monitoring implementation of the reopened Inquiry Reports' recommendations and affirmations in June 2016.



# 4



# CHAPTER 4: COMMUNICATIONS AND COMMUNITY ENGAGEMENT

- 4.1 Effective communication and community engagement are key elements of successful implementation of all actions and deliverables detailed in this Plan.
- 4.2 This chapter details the Government's response to recommendations and affirmations in the 2014 and reopened Inquiry Reports that relate specifically to communication and community engagement. These are:
- recommendation 11 and affirmations 6 and 14 of the 2014 Inquiry Report, which relate to whole of Government communication during and after emergencies
  - recommendation 12 of the 2014 Inquiry Report, which relates to community engagement across the State
  - affirmation 20 of the 2014 Inquiry Report, which relates to communications by EPA at the State level and community engagement specific to the Latrobe Valley
  - recommendations 3 and 4 of the Death Investigations Report, and affirmations 26 and 33 of the 2014 Inquiry Report, which relate to communications and community engagement by DHHS.
- 4.3 Actions to improve and strengthen communication and community engagement are also detailed throughout the remaining chapters in this Plan.

## COMMUNICATIONS

- 4.4 This section addresses recommendation 11 and affirmation 14 of the 2014 Inquiry Report. The State will develop a whole of Government State Communications Strategy.

### OUTCOME FOR THE COMMUNITY

The Victorian community receives timely, tailored and relevant public information and warnings on emergency events so that they can make informed decisions about their safety.

### Completed Government actions

#### EMJPIC

- 4.5 EMJPIC is responsible for ensuring public information is coordinated and distributed in a timely and accurate manner to inform and advise community members during a major emergency. EMJPIC also ensures that media needs are met during major emergencies.<sup>1</sup>
- 4.6 EMJPIC's principal role includes:
- providing a coordinated and timely whole of government contribution to emergency management communications and community engagement in preparedness, response, relief and recovery for a major emergency
  - facilitating the delivery of capability, training and testing sessions for communications and media staff across emergency response agencies
  - developing or contributing to whole of government public information communications strategies and action plans for major emergencies.
- 4.7 EMJPIC membership includes all emergency response agencies.

<sup>1</sup> Appendix 12, Public Information via Media During Emergencies: The Role of EMJPIC, Emergency Management Manual Victoria.

4.8 EMJPIC's terms of reference were amended in June 2015 to include responsibility for coordinating appropriate stakeholders to assist in communications during emergency events, including from businesses and relevant industries.

4.9 EMV chairs and administers EMJPIC and the EMJPIC Executive.

#### ***EMJPIC Executive***

4.10 The EMJPIC Executive was established in late 2014 to oversee operational and tactical media and communications functions and set communications and engagement priorities across readiness, response, relief and recovery.

4.11 EMJPIC Executive reports to the EMC, who shares information with SCRC, and works with the three SCRC sub committees.

#### **Future Government actions**

4.12 EMV will develop and maintain a whole of Government State Communications Strategy to guide and support communications staff in applying an integrated whole of Government communications approach. The State Communications Strategy will be a living document that is reviewed annually and following a major emergency.

4.13 The development of the State Communications Strategy will be facilitated by the EMJPIC Executive, as the strategic executive body for crisis communications.

4.14 The State Communications Strategy will incorporate a mechanism for integrating private operators of essential infrastructure into public communications during emergency events which impact, or may potentially impact, their industry.

4.15 EMV will provide a consultation draft of the State Communications Strategy to EMJPIC members in July 2016.

4.16 EMV's draft State Communications Strategy will be tested at the 2016 Latrobe Valley Coal Mine Taskforce exercise, which will be held on 25 and 26 August 2016.

4.17 EMV will submit the State Communications Strategy to SCRC for approval at its 22 September 2016 meeting.

4.18 EMV will provide annual training to EMJPIC members on the State Communications Strategy, with the first sessions available in October 2016.

## **WHITE PAPER ACTIONS**

4.19 This section addresses affirmation 6 of the 2014 Inquiry Report which relates to implementation of actions set out in the White Paper <sup>2</sup> to improve community awareness and education, and make information more readily available during emergencies.

### **OUTCOME FOR THE COMMUNITY**

The Victorian community:

- has a single emergency management web portal to provide information and advice to assist them to prepare for, respond to and recover from emergencies
- is delivered official emergency broadcasts via commercial television, CALD media and other communication channels (such as internet based media)
- has a single all-emergencies telephone hotline to access information during emergencies.<sup>3</sup>

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<sup>2</sup> [http://www.dpc.vic.gov.au/images/images/featured\\_dpc/victorian\\_emergency\\_management\\_reform\\_white\\_paper\\_dec2012\\_web.pdf](http://www.dpc.vic.gov.au/images/images/featured_dpc/victorian_emergency_management_reform_white_paper_dec2012_web.pdf).



## Completed Government actions

### *VicEmergency*

- 4.20 The VicEmergency website, [emergency.vic.gov.au](http://emergency.vic.gov.au),<sup>3</sup> provides the Victorian community with access to information, warnings and advice on a single site to prepare for, respond to, and recover from all emergencies. Information, warnings and advice on the VicEmergency website is provided on a real time Google Maps display.
- 4.21 At VicEmergency, the Victorian community can follow the status of emergencies and access emergency news, weather, maps and up-to-date information about incidents through a single source. This supports the Government's all-communities, all-emergencies approach to emergency management.
- 4.22 The VicEmergency website underwent three upgrades, in September, October and December 2015. The VicEmergency website was utilised over the 2015/16 summer season as an all communities, all-emergencies platform for warnings and advice. Community members visiting the incident and warnings pages of individual Government departments and agencies were redirected to VicEmergency.

### *EM-COP*

- 4.23 In November 2015, EM-COP became an operational all-emergencies platform, which allows Victorian Government departments and agencies to issues warnings for the emergencies for which they are the control or coordination agency.

### *Broadcasting of warnings*

- 4.24 Victoria has formal arrangements for the broadcast of emergency warnings and information to the community, which include MOUs with ABC Local Radio, Victorian commercial radio broadcasters, Sky News television, UGFM Radio Murrindindi, Plenty Valley FM, Radio Mansfield, Alpine Radio, Stereo 974 FM, KLFM and Eastern FM. These outlets have all agreed to break into programming when necessary to broadcast emergency warning messages.

## Future Government actions

### *VicEmergency*

- 4.25 EMV will build a VicEmergency application for mobile devices, to replace the FireReady application<sup>4</sup> and transition to an all-communities, all-emergencies warnings service by October 2016.
- 4.26 EMV will align the current emergency-related call centre arrangements for all Government agencies and departments, so that the community receives the benefits of one public VicEmergency hotline.

### *EM-COP*

- 4.27 EM-COP will be rolled out for the 2016/17 summer season.
- 4.28 EM-COP provides situational awareness before, during and after an emergency and allows for the public dissemination of information and warnings.
- 4.29 Existing emergency management information systems will be integrated into EM COP, which will be available to all emergency management personnel.

### *Broadcasting of warnings*

- 4.30 EMV will continue to work with broadcasters seeking to be accredited as Emergency Broadcasters under the current arrangements.
- 4.31 EMV is working with the Islamic Council of Victoria to explore capabilities of Islamic radio to broadcast emergency warnings.

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<sup>3</sup> <http://emergency.vic.gov.au/respond>.

<sup>4</sup> The FireReady app is the official Victorian Government app for CFA, MFB and DELWP bushfire warnings and information. It does not provide advice and warnings for other types of emergency events, such as flood and severe weather warnings.

## COMMUNITY ENGAGEMENT

- 4.32 This section addresses recommendation 12 in the 2014 Inquiry Report. The State will develop a community engagement model to build community resilience to emergency events.

### OUTCOME FOR THE COMMUNITY

A continuously evolving community-based engagement model is in place in the Latrobe Valley, which brings together Government departments and agencies, Latrobe City Council and the Latrobe Valley community to identify trusted community networks and plan for emergency events. This will build the resilience of the Latrobe Valley community.

### Completed Government actions

- 4.33 EMV is leading the Latrobe Valley Community Engagement and Planning Project to support the community to become more connected and build resilience before, during and after emergencies.
- 4.34 The Latrobe Valley Community Engagement and Planning Project is based on the community engagement model developed by EMV, in collaboration with the Harrietville community, to support resilience building following the 2013 bushfires. The Harrietville community engagement model was developed to support the Harrietville community to build resilience through community-led emergency management planning.
- 4.35 The Harrietville community developed the Harrietville Community Emergency Management Plan, which identified five key focus areas to promote engagement:
- connect people and networks
  - use local knowledge
  - identify stresses and shocks
  - develop goals and solutions
  - continue to learn, share and improve.
- 4.36 The key focus areas to guide engagement and collaboration through the Community Based Emergency Management Model are shown in Figure 4.1:

### Community Based Planning and Engagement Model

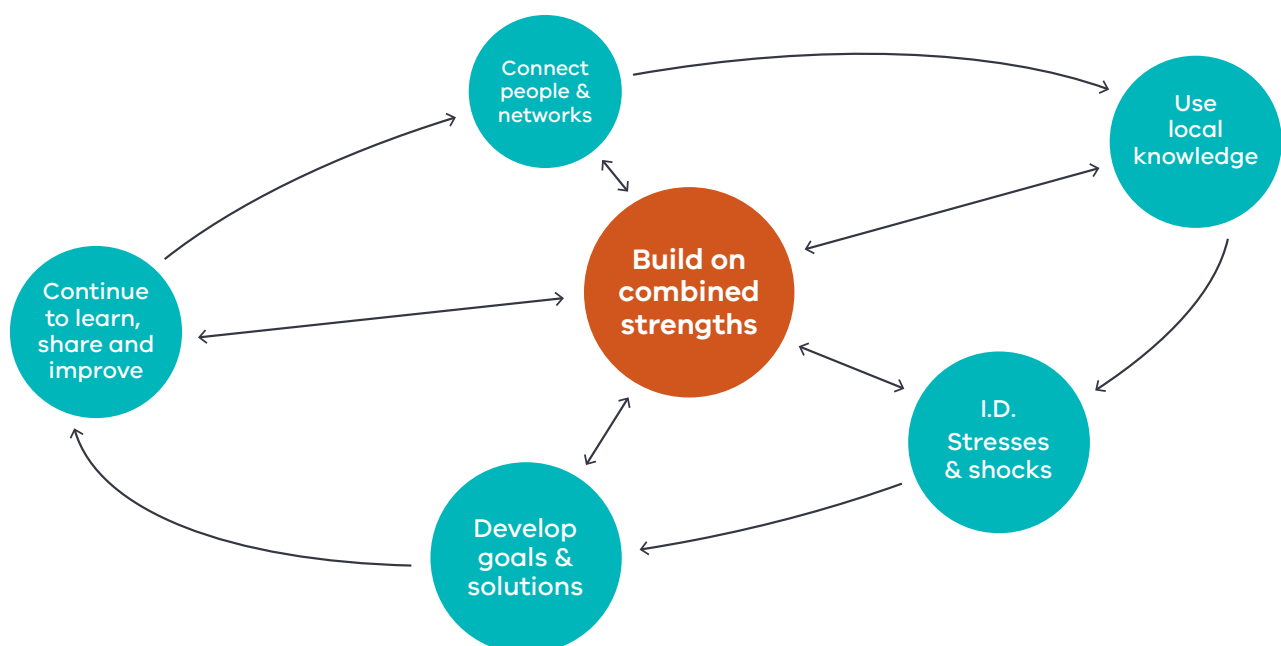


Figure 4.1: Key focus areas to guide engagement and collaboration through the Community Based Emergency Management approach

- 4.37 The Community-Based Emergency Management approach develops and strengthens community networks. It also supports community representatives to work with emergency management organisations to identify local priority risks and develop solutions utilising local knowledge, expertise and resources.
- 4.38 By promoting a strong focus on local community views and knowledge, the approach aligns with principles in the Emergency Management SAP<sup>5</sup> and the Regional Governance Model.<sup>6</sup>

#### Future Government actions

- 4.39 EMV will:
- engage a dedicated community engagement officer, to be based in the EPA regional office in Traralgon
  - develop a project plan for the Latrobe Valley Community Engagement and Planning Project
  - deliver the Latrobe Valley Community Engagement and Planning Project with the community.

## EPA EMERGENCY COMMUNICATIONS

- 4.40 This section addresses affirmation 20 of the 2014 Inquiry Report. EPA has reviewed its communications response during the Hazelwood Mine Fire.

#### OUTCOME FOR THE COMMUNITY

EPA is integrated into the State's emergency communications processes, supporting consistent and comprehensive emergency communications for the Victorian community.

#### Completed Government actions

- 4.41 Following the Hazelwood Mine Fire, EPA reviewed its approach to communications. Based on the review, EPA has revised its communications strategy and planning.
- 4.42 As a member of EMJPIC, EPA is now integrated into the State's emergency management communications structure and participates in specialised risk communications training.
- 4.43 EPA and DHHS have developed specific communication protocols for bushfire smoke advisories to communities and media, which have been integrated into the State's emergency management communications processes.
- 4.44 EPA formally documented its emergency communication role and responsibilities in the EPA Emergency Response Communications Protocol.

## EPA ENGAGEMENT WITH THE LATROBE VALLEY COMMUNITY

- 4.45 This section addresses affirmation 20 of the 2014 Inquiry Report, further to EPA Emergency Communications above. EPA has implemented a structured community engagement process and will continue to engage with the Latrobe Valley community.

#### OUTCOME FOR THE COMMUNITY

The community has access to easy-to-understand information on air quality in the Latrobe Valley.

Latrobe Valley community members are encouraged to participate in monitoring and build their understanding of the local environment through the EPA Citizen Science Program.

<sup>5</sup> <https://www.emv.vic.gov.au/plans/strategic-action-plan/>.

<sup>6</sup> <http://www.regions.vic.gov.au/>.

## Completed Government actions

### *Engagement and Communications*

- 4.46 To more effectively support community recovery, a structured communications and engagement approach for Morwell and surrounding communities was implemented, informed by feedback from the local community and social research. Two key focus areas were:
- the introduction of a pilot EPA Citizen Science Program
  - improving the way EPA communicates science and environmental monitoring information to the community.
- 4.47 The pilot Citizen Science Program has created opportunities for people in the community to participate in activities to build their skills and understanding of environmental monitoring, their environment and EPA's role. The program was co-designed with the local community through a reference group, which also guided the delivery of the program.
- 4.48 EPA engaged a local Latrobe Valley Citizen Science Co-ordinator, provided training for Latrobe Valley community groups, schools and individuals in air and water monitoring and donated hand-held air monitoring equipment to community members.
- 4.49 The pilot Citizen Science Program was evaluated in August 2015 through participant feedback. The evaluation found that 100 per cent of participants wanted to continue in the program; 76 per cent of participants reported a better understanding of EPA's role; and 89 per cent of participants reported a better understanding of science in general. This feedback is being used to inform future activities within the Citizen Science Program, both in the Latrobe Valley and across the State.
- 4.50 EPA has improved methods for communicating and conveying complex science data and environmental monitoring information. A section of the EPA website is now dedicated to providing data and recovery information for the Latrobe Valley community. EPA's main air quality web pages were also revised, with input and testing from community user groups, to make information clearer and more accessible. The community was kept informed and involved in EPA's environmental monitoring activities through social media, web updates, local media, presence at local community events and educational videos.
- 4.51 EPA has undertaken a range of community engagement activities, including regular meetings between EPA staff and local stakeholders, information sessions, a community round table, an open house event and EPA attendance at local forums and activities.
- 4.52 EPA completed a social network analysis to identify local community networks and their environmental information sources. A second round of social research was conducted in October 2015 to measure progress with recovery, communications and engagement activities.

### *Air quality monitoring*

- 4.53 During the Hazelwood Mine Fire and as part of the larger recovery effort, EPA implemented a program of air quality monitoring in locally affected areas. This included establishing temporary air quality monitoring sites in the southern area of Morwell, the eastern area of Morwell, Moe and Churchill.

## Future Government actions

### *Citizen science*

- 4.54 Through its Citizen Science Program, EPA will continue to create opportunities for people in the community to participate in activities to build their understanding of the environment and environmental monitoring, become actively involved in EPA's work and report issues that concern them to EPA.
- 4.55 EPA will review its activities under the Citizen Science Program to develop further opportunities to encourage increased community participation and ensure activities remain relevant to the local community.
- 4.56 EPA's information systems will be upgraded to collect data from a variety of sources in the Latrobe Valley, including Citizen Science monitoring and industry-based monitoring stations.

### Air quality monitoring

- 4.57 EPA will implement a co-design approach with the local community to develop a revised air monitoring network of five stations permanently located in the Latrobe Valley and a smoke sensor sub-network in the Latrobe Valley's smaller townships.
- 4.58 EPA will work with the local community to understand the environmental issues that affect them the most and co-design a longer-term air monitoring plan that can best meet the information needs of both EPA and the community.
- 4.59 Full transition from the current network of air monitoring stations located in Morwell, Moe, Churchill and Traralgon to the new network of air quality stations and smoke sensors, as developed under the community co-design process, will be completed by June 2018.
- 4.60 EPA will share information that is collected from the new air monitoring network, and the Citizen Science Program, online. Reporting on air quality and local air quality issues in the Latrobe Valley will be introduced and the findings will be discussed directly with the community through face-to-face engagement activities.



## HEALTH COMMUNICATIONS AND PUBLIC HEALTH INVESTIGATIONS

4.61 This section addresses:

- recommendations 2, 3 and 4 of the Death Investigations Report
- affirmations 26, 32, 33 and 36 of the 2014 Inquiry Report.

4.62 The Government will:

- implement processes to promote impartial and independent investigations of public health concerns
- implement processes for the development and delivery of transparent, reliable and appropriate health information and advice to the public
- improve engagement with the Latrobe Valley community on public health matters.

### OUTCOME FOR THE COMMUNITY

The Victorian community has access to expert advice and information on public health issues that is independent and is delivered transparently, reliably and appropriately.

### Completed implementation actions

#### *Public health investigations*

- 4.63 In November 2015, DHHS conducted refresher training for staff who procure or manage contracts for the delivery of independent expert advice. This refresher training had a strong focus on probity, including ethical conduct in procurement of contracts and how to avoid perceived conflicts of interest.
- 4.64 In January 2016, DHHS engaged an independent consultant to review the current policies and procedures for the procurement and management of contracts for independent expert advice.
- 4.65 The review examined:
- staff understanding of and approaches to the procurement and management of contracts
  - ways to strengthen the operating arrangements in relation to procurement and contracting activities, including maintenance of a culture most conducive to best practice contract management
  - how potential conflicts of interest are best managed in engaging expert advice
  - systemic learnings that may assist the department more broadly and if any improvements are required to the current systems, processes and training to support procurement activities for the engagement of independent expert advice
  - whether there are specific issues that need to be addressed in emergency management situations
  - the practices in the Health Protection Branch and Office of the CHO relating to expert advice engagements.
- 4.66 The independent consultant delivered its report in March 2016, which made recommendations for strengthening the current procurement and management arrangements.

#### *Public health information and advice*

- 4.67 DHHS has conducted a review to identify the departmental structures for communications teams working on health-related incidents and emergencies. The review concluded that many areas of DHHS release public health and emergency management information and advice to the community. The review identified an opportunity to streamline communications by increasing coordination of all communications-related activities.



- 4.68 Based on the findings of the review, a new Communications Health and Emergency Management Team was created within the Communications and Media Branch. The Communications Health and Emergency Management Team provides strategic direction and oversight for all public health and emergency management communications originating from DHHS by integrating relevant communications teams across DHHS. Integrating these functions allows for greater surge capacity in emergencies and links the central communications, digital and media functions of all teams. This consolidation of expertise makes the best use of resources and supports consistent messaging to the community.
- 4.69 The new structure commenced on 18 January 2016, and promotes a consistent and coordinated approach to health communications across DHHS.
- 4.70 DHHS information published on its health and medical information site, the Better Health Channel<sup>7</sup> and the sector site, health.vic,<sup>8</sup> was audited by a working group comprised of staff from the Office of the CHO, the Communications Health and Emergency Management Branch and the Sector and Community Engagement Branch. The audit identified and reviewed all existing emergency and public health content, which was then updated for style, tone, depth and accuracy.
- 4.71 DHHS has implemented new processes and protocols for the creation and publication of emergency and public health content, including standard messaging templates to facilitate immediate responses to emergencies. These standard messages can then be updated as more information becomes available. This facilitates the delivery of expeditious and appropriate messaging to the community.
- 4.72 In November 2015, a Senior Science Policy Adviser was appointed to focus on supporting communities before, during and after smoke events. The Senior Science Policy Adviser led the development of new communications material on smoke and health for the 2015/16 summer season. This material included posters, videos and factsheets,<sup>9</sup> which were developed following community focus testing and are available electronically. Where appropriate, posters and factsheets have been translated for CALD communities.

### ***Community Engagement***

- 4.73 During the 2015/16 summer season, DHHS implemented a local 'smoke and your health' engagement strategy designed specifically for the Latrobe Valley community. The strategy was designed and implemented in collaboration with Latrobe City Council, Latrobe Community Health Service, Latrobe Regional Hospital, Gippsland PHN, Gippsland Multicultural Services, CFA District 27, DEWLP and EPA. The delivery of 'smoke and your health' in the Latrobe Valley allowed DHHS to develop approaches for utilising local networks, influencers, known and trusted local people and stakeholders to engage with the community about the public health issues associated with exposure to smoke from fires.
- 4.74 Delivery of the local engagement plan in the Latrobe Valley included:
- communications workshops with local agencies and consultation with community groups including the Latrobe Positive Ageing Reference Group, Voices of the Valley and Morwell Neighbourhood House
  - two information sessions with CFA Community Education Coordinators and subsequent distribution of 'smoke and your health' information through CFA Planned Burn information packs
  - provision of posters, emails and social media content to early years settings and primary secondary schools, community groups and in medical settings such as GP clinics, pharmacies and health centres
  - face-to-face presentation of 'smoke and your health' information at four local community forums hosted by Gippsland Multicultural Services, and delivery of information to Home and Community Care patients and Meals on Wheels clients
  - translation of 'smoke and your health' information into four languages specifically for Latrobe Valley communities
  - active promotion of information through the Better Health Channel, Latrobe City Council, Voices of the Valley, Morwell Neighbourhood House and Latrobe Regional Hospital social media channels.

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<sup>7</sup> <https://www.betterhealth.vic.gov.au/>.

<sup>8</sup> <https://www2.health.vic.gov.au/>.

<sup>9</sup> <https://www2.health.vic.gov.au/Api/downloadmedia/%7BD069C9E2-692E-42F0-A7D6-0806844DAD3F%7D>.

## Future implementation actions

### *Public health investigations*

- 4.75 DHHS has accepted the findings and recommendations of the consultant report on DHHS' contract procurement and management policies and procedures. DHHS will develop and deliver a plan to implement the findings and recommendations, which will include detailed timing of implementation activities.

### *Public health information and advice*

- 4.76 DHHS is developing a State Smoke Framework Community Engagement Strategy to improve the way DHHS engages and communicates with the public on the potential health impacts of smoke.
- 4.77 The State Smoke Framework Community Engagement Strategy will be supported by an implementation plan, which will outline the target groups, methods of engagement and timeframes until November 2017. It will focus on practical advice and support materials to inform the proactive steps that the community can take to minimise the harmful effects of smoke and protect their health.
- 4.78 DHHS will also evaluate the communications materials on 'smoke and your health' and evaluate how well these were received by the community.
- 4.79 The evaluation will test the effectiveness of the current 'smoke and your health' campaign and seek feedback on the current range of communication platforms and channels used to convey these messages. The evaluation of 'smoke and your health' communications materials will inform the development of new material for the 2016/17 summer season.

## DELIVERABLES

- 4.80 The lead agencies for delivery of Communications and Community Engagement are EMV, DHHS and EPA.
- 4.81 The deliverables for specific actions are set out in actions 6 to 45 of the Deliverables Table in Appendix 1.





5



# CHAPTER 5: HEALTH IN THE LATROBE VALLEY

- 5.1 This chapter outlines the actions that the Government will undertake to work collaboratively with the Latrobe Valley community to improve health and wellbeing outcomes for residents. This chapter details:
- the Government's response to the need for health innovation in the Latrobe Valley
  - the Long Term Health Study, which is investigating the medium and long term health impacts of exposure to smoke from the Hazelwood Mine Fire on residents of Morwell and the Latrobe Valley
  - the Government's plan for responding to the Morwell community's concern regarding coal ash residue in roof cavities.
- 5.2 The Health and Wellbeing Working Group oversees and coordinates implementation of actions and deliverables relating to health innovation, and provides an additional forum for broader communication about community engagement activities and strategies.
- 5.3 The Health and Wellbeing Working Group is chaired by DHHS, with support from DPC, and has representation from DELWP, DET, EMV, EPA and others as required. The Health and Wellbeing Working Group meets quarterly in the Latrobe Valley and more often as required.

## HEALTH INNOVATION

- 5.4 This section addresses:
- recommendations 2 through 5 inclusive, 8 and 10 and affirmation 5 of the Health Improvement Report
  - recommendation 2 of the Death Investigations Report
  - affirmation 26 of the 2014 Inquiry Report.
- 5.5 The State will:
- designate Latrobe Valley as the Latrobe Valley Health Zone
  - establish a Latrobe Health Assembly and executive Board to promote, support and oversee the development of the Latrobe Valley Health Zone
  - appoint a Health Advocate
  - engage with the community to identify local health priorities
  - support and fund the development and delivery of health improvement strategies to address health priorities.

### OUTCOME FOR THE COMMUNITY

The Latrobe Valley is designated as the Latrobe Valley Health Zone.

The Latrobe Valley community is engaged in the Latrobe Health Assembly to work with Latrobe City Council, local agencies, business leaders and Government to identify local health priorities and implement health programs

## Completed Government actions

### *Latrobe Valley Health Zone*

- 5.6 The Latrobe Valley has been designated as the Latrobe Valley Health Zone.
- 5.7 This designation will drive innovation in the development and delivery of health services and health improvement programs, supported by the Latrobe Health Assembly.

### *Governance and community engagement*

- 5.8 DHHS held round table discussions with a broad range of service providers in April and May 2015 to consider the Health Conservation Zone and Health Advocate proposals, which were put forward by the Inquiry in the 2014 Inquiry Report as 'proposals warranting serious consideration'.<sup>1</sup>
- 5.9 DHHS has employed a dedicated community engagement officer for the Latrobe Valley, based in Traralgon, and has commenced work on a community engagement strategy.
- 5.10 DHHS is working with Latrobe City Council to support recovery and resilience building activities in Morwell. DHHS provided Latrobe City Council with \$373,000 in 2014 to support initial Hazelwood Mine Fire recovery activities, and a further \$100,000 to undertake door-knocking and household surveys and subsequent discussion workshops to build a body of knowledge about the Morwell community.
- 5.11 Work will soon commence on the development of the Latrobe MPHWP Plan 2017-21. The Latrobe Health Assembly will work with Latrobe City Council to align the Latrobe MPHWP Plan 2017-21 with themes that emerged from the Health Improvement Report.

### *Engagement with the Commonwealth*

- 5.12 In February 2016, the Victorian Minister for Health wrote to the Federal Minister for Health identifying the importance of the Health Improvement Report and seeking support for future funding for the Latrobe Valley, in line with the reopened Board of Inquiry's findings in the Health Improvement Report.
- 5.13 In April 2016, the Federal Minister for Health replied, noting that the Commonwealth was familiar with the Inquiry's Health Improvement Report and the contribution of the Gippsland PHN to the medical services for the Latrobe Valley community. The Commonwealth provided flexible funding to the Gippsland PHN to respond to specific priorities and needs of the Gippsland region.
- 5.14 DHHS has also actively engaged with the Gippsland PHN, which will play a key role in commissioning Commonwealth funding in mental health, drugs and a range of other key services.

## Future Government actions

### *Governance and community engagement*

- 5.15 By July 2016, the Health and Wellbeing Working Group will establish a time-limited Latrobe Health Taskforce to facilitate the appointment of the independent Latrobe Health Assembly.
- 5.16 The Latrobe Health Taskforce will be chaired by DHHS and be open to representatives from Latrobe City Council, Latrobe Community Health Service, Latrobe Regional Hospital, the Gippsland PHN and others, as appropriate.
- 5.17 The Latrobe Health Taskforce will meet monthly, and will:
  - by August 2016, develop an engagement strategy to guide the establishment of the Latrobe Health Assembly
  - by October 2016, support the establishment of the membership of the Latrobe Health Assembly
  - by October 2016, lead development of an operating model and supporting documentation (including proposed terms of reference) in partnership with the community, to support the establishment of the Latrobe Health Assembly
  - recruit an initial local team to support the work of the Latrobe Health Taskforce and Latrobe Health Assembly.

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<sup>1</sup> 2014 Inquiry Report, page 38.

- 5.18 The Latrobe Health Assembly will include representatives from the community, business, service providers and government departments.
- 5.19 The functions of the Latrobe Health Assembly will be refined in consultation with the community, but will include:
- assisting in the development and design of the role and responsibilities of the Health Advocate, and facilitating the appointment of a Health Advocate
  - leading local health planning and priority setting in active partnership with the local community
  - creating local, community-led responses to priority health issues
  - embedding community engagement through all elements of its operation and that of the broader healthcare service system
  - collecting and reporting on progress made and outcomes achieved, working with local partners and the community to identify what measures will be meaningful and useful.
- 5.20 DHHS will develop an evaluation framework and plan by June 2017, which will enable evaluations of the work of the Latrobe Health Assembly.

### *Engagement with the Commonwealth*

- 5.21 DHHS will engage with the Commonwealth and propose the Gippsland region as its preferred site for the Commonwealth Healthcare Home and COAG chronic disease integration trials.

### *Changes to the pattern of health investment in the Latrobe Valley*

- 5.22 The Latrobe Valley Health Zone, and the work of the Latrobe Health Assembly, will result in changes to the pattern of investment in health services in the Latrobe Valley.
- 5.23 The Government will support innovation in the delivery of:
- prevention and health improvement initiatives
  - early detection and screening programs
  - chronic disease management
  - mental health services
  - initiatives to increase access to specialist services.

### *Prevention and health improvement initiatives*

- 5.24 Prevention refers to initiatives designed to prevent poor health occurring by tackling underlying causes of ill health or changing patterns of behaviours to reduce the risk of illness.
- 5.25 Contemporary prevention approaches advocate for:
- strong community involvement in responding to identified health and wellbeing challenges
  - local approaches to identifying priorities and developing solutions
  - sustained investment in multiple strategies across multiple settings to improve health
  - population-level approaches to create lasting policy and environmental changes combined with targeted approaches for those at higher risk or greater vulnerability.<sup>2</sup>
- 5.26 DHHS will draw together available data and evidence, including that from other local approaches such as Healthy Together Latrobe, and provide this to the Latrobe Health Taskforce and Latrobe Health Assembly to inform the approach to prevention under the Latrobe Valley Health Zone, by July 2016.

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<sup>2</sup> Peeters A undated, Exploring the relationship between social disadvantage and obesity, Baker IDI, Melbourne, viewed 22 January 2016, <http://admin.bakeridi.edu.au/Assets/Files/Baker-IDI-Perspectives-Forum-Exploring-relationship-between-social-disadvantage-and-obesity-Peeters.pdf>; Dobbs R, Sawers C, Thompson F, Manyika J, et al. 2014, Overcoming obesity: an initial economic analysis, McKinsey and Company, viewed 27 January 2016, [www.mckinsey.com/insights/economic-studies/how\\_the\\_world\\_could\\_better\\_fight\\_obesity](http://www.mckinsey.com/insights/economic-studies/how_the_world_could_better_fight_obesity).



- 5.27 The approach to prevention will include a focus on collective impact approaches that align efforts, delivered through local partnerships and will be overseen by the Latrobe Health Assembly. To promote consistency in prevention planning, the Latrobe Health Taskforce and the Latrobe Health Assembly will seek to partner with Latrobe City Council in the development of the Latrobe MPHWP Plan 2017-21.
- 5.28 The Government will invest in initiatives to engage local agencies and the community to develop prevention initiatives. These initiatives will focus on the settings where people live and experience their daily lives including school and early childhood settings, workplaces, community infrastructure and residential care. These initiatives will be determined in collaboration with the community and delivered consistent with the Latrobe MPHWP Plan 2017-21, and will include:
- initiatives across early childhood services and school communities, to create healthier communities for children, focusing on developing lifelong positive and healthy habits
  - initiatives in workplaces, to support a stronger, healthier and more productive workforce in the Latrobe Valley for the long term
  - community-based initiatives, to support healthy living
  - additional support to strengthen strategies and policies of the Latrobe City Council, to deliver health improvements across all aspects of the community, including urban planning, tracks, trails and pathways, smoke-free environments and food procurement.



#### *Early detection and screening*

- 5.29 Screening refers to a variety of processes and tools aimed at identifying early signs and precursors of disease to prevent further disease progression through early intervention services.
- 5.30 DHHS will review the current screening practices and services in the Latrobe Valley by December 2016. The outcomes of this review will be used to develop a strategy and implementation plan to improve access to screening services, in partnership with the Latrobe Health Assembly.
- 5.31 DHHS will support the Gippsland PHN to develop pathways for the diagnosis and management of priority chronic diseases, such as diabetes, anxiety and depression, respiratory disease and cancer. The first pathway will be available for use by general practitioners by July 2017.
- 5.32 DHHS will also partner with the Gippsland PHN to promote and increase the use of existing systems in primary care settings to assist healthcare providers to identify clients for screening.

- 5.33 DHHS will work with the Latrobe Health Assembly to develop priority pathways for patient follow-up where the risk of disease is identified through health screening activities. By December 2017, the Latrobe Health Assembly and DHHS will promote these pathways to Latrobe Valley health practitioners.
- 5.34 The Government will invest in a smoking cessation initiative. By December 2016, DHHS, in consultation with local health practitioners and other relevant stakeholders, will develop a plan for implementing a system-wide approach to encourage health professionals to ask patients about their smoking and offer support to quit.
- 5.35 The smoking cessation initiative will be implemented in 2017, in partnership with the Latrobe Health Assembly, the community and stakeholders.

#### ***Enhancing priority services – chronic disease***

- 5.36 By December 2016, DHHS will establish a Chronic Disease Improvement Forum to report to and assist the Latrobe Health Assembly. The Chronic Disease Improvement Forum will identify priorities for improving the design and utilisation of care pathways to improve coordination of services for people with chronic disease. This will build on the care pathway work developed to support intervention and screening.
- 5.37 DHHS will work with the Latrobe Health Assembly to support take-up of the approach to care pathways by general practitioners and others involved in the diagnosis and management of chronic disease, including statewide peak bodies.
- 5.38 DHHS will expand two programs providing specialised health services: the respiratory nursing service and the early intervention in chronic disease program. DHHS will provide funding for the Latrobe Community Health Services to deliver:
- additional respiratory nursing services
  - additional hours of allied health and care coordination services.
- 5.39 DHHS will invite primary health agencies to investigate options for the co-location of respiratory nurses within general practices in Latrobe Valley by July 2017.

#### ***Expanding priority services – mental health***

- 5.40 DHHS will establish a Latrobe Valley Community Mental Health Forum by December 2016 to report to and assist the Latrobe Health Assembly. The Community Mental Health Forum will identify priorities for investment of new funding and opportunities to align funding streams to support locally responsive models of mental health support and treatment.
- 5.41 There will be an initial focus on priorities that have already been identified, such as delivery of mental health first aid courses and increasing awareness and understanding of mental health issues and available supports.
- 5.42 The Latrobe Health Assembly will engage with the community to determine priorities for investment, with funding support from the Government. In response to priorities for investment that have already been identified, the Government will fund:
- by January 2017, the development of strategies to increase awareness and community understanding of mental health issues and where and how to access mental health services
  - by July 2017, the development and delivery of programs to increase awareness of mental health issues
  - development and delivery, in partnership with health and community sector representatives, of an approach to build workforce skills in primary mental health service delivery, which will involve mentoring, supervision and training (where required) in managing mental health issues associated with chronic disease.

### *Expanding priority services – access to specialists*

- 5.43 Telehealth refers to the provision of health services using technology, such as telephone and videoconferencing, so that the patient and the health service professional do not need to be in the same room. For regional areas of Victoria, where access to specialist medical care may be limited, telehealth is an innovative health service delivery strategy.
- 5.44 The Government will increase the capacity of telehealth to increase access to specialist health services and decrease patient travel time.
- 5.45 The Latrobe Health Assembly will work with the community to identify priorities around access to specialist health services.
- 5.46 DHHS will work with the Latrobe Health Assembly and provide funding to enable health services to implement models to improve access to specialist care for patients with complex healthcare needs so that conditions can be more actively managed. This includes alternative service models such as home-based care and telehealth where appropriate.
- 5.47 DHHS will work with the Latrobe Health Assembly and other key stakeholders to develop and implement a marketing campaign to promote telehealth to the Latrobe Valley community as an option for accessing health services.
- 5.48 DHHS will work with health service providers to enable telehealth capacity at more points of primary and acute healthcare.
- 5.49 DHHS will work with the Latrobe Health Assembly to develop and deliver telehealth education and training packages to health service providers in the Latrobe Valley.

## ABORIGINAL HEALTH

- 5.50 This section addresses recommendation 7 of the Health Improvement Report, which relates to the need for specific innovation and support for the Latrobe Valley Aboriginal community.
- 5.51 The Government will:
- give a greater voice to the Aboriginal community in determining health programs and investments affecting the community
  - recognise the need for culturally appropriate health and community services and facilities and work to implement appropriate initiatives.
- 5.52 Innovation and initiatives will aim to achieve a significant and measurable impact on improving the length and quality of life for Aboriginal people consistent with the Victorian Government objectives to:
- close the gap in life expectancy for Aboriginal people living in Victoria
  - reduce the differences in infant mortality rates, morbidity and low birth weights between the general population and Aboriginal people
  - improve access to services and outcomes for Aboriginal people.

### OUTCOME FOR THE COMMUNITY

The Latrobe Valley Aboriginal community has access to culturally-appropriate health services that respond to their health and wellbeing needs, as identified in collaboration with the community.



## Completed Government actions

### *Latrobe Local Aboriginal Community Partnership Project*

- 5.53 Sponsored by DHHS, the Latrobe Local Aboriginal Community Partnership Project brings together representatives from the Latrobe Valley Aboriginal communities, government agencies and service providers.
- 5.54 With an emphasis on community led decision-making, the objectives of the Latrobe Local Aboriginal Community Partnership Project are to strengthen families and communities with a focus on improving maternal health, early childhood health, employment, education outcomes and economic development as identified by the local Aboriginal community.
- 5.55 In 2015, the Latrobe Local Aboriginal Community Partnership Project was involved in:
- promoting anti-family violence and anti-drug messages through the 'Enough is Enough' event held in Morwell
  - youth-specific activities, such as:
    - two Inspiring Young Koorie People dinners attended by approximately 60 young people
    - a three-day workshop on Youth Leadership and Corporate Governance where nine up-and-coming community role models completed the accredited training
    - two Deadly XFactor talent shows attended by over 70 people.

### *Health, sports and recreation*

- 5.56 As part of the implementation of Koolin Balit: Victorian Government Strategic Directions for Aboriginal Health 2012-2022, the Government is supporting delivery of the 'Deadly Sport Gippsland' and oral health project in Gippsland.
- 5.57 'Deadly Sport Gippsland' is delivered by GippSport in partnership with a range of Aboriginal and sporting organisations. The initiative promotes healthy lifestyles and early detection activities through social media by embedding health messages into the promotion of Aboriginal sporting events and participation. The 'Deadly Sport Gippsland' initiative has a significant reach in the local Latrobe Valley Aboriginal community, with the Facebook page having over 1,700 followers.
- 5.58 Ramahyuck District Aboriginal Corporation is delivering an Aboriginal oral health project in partnership with the Latrobe Community Health Service. It aims to:
- increase teeth-brushing rates among Aboriginal children
  - decrease the consumption and raise awareness of the impacts of, and alternative options to, sugary drinks
  - increase the number of Aboriginal children having oral health/dental check-ups through the implementation of mobile services.
- 5.59 Screening has been conducted in Gunai Lidj Multifunctional Children's Services and the Dala Lidj Woolum Bellum Kindergarten and regular teeth-brushing programs are being promoted. Early childhood service providers, Aboriginal health workers and maternal and child health workers have been trained through the 'Bigger Better Smiles Program' to strengthen oral health promotion and screening as part of their service model.

- 5.60 Budjeri Napan (good food good tucker) Association Incorporated is recognised as the leader in Aboriginal Sport Programs for the Latrobe Valley. Budjeri Napan is supported by Sport and Recreation Victoria and aims to promote a healthy, active and vibrant Aboriginal community in the Latrobe Valley. Budjeri Napan has formed a sports committee to:
- improve health through encouraging a healthy, active lifestyle
  - create opportunities for community participation
  - celebrate Aboriginal culture
  - identify and support leadership
  - build relationships between community, local organisations, service providers and the broader community
  - promote potential pathways in sport, education and training
  - recognise and promote the achievements of Aboriginal groups and individuals.<sup>3</sup>
- 5.61 The Budjeri Napan Committee is made up of local Aboriginal members and support organisations that meet on a regular basis to plan and develop a range of products. Current programs of Budjeri Napan include:
- Gippsland Sports Forum, in partnership with GippSport, held in April 2016
  - Koorie Women's Fitness Program
  - Koorie Boxercise Program
  - AFL 9's and Koorie Auskick Community Day, held in March 2016
  - Harmony 8's Cricket Junior Programs, run with Cricket Victoria and Sport and Recreation Victoria.

#### **Future Government actions**

- 5.62 The Government will continue to implement Koolin Balit and improve cultural awareness and competence with agencies and health services.
- 5.63 The Government will provide support to implement initiatives to address health priorities identified by the local Aboriginal community. This will provide the flexibility necessary to be responsive to the needs of the Aboriginal community.
- 5.64 The Latrobe Health Assembly will build upon the existing work being undertaken to support the local Aboriginal community to:
- identify health priorities for investment
  - investigate the possibility of creating a gathering place.
- 5.65 Budjeri Napan is expanding into other areas of recreation opportunities. This expansion will continue to build on the principle of promoting healthy lifestyles to encourage long-term relationships of trust between the Aboriginal community, health professionals and other organisations.

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3 [http://www.foxsportspulse.com/assoc\\_page.cgi?c=1-6084-0-0-0&sID=85721](http://www.foxsportspulse.com/assoc_page.cgi?c=1-6084-0-0-0&sID=85721).

## LONG TERM HEALTH STUDY

- 5.66 This section addresses:
- recommendation 10 of the 2014 Inquiry Report
  - affirmations 25 and 28 of the 2014 Inquiry Report
  - recommendation 6 of the Health Improvement Report.
- 5.67 The State has commissioned the Long Term Health Study to investigate the medium and long-term health impacts of exposure to smoke from the Hazelwood Mine Fire on the Latrobe Valley community.
- 5.68 The State will:
- review the governance arrangements for the Long Term Health Study to ensure they promote independence and community engagement
  - review the scope of the Long Term Health Study to consider the proposal to extend the scope of the Adult Survey to first responders to the Hazelwood Mine Fire who are not residents of Morwell and other cohorts.

### OUTCOME FOR THE COMMUNITY

The community is participating in the Long Term Health Study, which is investigating the medium and long-term health impacts of exposure to smoke on the Latrobe Valley community.

### Completed Government actions

#### *Long Term Health Study*

- 5.69 On 30 October 2014, following a formal engagement process, a consortium of researchers led by Monash University was appointed to undertake the Long Term Health Study. The contract with Monash University ensures appropriate competencies and experience in epidemiology, environmental health risk assessment, air quality and toxicology, infant and child health (University of Tasmania) and community engagement, wellbeing and resilience (Federation University) are applied during the Long Term Health Study.<sup>4</sup>
- 5.70 Monash University has established governance arrangements for the Long Term Health Study, which include:
- a Community Advisory Committee, comprising representatives from the Latrobe Valley community, health and community service providers and Latrobe City Council
  - a Clinical Reference Group, comprising key clinicians from the local region who provide advice on the clinical aspects of the research
  - a Scientific Reference Group, which oversees and contributes to the methodological framework of the study
  - a Project Management Group, comprising the principal investigators and research leaders, which monitors the progress of the study and reports to the Project Steering Committee
  - a Project Steering Committee.<sup>5</sup>

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4 <https://www.tenders.vic.gov.au/tenders/contract/view.do?id=21994&returnUrl=%252Fcontract%252Flist.do%253F%2524%257Brequest.queryString%257D>.

5 <http://hazelwoodhealthstudy.org.au/about/governance/>.

### *Community engagement*

- 5.71 The Community Advisory Committee meets on a quarterly basis and includes local community members selected as part of an open expression of interest process. The local community members are currently a community science educator, the Morwell Neighbourhood House Coordinator and two local teachers. There are two community members from Sale, which is the comparative control sample for the Long Term Health Study Adult Survey. The Community Advisory Committee also has nominated organisational representatives from Latrobe City Council, Wellington Shire Council, Federation University, Latrobe Community Health Service Board, the Latrobe Regional Hospital Board, Central Gippsland Health Service and the Office of the CHO.<sup>6</sup>
- 5.72 As a part of the reporting requirements under Monash University's contract, an annual community briefing is prepared and included in the Long Term Health Study annual report. All annual reports are made public.
- 5.73 As part of the commitment to reporting and community engagement Monash University launched the Hazelwood Health Study website on 1 June 2015.<sup>7</sup> The website aims to provide the community with a centralised point of information about the Long Term Health Study and includes information on the Long Term Health Study's timeline and locations. Members of the public also have the option to subscribe to newsletters.

### *Design of the Long Term Health Study*

- 5.74 The Long Term Health Study has five study areas investigating the impact of the Hazelwood Mine Fire:
- Latrobe Early Life Follow Up Study, which is investigating the impacts of exposure to smoke during pregnancy or infancy and on the health and development of children in the Latrobe Valley
  - Older Persons Study, which is investigating the impacts of the smoke event on older people and a review of policy decisions made during the event that affected older people
  - Community Wellbeing Study, which is gathering community perceptions of the most significant changes since the smoke event and the key feature of effective communication
  - Schools Study, which is investigating any ongoing psychological impacts of exposure to smoke in school-aged children, and exploring other educational and wellbeing outcomes
  - Adult Study, which is investigating whether there are any long-term health effects by comparing exposure and health outcomes of adults who were residents of Morwell with a similar population in Sale who had minimal exposure to the Hazelwood Mine Fire.<sup>8</sup>

## **Future Government actions**

### *Long Term Health Study*

- 5.75 Monash University is engaged to undertake the Long Term Health Study for a three-year period (to end on 30 October 2017), with three two-year options to extend and a final one-year option to extend.
- 5.76 Each year of the contract, Monash University must meet all performance measures stipulated in the contract document before DHHS makes milestone payments or exercises options to extend the contract.
- 5.77 The Government is committed to a 20-year Long Term Health Study, as recommended by the 2014 Inquiry Report and the Health Improvement Report.

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6 <http://hazelwoodhealthstudy.org.au/about/governance/community-advisory-committee/>.

7 <http://hazelwoodhealthstudy.org.au/about>.

8 <http://hazelwoodhealthstudy.org.au/research-areas/>.

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### *Review of the scope of the Long Term Health Study*

- 5.78 A contractor has been engaged to undertake:
- a cost benefit analysis of the Inquiry's proposal to extend the Long Term Health Study to include emergency responders to the Hazelwood Mine Fire who are not residents of Morwell
  - a review of the scope and structure (methodology) of the five study areas
  - a review of the scope and structure of the governance groups
  - a review of the process whereby key health information obtained through the Long Term Health Study about the health status of the population and the health effects of the Hazelwood Mine Fire is provided to the study participants, the community and local health practitioners and the Latrobe Valley Health Assembly
  - a review of the process whereby policy-relevant health information obtained through the Long Term Health Study is considered by the Government for action to improve the health of the Latrobe Valley and other populations in Victoria.
- 5.79 The contractor will provide a report to DHHS by July 2016, making recommendations as to the optimal governance, oversight and structure of the Long Term Health Study to:
- achieve the aims and objectives
  - ensure independence
  - ensure meaningful community engagement
  - ensure key health information is accessible.
- 5.80 DHHS will publicly release the consultant report.
- 5.81 DHHS will review the report and all recommendations and determine the next appropriate step. The scope and structure of the Long Term Health Study may be amended to ensure that they meet the aims and objectives.

## **ASH IN ROOF CAVITIES**

- 5.82 This section addresses recommendation 9 of the Health Improvement Report, which relates to ash in roof cavities in houses in Morwell.
- 5.83 The Government will:
- commission an analysis of the ash contained in roof cavities in houses in Morwell and publish the results of that analysis, together with clear advice about the potential known or unknown health effects
  - if the analysis of the ash in roof cavities reveals any content that is potentially hazardous to health, or of unknown impact on health, conduct an audit of the extent of the exposure to ash and develop an action plan of next steps.

### **OUTCOME FOR THE COMMUNITY**

Roof cavities in Morwell are randomly sampled and the results of the analysis are publicly released to the community. The Latrobe Valley community is informed of the sampling and analysis, with next steps determined in consultation with the community and the Latrobe City Council.

### Completed Government actions

- 5.84 During and after the Hazelwood Mine Fire, EPA collected and analysed ash samples from several open locations around Morwell.
- 5.85 EPA analysed the ash samples for a suite of potential contaminants, including metals, polycyclic aromatic hydrocarbons, halogenated volatiles, solvents and monocyclic hydrocarbons. EPA published the results of the sampling and analysis on its website in September 2014. The results showed that contaminant levels were below the levels of concern, based on the relevant environmental standards. This earlier analysis by EPA will help inform the analysis of ash in roof cavities.

### Future Government actions

- 5.86 DHHS will develop a project proposal that outlines the proposed approach to conducting a risk assessment. This will involve designing a project plan that includes random sampling of roof cavities in Morwell for ash.
- 5.87 DHHS will engage an independent consultant to:
- peer review the project plan, including the detailed methodology and, if necessary, make recommendations to amend
  - contract an occupational hygienist to collect and analyse samples from roof cavities of randomly selected homes in Morwell
  - analyse available data and information on ash and roof cavity contamination
  - assess potential exposure pathways for residents
  - prepare a report, that:
    - interprets the results of the occupational hygienists' sampling and analysis
    - assesses the potential exposure pathways
    - recommends next steps for DHHS.
- 5.88 The independent consultant report will be made public.
- 5.89 Any subsequent steps are dependent upon the recommendations made in the independent expert's report and will be decided in collaboration with EPA, Latrobe City Council and the Latrobe Valley community.
- 5.90 DHHS will engage and communicate with EPA, Latrobe City Council and the Latrobe Valley community throughout the development and implementation of the ash in roof cavities investigation.

## DELIVERABLES

- 5.91 The lead agency for delivery of health in the Latrobe Valley is DHHS.
- 5.92 The deliverables for health in the Latrobe Valley are set out in actions 46 to 113 of the Deliverables Table in Appendix 1.





# 6





# CHAPTER 6: INCIDENT AIR QUALITY AND WELLBEING

- 6.1 This chapter outlines the Government's actions to:
- increase incident air quality monitoring capability<sup>1</sup> to respond to smoke events
  - strengthen the decision-making framework used before, during and after smoke events to manage potential health impacts
  - improve Government engagement and communication with communities in respect of smoke events.
- 6.2 The State Smoke Working Group oversees the implementation of recommendations and affirmations from the Inquiry Reports relating to the management of smoke events, including incident air quality monitoring, standards for decision-making and communication.
- 6.3 The State Smoke Working Group is co-chaired by DHHS and EMV, and includes representatives from Ambulance Victoria, CFA, DELWP, EPA, MFB, Victoria Police and WorkSafe.

## RAPID AIR QUALITY MONITORING CAPABILITY

- 6.4 This section addresses recommendation 5 and affirmation 17 of the 2014 Inquiry Report, which relates to rapid air quality monitoring capability and capacity to respond to emergency events.
- 6.5 The Government will:
- establish smoke triggers at which rapid air monitoring should occur to protect the health of the community
  - determine the equipment necessary to undertake rapid air quality monitoring for smoke events across Victoria
  - equip the State, including EPA and emergency services responders as appropriate to undertake rapid air quality monitoring in any location in Victoria in response to a smoke event impacting a community. This requires an investment in equipment, training and data and information systems.

### OUTCOME FOR THE COMMUNITY

The State has the appropriate equipment and resources to rapidly monitor air quality within 24 hours of escalation triggers. Air quality monitoring data is used to inform timely decision-making to support the Victorian community during a smoke event.

### Completed Government actions

#### *Acquisition of appropriate equipment*

- 6.6 During and immediately following the Hazelwood Mine Fire, EPA started to build the State's rapid air quality monitoring capabilities with the purchase of portable monitoring equipment for measuring PM<sub>2.5</sub>, smoke and wind speed and direction during an event.
- 6.7 In October 2014, EPA held a workshop to understand:
- the types of emergencies that may need a rapid air quality monitoring response
  - the pollutants that need to be measured
  - the equipment required to undertake monitoring, which included field-ready devices.

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<sup>1</sup> Incident air quality monitoring is distinct from ambient air quality monitoring, and refers to the monitoring of air quality in response to an incident which produces air borne emissions.

- 6.8 EPA undertook an inventory in October 2014 to identify the equipment that was available to first responders and EPA for rapid air quality monitoring. Using the results of the workshop and the inventory, EPA identified the equipment that needed to be procured to provide an effective rapid response capability to multiple events occurring simultaneously across Victoria.
- 6.9 In May 2015, EMV led a further workshop with emergency services agencies to review needs and identify gaps in incident response monitoring capability. This workshop identified the need to provide extra capacity for smoke monitoring during the early hours of an emergency event.
- 6.10 EPA continued to build the inventory of rapid air quality monitoring equipment in 2015 with purchases of portable equipment to monitor CO, ozone, nitrogen dioxide, sulphur dioxide and volatile organic carbon.

### ***Development and application of a Rapid Air Quality Monitoring Response Model***

- 6.11 The results of EPA's inventory, workshops and discussions with emergency services agencies were used to develop a Rapid Air Quality Monitoring Response Model in December 2014,<sup>2</sup> which documented:
  - types of prolonged smoke events that are likely to require the deployment of rapid air quality monitoring equipment (for example, coal mine and landfill fires)
  - key pollutants that may need to be measured, depending on the type of event
  - threshold conditions relating to the possible community impacts of smoke under which rapid air quality monitoring will be undertaken, including escalation triggers for increasing the level of monitoring response (from initial first response to rapid response through to long-term response)
  - air quality data needed by agencies to make health and operational decisions during and after smoke events, based on rapid air quality monitoring data.
- 6.12 The Rapid Air Quality Monitoring Response Model was designed to assist decision makers to make initial decisions to protect the community during smoke events, based on air quality monitoring data.
- 6.13 Over the 2014/15 summer season, rapid deployment of air quality monitoring equipment was managed by EPA under a single agency response procedure.
- 6.14 Following the 2014/15 summer season, the single agency response procedure was replaced with an all-agencies approach to the deployment of air quality monitoring equipment. The all-agencies approach was first released as a guideline by EMV in October 2015, and was subsequently released in December 2015 as JSOP 03.18 for Rapid Deployment of Air Quality Monitoring for Community Health.<sup>3</sup>
- 6.15 JSOP 03.18 incorporates the Rapid Air Quality Monitoring Response Model and provides additional information on the operational arrangements for a rapid air quality monitoring response, including:
  - the roles and responsibilities of CFA, DELWP, DHHS, EMV, EPA and MFB
  - directions to incident controllers in evaluating events that may produce smoke impacting on communities
  - directions for communicating decisions on a rapid air quality monitoring response.
- 6.16 Over the 2015/16 summer season, equipment for rapid air quality monitoring was deployed to emergency events as needed under JSOP 03.18, and monitoring data and information was provided to DHHS to assist public health decisions.

## **Future Government actions**

### ***Building air quality monitoring capability and capacity***

- 6.17 Two mobile air quality monitoring stations, with more sensitive, higher quality instrumentation, will be built for longer-term deployment to complex smoke events of extended duration that significantly impact upon communities. The two mobile air quality monitoring stations will be operational by December 2016.

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<sup>2</sup> The Rapid Air Quality Monitoring Response Model has been assessed as complete in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, page 42.

<sup>3</sup> SOP J03.18, available at <http://files.em.vic.gov.au/JSOP/SOP-J03.18.pdf>.

- 6.18 Ten smoke detection monitors will be pre-deployed to high risk areas in regional Victoria, to enable the commencement of monitoring during the early hours of a smoke event and the provision of smoke-related information to first responders, DHHS and EPA.
- 6.19 EPA will partner with VicSES to maintain the smoke monitors in a state of readiness for quick relocation and activation, as necessary, to fire events in the area.
- 6.20 Further training in the deployment of air quality monitoring equipment will be undertaken by EPA staff by December 2016 and relevant emergency services staff by April 2017.
- 6.21 Air quality monitoring data is collected in the field by multiple agencies with a range of equipment. Significant information systems infrastructure work will be undertaken by June 2017 to functionally integrate the variety of collected air quality data. This will give decision-makers access to all relevant data, regardless of the agency that collected it, to facilitate informed decisions about community health during smoke events.

#### *Incident air quality monitoring response model*

- 6.22 Lessons learned from the 2015/16 summer season will be captured and a revised model for incident (formerly rapid) response, tools and deployment procedures will be released in October 2016, ahead of the 2016/17 summer season. This will include a revision of JSOP 03.18 as required.
- 6.23 From June 2017, lessons learned from participation in regular emergency exercises and incident debriefs will be used to continually improve the effectiveness of incident response air monitoring operations in an event as a BAU function.

## STATE SMOKE FRAMEWORK AND PROTOCOLS FOR AIR QUALITY AND HEALTH

- 6.24 This section addresses recommendations and affirmations relating to the framework and protocols in place to guide decision-makers in protecting the health of the community and first responders during a smoke event, including:
  - recommendations 7, 8 and 9 of the 2014 Inquiry Report
  - affirmations 19, 24 and 25 of the 2014 Inquiry Report
  - recommendation 1 of the Death Investigations Report.
- 6.25 The Government will:
  - develop a State Smoke Framework to address the management of potential public health impacts from smoke events, or events generating emissions
  - review and revise the community and firefighter carbon monoxide response protocols so that they are consistent and include assessment methods and trigger levels
  - review and revise the Bushfire Smoke Protocol and PM2.5 Health Protection Protocol to ensure they are consistent and include assessment methods and trigger levels
  - develop decision-making tools to ensure that the community is provided with practical advice and support materials on how to minimise the health effects of smoke
  - undertake a review of the State Smoke Framework and the Community Smoke Health Standard in light of the finding that the Hazelwood Mine Fire contributed to an increase in deaths.

### OUTCOME FOR THE COMMUNITY

Victoria has a comprehensive State Smoke Framework, incorporating a broad suite of protocols, advice and standards regarding the impact of smoke on air quality and health.

Decision-makers are using the State Smoke Framework to manage large-scale extended smoke events, and the Victorian community is provided with practical advice and support.

## Completed Government actions

### *State Smoke Framework*

- 6.26 The 2014 Inquiry Report identified the need for guidance in the management of significant smoke events that impact air quality and the health of communities. In response, the State Smoke Working Group developed the State Smoke Framework.
- 6.27 The State Smoke Framework identifies:
- the types of events that may require management, including smoke or emissions from extended bushfires, large-scale planned fuel reduction burns, landfill and waste facility fires, open-cut coal mine fires, industrial and hazardous material fires, or emissions from chemical fires and spills
  - the intelligence tools that can be utilised to understand the potential impact of smoke generated from events
  - the operating procedures for the collection and use of air quality monitoring data
  - the protocols and guidelines to assist decision-makers during a smoke event to protect the community and emergency responders
  - the advice that should be given to the community.
- 6.28 The State Smoke Framework was endorsed in December 2015.<sup>4</sup> As shown in Figure 6.1, the State Smoke Framework is supported by government and emergency services standards, guidelines and JSOPs relating to the management of smoke events, including:
- Materials guiding the deployment of air quality monitoring equipment:
    - Rapid Deployment of Air Quality Monitoring for Community Health Guideline, December 2015
    - JSOP 03.18 for Rapid Deployment of Air Quality Monitoring for Community Health, December 2015<sup>5</sup>
  - Materials guiding the management of events generating CO and impacting on communities:
    - Standard for Managing CO Emissions, July 2015<sup>6</sup>
    - JSOP 03.20 for Managing Significant Community Exposures to Carbon Monoxide from Smoke, December 2015<sup>7</sup>
  - Materials guiding the management of events generating PM2.5 and PM10 and impacting on communities:
    - Community Smoke Health Standard, December 2015<sup>8</sup>
    - JSOP 03.19 for Managing Significant Community Exposures to Fine Particles from Smoke, December 2015.<sup>9</sup>

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4 <https://www.emv.vic.gov.au/latest-news/a-new-approach-to-smoke-events>.

5 <http://files.em.vic.gov.au/JSOP/SOP-J03.18.pdf>.

6 <http://files.portal.em.vic.gov.au/refdocs/EMK-01.19-CarbonMonoxideEmissions.pdf>.

7 <http://files.em.vic.gov.au/JSOP/SOP-J03.20.pdf>.

8 <http://files.portal.em.vic.gov.au/refdocs/EMK-01.19-Community-SAQH-Protocol.pdf>.

9 <http://files.em.vic.gov.au/JSOP/SOP-J03.19.pdf>.

## Tools and Outcomes under the State Smoke Framework

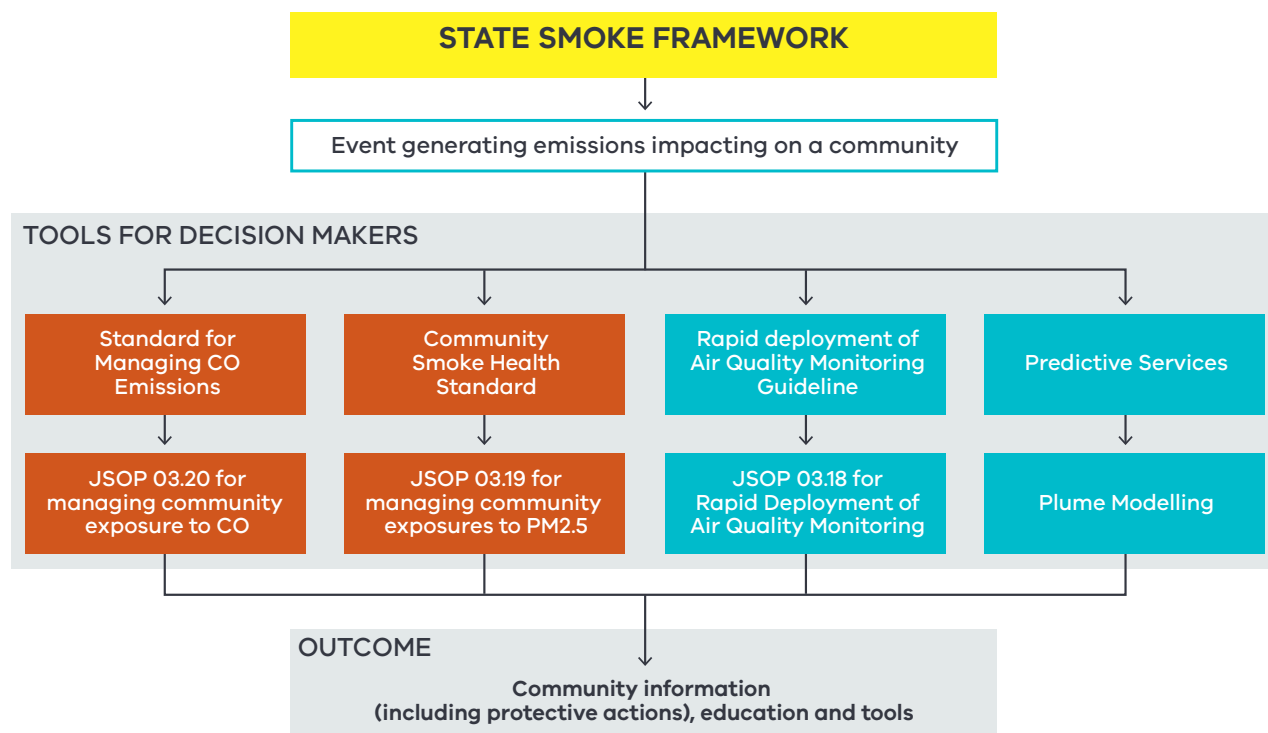


Figure 6.1 Supporting standards, guidelines, JSOPs developed to date under the State Smoke Framework

- 6.29 Communication is a central element of the State Smoke Framework. During the 2015/16 summer season, EMV collaborated with DHHS to ensure new smoke health messages were included in all fire warnings published during emergency events on the VicEmergency website.
- 6.30 Following focus group testing, new 'smoke and your health' posters were developed in December 2015. The new 'smoke and your health' posters were distributed at the beginning of 2016, as the first part of the State Smoke Framework Community Engagement Strategy.

### *Managing exposure to carbon monoxide*

- 6.31 In February 2014, during the Hazelwood Mine Fire, DHHS developed and applied the Latrobe Valley Coal Fires Carbon Monoxide Response Protocol as a decision making tool for the protection of public health. This protocol was later incorporated into Version 1.0 of the Standard for Managing CO Emissions<sup>10</sup>.
- 6.32 Following the Hazelwood Mine Fire, DHHS engaged two expert panels to review:
- the air quality reference values for short and medium-term community exposure to CO and fine particulates in smoke
  - the CO protocol for protecting firefighter health and safety during emergency events.
- 6.33 The expert panels delivered their final advice to DHHS in July 2015.
- 6.34 Version 2.0 of the current Standard for Managing CO Emissions was endorsed in July 2015.<sup>11</sup> It reflects the recommendations set out in the expert panel reports and addresses both community and occupational exposure to CO.

<sup>10</sup> Standard for Managing Significant Community Exposure to Carbon Monoxide Emissions, Version 1.0, endorsed by the CHO and EMC in January 2015.

<sup>11</sup> The Standard for Managing Significant Community Exposure to Carbon Monoxide Emissions, Version 2.0, endorsed by the CHO and EMC in July 2015, available at <http://files.portal.em.vic.gov.au/refdocs/EMK-01.19-CarbonMonoxideEmissions.pdf>.

- 6.35 The Standard for Managing CO Emissions provides a framework for decision making to assist incident controllers and agency commanders to manage the health and safety of all personnel and affected communities during large, complex incidents that have the capacity to produce significantly elevated levels of CO in the outdoor environment. It contains the occupational exposure standard for CO and the community exposure standard for CO and details how these standards are used to protect emergency services personnel and the community.
- 6.36 The Standard for Managing CO Emissions is supported by JSOP 03.20, which is an operational protocol that provides step-by-step guidance to responding to incidents that generate significant levels of CO in the outdoor environment.
- 6.37 JSOP 03.20 details the arrangements between EPA, DHHS and first responder agencies during significant or prolonged events that generate CO. JSOP 03.20 also sets out the arrangements with specific CO trigger levels (as concentration in ppm) for the provision of:
- air quality monitoring and forecast information sharing between agencies
  - public health advice to the community.
- 6.38 EMV undertook a targeted training program for first responders prior to the 2015/16 summer season. Personnel in senior leadership positions (Incident, Regional and State Controllers) were trained in the application of the State Smoke Framework and associated standards during emergency events. This training is ongoing, with further training and reinforcement to occur prior to the 2016/17 summer season.

### ***Community Smoke, Air Quality and Health Standard***

- 6.39 During the Hazelwood Mine Fire DHHS developed and applied the Hazelwood Coal Mine Fire PM2.5 Health Protection Protocol.
- 6.40 In late 2014, an expert panel was engaged to investigate air quality reference values for short to medium-term community exposure to fine particles in smoke. The expert panel delivered its report to DHHS in July 2015.
- 6.41 The Community Smoke Health Protocol was endorsed in July 2015, incorporating the previous protocols and recommendation from the expert panel.<sup>12</sup>
- 6.42 The Community Smoke Health Protocol was revised into the Community Smoke Health Standard, which was released in December 2015. The Community Smoke Health Standard provides guidance for protecting communities during smoke events that have the potential to generate significant levels of fine particles in the air. The Community Health Standard provides air quality standards from 'low' to 'hazardous extreme' and identifies appropriate cautionary health advice and actions to be undertaken to protect the community. It applies to all fire settings where levels of fine particles in smoke are significant and of potential health concern.
- 6.43 The Community Smoke Health Standard is supported by JSOP 03.19 for Managing Significant Community Exposure to Fine Particles from Smoke.<sup>13</sup>
- 6.44 JSOP 03.19 details the arrangements between EPA, DHHS and first responder agencies during significant or prolonged events that generate fine particles. JSOP 03.19 sets out the arrangements with specific fine particle trigger levels (as concentration of PM2.5) for the provision of:
- air quality monitoring and forecast information sharing between agencies
  - public health advice to the community.

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<sup>12</sup> Community smoke, air quality and health standard Version 1.0, endorsed by the CHO, EMC and EPA in July 2015, available at <http://files.portal.em.vic.gov.au/refdocs/EMK-01.19-Community-SAQH-Protocol.pdf>.

<sup>13</sup> JSOP 03.19, endorsed by CHO, EPA and EMC is available at <http://files.em.vic.gov.au/JSOP/SOP-J03.19.pdf>.

### ***Review of the State Smoke Framework and protocols***

- 6.45 EMV engaged an independent consultant to review the use of the Standard for Managing CO Exposure and the Community Smoke Health Standard during the Somerton Tip Fire in November 2015.
- 6.46 The Somerton Tip Fire Review found that the State Smoke Framework and Standards drove collaboration amongst response and support agencies. This collaboration resulted in informed and engaged communities, safe systems of work for responders and industry representatives and a framework that guided the complex operation.

### **Future Government actions**

#### ***Review of the State Smoke Framework***

- 6.47 The State Smoke Framework will be subject to review following the 2015/16 summer season. Further evolution over the next 12 to 18 months will occur as the tools, technology and processes for managing air quality, smoke and hazardous emissions are further developed.
- 6.48 DHHS will review internationally recognised graduated smoke frameworks and the scientific basis for these frameworks. This work will be undertaken in consultation with interstate health departments and experts. The review of internationally recognised smoke frameworks will strengthen the evidence base rationale for the Community Smoke Health Standard, which is currently based on an internationally recognised graduated smoke framework.





### Predictive services under the State Smoke Framework

- 6.49 CFA is undertaking a plume modelling project to develop enhanced capability to predict toxic smoke and chemical releases from fires and hazardous material incidents. The plume modelling capability will include access to improved models and software such as ARGOS, auto forecast for major risk and events and real-time modelling systems. A new web based interface will provide rapid access to modelling tools and allow multi-agency access to results. The project will also provide training for scientific personnel who will operate the models and provide output advice.
- 6.50 DELWP will lead the development of an integrated predictive services framework. The predictive services framework will be an ICT platform and system of intelligence and vulnerability data, information and hazards exposure models and tools, which can be used to inform decision-making about hazards, including bushfires, smoke, toxic plumes and floods, by predicting the impacts of an event. Figure 6.2 shows a diagram of the predictive services framework.

### Predictive Services Framework

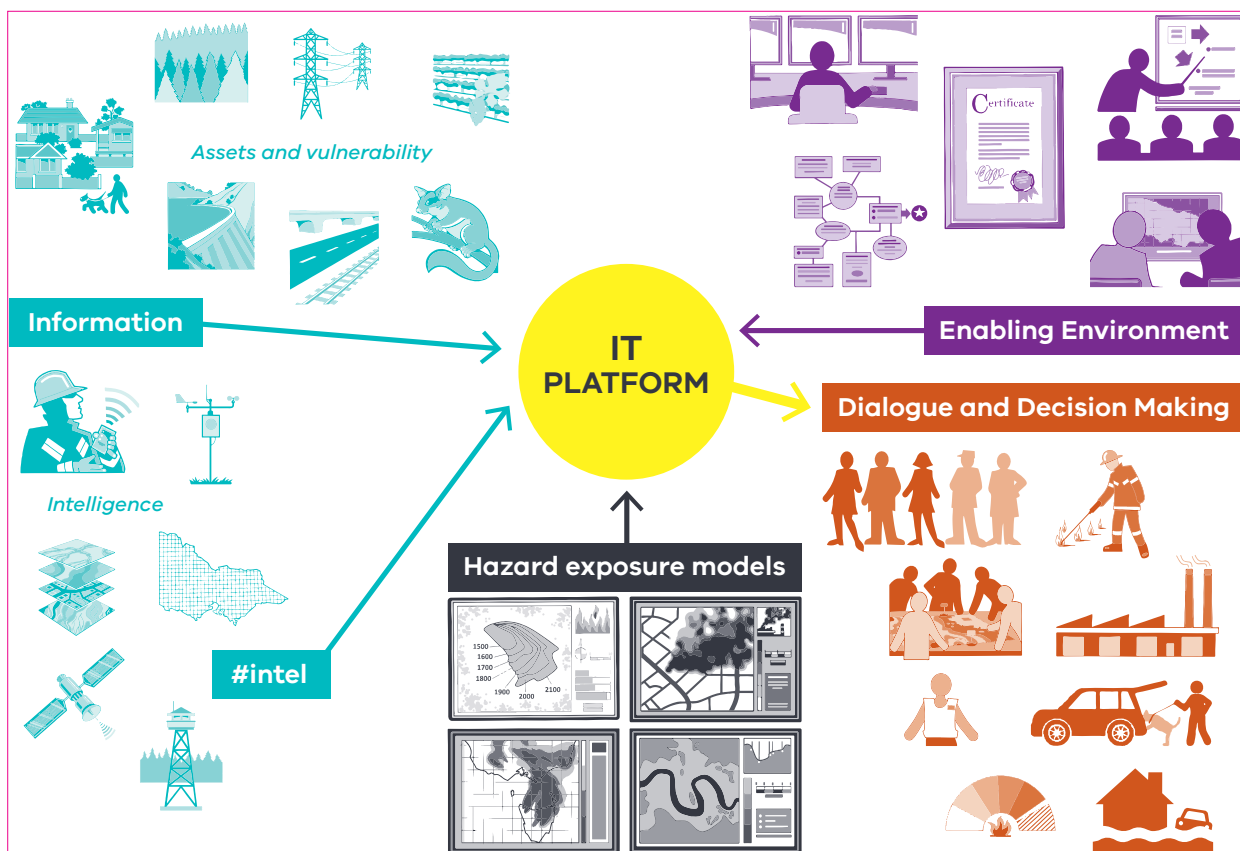


Figure 6.2: the interplay between information, hazard exposure models, enabling environmental factors and decision-making under the predictive services framework IT platform



## NATIONAL COMPLIANCE STANDARD FOR PM2.5

- 6.51 This section addresses recommendation 6 and affirmation 23 of the 2014 Inquiry Report, which relate to advocating for a national compliance standard for PM2.5 and subsequently reviewing the SEPP (AAQ)<sup>14</sup> to ensure consistency.

### OUTCOME FOR THE COMMUNITY

The Government has undertaken activities to advocate for a nationally adopted compliance standard for PM2.5 and incorporated any outcomes in the SEPP (AAQ), to provide assurance to the community that Victoria is following national best practice when measuring and reporting on ambient air quality.

### Completed Government actions

- 6.52 The Government has identified and acted upon opportunities to promptly progress the proposed variation to NEPM (AAQ) for PM2.5 and PM10.
- 6.53 On 15 December 2015, the NEPC agreed to establish NEPM (AAQ) standards for PM2.5 and PM10:
- annual average and 24-hour PM2.5 particles of 8µg/m3 and 25µg/m3 respectively, aiming to move to 7µg/m3 and 20µg/m3 respectively by 2025
  - annual average PM10 particles of 25µg/m.3
- 6.54 The variation to the NEPM (AAQ) was registered on the Federal Register of Legislative Instruments on 3 February 2016. The NEPC has advised that the required formal disallowance period<sup>15</sup> will conclude on 21 June 2016.

### Future Government actions

- 6.55 In anticipation of the conclusion of the formal disallowance period on 21 June 2016, DELWP and EPA have commenced preparatory works to begin the process to vary the SEPP (AAQ). On the basis of the 21 June 2016 date, the variation to the SEPP (AAQ) is expected to be completed by December 2016.

## EPA EMERGENCY PROTOCOLS

- 6.56 This section addresses affirmation 16 of the 2014 Inquiry Report, which relates to EPA's emergency protocols.
- 6.57 EPA will review its emergency protocols and incorporate lessons learned from the Hazelwood Mine Fire.

### OUTCOME FOR THE COMMUNITY

The community is confident in the ability of EPA to respond to emergency events.

### Completed Government actions

- 6.58 EPA completed a review of its emergency and incident management processes in October 2014, which highlighted the need for better integration with the broader emergency management arrangements.
- 6.59 Prior to the 2014/15 summer season, EPA engaged with the emergency services at both the state and regional levels to establish interim processes to support a whole of Government response to emergency events, especially fires. Relevant emergency management protocols were updated and new procedures established. EPA staff training workshops were held on the State's emergency management structure, EPA's general emergency management responsibilities in planning, response and recovery and business accountability and ownership.

<sup>14</sup> State Environment Protection Policy (Ambient Air Quality) No. S19, Gazette 9/2/1999.

<sup>15</sup> Legislative Instruments Act 2003 (Cth) s. 42.

- 6.60 In June 2015, EPA established its new Emergency Management Framework to provide clarity around roles, responsibilities, response actions and decision making in emergencies. EPA established a new governance group responsible for coordinating EPA emergency management strategy, preparedness, response capacity and capability.
- 6.61 EPA's accountabilities in emergency management have been revised for inclusion in the EMMV.
- 6.62 In December 2015, EPA established a high-level Environment Protection Incident Management System, which uses the AIIMS structure. This scalable system allows EPA to manage its response to all incidents, ranging from a community pollution report to a large-scale, all-agencies emergency event under one system.
- 6.63 Relevant emergency management protocols were further refined in preparation for the 2015/16 summer season to include lessons from emergency response exercises held in August, September and December 2015.
- 6.64 Preparedness training was also held for EPA staff with emergency management responsibilities in the lead up to the 2015/16 summer season.
- 6.65 Ongoing review and improvement of EPA's revised emergency and incident management operations is a BAU function.

## EPA META-ANALYSIS

- 6.66 This section addresses affirmation 18 of the 2014 Inquiry Report, which relates to creating a body of knowledge on the impacts of extended brown coal fire events. EPA will coordinate a meta-analysis of air monitoring data collected during the Hazelwood Mine Fire.

### OUTCOME FOR THE COMMUNITY

Decision-making during and after any future event is supported by a body of knowledge of the environmental impacts of extended brown coal fires, increasing the likelihood of better environmental outcomes for the community.

### Completed Government actions

- 6.67 EPA engaged with academic institutions and agencies to scope a meta-analysis of air monitoring and environmental data, including smoke plume modelling, collected during the Hazelwood Mine Fire. The meta-analysis scope was completed and endorsed by partner agencies in April 2015.
- 6.68 In April 2015, EPA established a working group of partner agencies, including CFA, DELWP, DHHS, EMV and MFB, to oversee delivery.
- 6.69 Four meta-analysis information reports have been released:
  - a consolidation of the measured air quality data and conditions to provide a general summary of the Hazelwood Mine Fire's impact on air quality in February and March 2014
  - an examination of air quality data in the early stages of the Hazelwood Mine Fire to develop an understanding of the scientific correction factor that should be applied to indicative data generated by rapid response air monitoring equipment, enabling more accurate estimates of air quality in future emergency events
  - an assessment of air quality during the Hazelwood Mine Fire and through recovery (February 2014 to May 2015)<sup>16</sup>
  - an assessment of water, soil and ash samples taken during the Hazelwood Mine Fire and through recovery (February 2014 to May 2015).<sup>17</sup>

<sup>16</sup> EPA Technical Report, Hazelwood Recovery Program air quality assessment – Morwell and surrounds (June 2015), available at <http://www.epa.vic.gov.au/media/Publications/1601.pdf>.

<sup>17</sup> EPA Technical Report, Hazelwood Recovery Program water, soil and ash assessment – Morwell and surrounds (June 2015), available at <http://www.epa.vic.gov.au/media/Publications/ATTVE0MP.pdf>.

- 6.70 Environmental data collected during the Hazelwood Mine Fire response and recovery phase has been provided for the Long Term Health Study, improved smoke forecasting trials, and assessments by health researchers for the reopened Inquiry.

#### **Future Government actions**

- 6.71 EPA will continue to coordinate the meta-analysis and make the information publicly available. This may include online products, protocol development, agency publications, academic publications or identifying areas for further research to fill knowledge gaps.
- 6.72 A report on the complete body of information and knowledge generated from the Hazelwood Mine Fire meta-analysis will be released by the end of 2016.

### **DELIVERABLES**

- 6.73 The lead agencies for delivery incident air quality and wellbeing are DHHS, EPA and EMV.
- 6.74 The deliverables for air quality and wellbeing, and the lead agency for specific actions are set out in actions 114 to 147 of the Deliverables Table in Appendix 1.

# 7



# CHAPTER 7: LATROBE VALLEY COAL MINE REGULATION

- 7.1 This chapter sets out Government action relating to:
- reforming the regulatory framework to require the operators of the Latrobe Valley Coal Mines to manage risks to the environment and public safety
  - acquiring expertise to monitor and enforce compliance by the operators of the Latrobe Valley Coal Mines with the regulatory framework as it relates to risk and assessment of rehabilitation liabilities
  - improving coordination in the regulation of the earth resources sector
  - improving the performance of ERR in DEDJTR
  - accelerating progressive rehabilitation milestones and research through Work Plan Variations for the Latrobe Valley Coal Mines.
- 7.2 This chapter responds to:
- recommendation 4 and affirmations 35 and 39 of the 2014 Inquiry Report
  - recommendations 2, 4 and 17 of the Mine Rehabilitation Report
  - affirmations 2 and 3 of the Mine Rehabilitation Report.

## CONTEXT

- 7.3 The Latrobe Valley Coal Mines are principally regulated by DEDJTR, WorkSafe and EPA.

### DEDJTR

- 7.4 Coal mining is regulated by DEDJTR under the MR(SD) Act and the MR(SD) Regulations. Mining is controlled by mining licences and Work Plans. Licences allocate Crown rights to a resource to the licence holder.<sup>1</sup> Work Plans regulate particular aspects of a mine's operation and must include a number of sub-plans, including rehabilitation, community engagement and managing risk to the environment, public infrastructure and public safety.<sup>2</sup>
- 7.5 Under the MR(SD) Act and the MR(SD) Regulations, DEDJTR is responsible for regulating mine operators' compliance with mining licences, Work Plans, and statutory obligations. Where non-compliance is identified, DEDJTR can utilise compliance tools, which may include infringement notices, enforceable undertakings, remedial notices and enforcement orders.
- 7.6 DEDJTR also develops policy and programs for the Latrobe Valley Coal Mines.
- 7.7 There are additional risk management requirements for 'declared mines' under the MR(SD) Regulations. The Latrobe Valley Coal Mines are declared mines. Declared mines are required to:
- carry out mine stability and ground water control activities and to monitor and report on those activities
  - pay a mine stability levy, for the purpose of providing measures designed to decrease geotechnical and hydrogeological risks to mine stability in the Latrobe Valley Coal Mines.<sup>3</sup>
- 7.8 DEDJTR reports to the Minister for Resources.
- 7.9 The Minister for Resources has the power to impose conditions on a mining licence or vary a licence condition.<sup>4</sup>

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1 Section 8(1)(a) Mineral Resources (Sustainable Development) Act 1990 (Vic).

2 Section 40(3) Mineral Resources (Sustainable Development) Act 1990 (Vic).

3 Part 4 and Schedule 15, Part 2, Mineral Resources (Sustainable Development) Regulations.

4 Section 8(1)(a) Mineral Resources (Sustainable Development) Act 1990 (Vic).

## WorkSafe

- 7.10 WorkSafe's regulatory role involves preventing workplace illness, injury and fatalities by monitoring and enforcing compliance with Victoria's OHS laws and regulations. WorkSafe also provide guidance, education, and support to employers and workers to maximise regulatory compliance.
- 7.11 The OHS Act imposes obligations on employers at workplaces and those persons (including corporations) who have management or control of a workplace to ensure that the workplace is safe and without risk to health and safety, so far as is reasonably practicable.
- 7.12 In respect of the Latrobe Valley Coal Mines, WorkSafe's operational focus is the control of risks to health and safety associated with 'major mining hazards.' Under the OHS Regulations, a 'mining hazard' is any activity, procedure, plant, process, substance, situation or other circumstance that could pose a risk to health or safety in relation to any one of a number of listed mine-related hazards, including fire.<sup>5</sup> A 'major mining hazard' is a mining hazard that has the potential to cause an incident that could cause, or pose a significant risk of causing, more than one death.<sup>6</sup>
- 7.13 The Latrobe Valley Coal Mines are required to assess and address all mining hazards by adopting risk control measures that eliminate or reduce risks to health and safety, so far as is reasonably practicable. Where non-compliance is identified, a WorkSafe inspector can utilise compliance tools, which may include improvement or prohibition notices.
- 7.14 The Latrobe Valley Coal Mines are 'prescribed mines' under the OHS Regulations.<sup>7</sup> As prescribed mines, they are required to prepare an emergency plan in conjunction with the relevant local emergency services, which must be used as the primary means of responding to incidents involving a significant risk of serious injury or death, such as a mine fire, mine flood, catastrophic failure of a mine or plant, bomb threat or hazardous material incident.

## EPA

- 7.15 EPA's objective is to deliver clean air, healthy waterways, safe land and minimal disturbances from noise and odour for Victorians. EPA administers the EP Act.
- 7.16 EPA is responsible for determining compliance with conditions in licences granted by it for industrial activities. EPA licences prescribe and set limits on pollution and waste levels, as well as standard obligations within which entities must operate.

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5 Regulation 5.3.2, Occupational Health and Safety Regulations 2007 (Vic).

6 Regulation 1.1.5, Occupational Health and Safety Regulations 2007 (Vic).

7 Regulation 5.3.1, Occupational Health and Safety Regulations 2007 (Vic).



## REFORMING THE REGULATORY FRAMEWORK FOR COAL MINING

7.17 This section addresses:

- recommendation 4 and affirmation 35 of the 2014 Inquiry Report, to bring forward amendments to the MR(SD) Amendment Act to require Work Plans to specifically address fire prevention, mitigation and suppression
- recommendation 17 of the Mine Rehabilitation Report, to reform the regulatory framework for the Latrobe Valley Coal Mines.

### OUTCOME FOR THE COMMUNITY

An effective and transparent regulatory framework is in place for the Latrobe Valley Coal Mines, which enables:

- Work Plans that address all risks including fire
- rehabilitation and closure requirements that drive progressive rehabilitation, underpinned by financial assurance for the State
- post closure arrangements that provide for ongoing monitoring and maintenance of safe and stable landforms.

The regulatory framework provides assurance to the community that the Latrobe Valley Coal Mines are managing their risks, planning and undertaking rehabilitation.

### Completed Government actions

- 7.18 On 20 January 2015, the Minister for Energy and Resources<sup>8</sup> introduced licence condition 1A into the mining licences for the Latrobe Valley Coal Mines. Licence condition 1A requires each licensee to assess the risks to the environment and public safety from the work done, and proposed to be done, under their respective licences and submit a RAMP under a new licence.
- 7.19 Under licence condition 1A.4, the operators of the Latrobe Valley Coal Mines are required to produce RAMPs that:
- assess the risks to the environment and public safety from the work done and the work that is proposed to be done
  - include a review of key documents in the preparation of the RAMP
  - detail quantifiable risk control standards to be achieved so as to protect the environment and public safety
  - identify the most reasonably practicable effective actions to manage the risks to the environment and public safety
  - set milestones for completing the most reasonably practicable effective actions.
- 7.20 DEDJTR also developed the Requirement for Compliance with Risk Management Conditions 2015 policy to support licence condition 1A requirements.
- 7.21 Condition 1A was introduced in advance of the Government bringing forward the commencement of section 16 of the MR(SD) Amendment Act, which amends the MR(SD) Act to require risk-based Work Plans and Work Plan Variations.
- 7.22 On 8 December 2015, section 16 of the MR(SD) Act commenced. This amendment requires that approved Work Plans and Work Plan Variations specifically address fire prevention, mitigation and suppression, in addition to addressing other risks to the environment, public safety and infrastructure.
- 7.23 In July 2015, the Minister for Energy and Resources amended the Terms of Reference for the TRB to include providing advice and guidance to DEDJTR on any issues related to rehabilitation, including progressive rehabilitation, within mines and quarries.<sup>9</sup>

<sup>8</sup> In May 2016 the portfolio was changed to Minister for Resources from Minister for Energy and Resources. All references to actions taken prior to May 2016 reflect this.

<sup>9</sup> <http://www.energyandresources.vic.gov.au/earth-resources-regulation/advisory-councils-and-review-boards/technical-review-board>.

### Future Government actions

- 7.24 Once a RAMP is approved for a Latrobe Valley Coal Mine, licence condition 1A.6 requires the submission of a Work Plan Variation application. The Work Plan Variation must comply with new risk-based Work Plan requirements in Schedule 15 of the MR(SD) Regulations.
- 7.25 Licence condition 1A also requires the mine operator to provide an annual statement of compliance detailing progress in implementing actions in the RAMP.
- 7.26 By June 2017, DEDJTR will review the regulatory framework for the Latrobe Valley Coal Mines and provide options for policy, administrative and legislative reforms to address issues including:
- risk-based approaches to mine regulation, rehabilitation, closure and post closure being integrated in risk-based work plans and fire risk management plans
  - progressive rehabilitation and rehabilitation trials to address knowledge gaps
  - obligations on referral authorities and the mining regulator during Work Plan variation approvals
  - the role for community involvement in rehabilitation planning
  - implementation of the Latrobe Valley Regional Rehabilitation Strategy
  - clarifying the roles of the operators of the Latrobe Valley Coal Mines and the State in ongoing post-closure monitoring, maintenance and liability
  - a framework of sanctions to deter and address non-compliance commensurate with the risks
  - financial assurance to the State.
- 7.27 By December 2017, DEDJTR will consult with the Latrobe Valley Mine Rehabilitation Commissioner about the options for policy, administrative and legislative reforms.
- 7.28 By June 2018, DEDJTR will implement policy, administrative and legislative reforms.

## COLLABORATION AND ACQUIRING EXPERTISE

- 7.29 This section addresses:
- recommendation 4 and affirmation 39 of the 2014 Inquiry Report, to acquire the expertise necessary to monitor and enforce compliance with fire risk measures adopted by the Victorian coal mining industry
  - recommendation 2 of the Mine Rehabilitation Report, to acquire expertise to address mine closure and rehabilitation liability assessments.

### OUTCOME FOR THE COMMUNITY

DEDJTR and WorkSafe proactively and collaboratively monitor and enforce compliance with legislation and regulations applicable to the Latrobe Valley Coal Mines, including fire risk control measures. This will provide assurance to the Victorian community that the Latrobe Valley Coal Mines are being effectively regulated.

### Completed Government actions

#### *Collaboration*

- 7.30 The Secretary of DEDJTR and the Chief Executive Officer of WorkSafe approved a revised MOU in May 2015. The MOU between WorkSafe and DEDJTR includes specific details in relation to mine fire risks and is also supported by an action plan to guide implementation.
- 7.31 The action plan arising from the MOU between WorkSafe and DEDJTR requires twice yearly workshops to be undertaken by DEDJTR and WorkSafe, which have taken place in June 2015 and February 2016.
- 7.32 DEDJTR (ERR) and EPA signed a Statement of Agreement in May 2015, which documents their respective roles and responsibilities for the regulation of the earth resources industries, including mine fire risks. Six schedules to the DEDJTR and EPA Statement of Agreement detail how it is to be implemented.
- 7.33 To strengthen regulatory oversight of dust mitigation management in the Latrobe Valley Coal Mines, EPA and DEDJTR established the Latrobe Valley Mine Dust Industry Sector Strategy.



- 7.34 The Latrobe Valley Mine Dust Industry Sector Strategy uses the appropriate regulatory powers of each agency to minimise the risk of unacceptable levels of dust impacting the local community.

#### ***DEDJTR expertise***

- 7.35 In March 2016, DEDJTR established a Mine Fire and Emergency Unit, based in the Latrobe Valley. The Mine Fire and Emergency Unit will lead DEDJTR's regulatory, compliance and education activities related to mine fire safety and other emergency events and will coordinate DEDJTR's emergency preparedness and response activities.

#### ***WorkSafe expertise***

- 7.36 WorkSafe has adopted a systems-based approach to regulatory oversight and has acquired expertise to provide effective oversight of the fire risk in the Latrobe Valley Coal Mines. WorkSafe has:
- created a Manager of Systems Safety role, in its Earth Resources Team, which commenced in July 2015
  - engaged technical specialists to provide expertise in the area of coal mine fires
  - undertaken training programs to support and enhance the Earth Resources Team.
- 7.37 WorkSafe has facilitated training programs with attendees from DEDJTR, EPA and CFA. Training activities have included:
- incident cause analysis method investigation in December 2015
  - a risk management workshop in August 2015, facilitated by Professor David Cliff, who was engaged as an expert witness by the 2014 and reopened Boards of Inquiry.

- 7.38 An emergency planning workshop for high consequence industrial facilities, major hazard facilities, prescribed mines, and large dangerous goods sites, was also held in February and March 2016. Attendees included CFA, EMV, EPA, MFB, VicSES and Victoria Police.

#### **Future Government actions**

- 7.39 WorkSafe and DEDJTR will continue to undertake twice yearly workshops on the MOU between WorkSafe and DEDJTR.
- 7.40 By July 2016, DEDJTR will establish an Earth Resources Regulators Forum, with an independent chair to facilitate a coordinated, strategic approach to regulation in the earth resources sector, with a focus on robust decision making and timeliness. The Earth Resources Regulators Forum will enable strategic coordination of the system for regulation.
- 7.41 DEDJTR and the CFA will enter into an MOU, which will describe roles and responsibilities in respect to fire risk at earth resource sites.

#### ***DEDJTR***

- 7.42 The Mine Fire and Emergency Unit will provide advice to DEDJTR staff, industry and the public and undertake ongoing programs to improve processes to prevent, mitigate and suppress fires and other emergencies in Victoria's mines and other earth resource sites by:
- monitoring the performance of coal mines in relation to fire management, including periodic reviews of the implementation of licence conditions and inspecting and auditing coal mine compliance with their RAMPs and fire management plans
  - reviewing current fire management plans and assessing the effectiveness of the plans in addressing the:
    - risk of fire ignition (including from internal and external sources)
    - potential for spread of fire
    - risk to neighbouring communities, infrastructure and environmental assets
  - developing and implementing an annual framework for inspections of coal mines to assess fire preparedness in each site, in liaison with WorkSafe and CFA
  - contributing to DEDJTR's assessment of risk-based Work Plans, particularly in the assessment of fire risk
  - improving DEDJTR's processes and policies currently in place for the management of fire and other risks at earth resources sites in Victoria
  - leading efforts to improve DEDJTR's engagement with key stakeholders and community groups on fire risk
  - providing a central point of coordination for DEDJTR's response to fire events in the Latrobe Valley Coal Mines.
- 7.43 By December 2016, DEDJTR will employ or engage experts in mine closure and rehabilitation liability assessments by:
- including on its expert panel mine closure and rehabilitation liability assessment experts
  - reviewing DEDJTR's capability strategy to determine internal requirements for mine closure and rehabilitation liability assessments expertise.

## WorkSafe

- 7.44 WorkSafe is providing systems approach to safety assurance training annually to members of its Earth Resources Practice Team, to embed this approach in WorkSafe's core business activities.
- 7.45 Technical specialists have been, and continue to be, engaged to assist WorkSafe in the assessment of coal mine fire risk. This is being done with WorkSafe's Earth Resources Team working alongside specialists to gain fire risk knowledge in the process.

## IMPROVING THE PERFORMANCE OF ERR

- 7.46 This section addresses affirmation 2 of the Mine Rehabilitation Report and affirmation 39 of the 2014 Inquiry Report, relating to improving the performance of the mining regulator through delivering the 2015-16 DEDJTR ERR Action Plan.

### OUTCOME FOR THE COMMUNITY

The Victorian community, industry and co-regulators respect ERR in DEDJTR as a modern risk-based regulator and have confidence that it delivers best practice regulation on earth resources sites across Victoria.

### Completed Government actions

- 7.47 The ERR 2015-16 Action Plan<sup>10</sup> responds to a Ministerial Statement of Expectations of 18 September 2015 for regulation of the earth resources sector.<sup>11</sup> The ERR 2015 16 Action Plan sets out:
- commitments to reform and improve the governance of ERR
  - policy, administrative and legislative reform to be delivered by ERPP
  - strategies, due dates and responsibilities to address areas identified for reform.

### Future Government actions

#### Implementing the ERR Action Plan

- 7.48 The ERR 2015-16 Action Plan commits to activities under eight themes: role clarity; building capability and culture; risk-based strategies; clear and consistent regulatory activities; stakeholder consultation and engagement; timeliness; communication and transparency; and continuous improvement.
- 7.49 To implement the ERR 2015-16 Action Plan by 30 June 2016, ERR will:
- establish a Victorian Earth Resources Regulators Forum to enable strategic coordination of the system for regulation for earth resources sites
  - implement a capability strategy for ERR that will, along with the implementation of the Mine Fire and Emergency Unit and a new organisational structure, build ERR's internal capability as a contemporary regulator
  - implement risk-based Work Plans by publishing final risk-based work plan guidelines on the DEDJTR website and requesting selected sites to prepare risk-based Work Plans
  - continue to build capability in stakeholder engagement and statutory authorisations through training and acquiring additional workforce capacity, including through the dedicated resources proposed in the new organisational structure for ERR
  - continuously improve online and print material, including through the development of new internet architecture and new web content
  - implement a new complaints management process for ERR
  - monitor and evaluate the performance of the compliance plan and report results.

<sup>10</sup> <http://www.energyandresources.vic.gov.au/earth-resources-regulation/about-us/earth-resources-regulation-branch/earth-resources-regulation-2015-16-action-plan>.

<sup>11</sup> <http://www.energyandresources.vic.gov.au/earth-resources/policy-and-legislation/policy-reviews/ministerial-statement-of-expectations>

- 7.50 By 31 December 2016, ERR will also establish an external technical expert panel to build ERR's operational capability.
- 7.51 From July 2016, ERR will improve transparency by regularly publishing on the DEDJTR website:<sup>12</sup>
- information on regulatory decisions
  - performance against the client service standard
  - an evaluation of the performance of the compliance plan
  - ERR's performance against performance indicators
  - reports received from the Latrobe Valley Coal Mine operators in accordance with public reporting requirements by 30 October 2016.

## ACCELERATING PROGRESSIVE REHABILITATION AND RESEARCH

- 7.52 This section addresses:
- recommendation 4 of the Mine Rehabilitation Report, to increase the rate of progressive rehabilitation by developing milestones within the rehabilitation plans of the Latrobe Valley Coal Mines
  - recommendation 18 of the Mine Rehabilitation Report, that the Latrobe Valley Coal Mine operators develop an integrated research plan that identifies common research areas and priorities for the next 10 years, in consultation with the mining regulator and relevant agencies.

### OUTCOME FOR THE COMMUNITY

Work Plan Variations for the Latrobe Valley Coal Mines contain research plans and milestones that increase the rate of progressive rehabilitation, which are monitored and enforced by DEDJTR.

### Future Government actions

- 7.53 DEDJTR will work with the Latrobe Valley Coal Mines, with support from the TRB and other experts where necessary, to develop progressive rehabilitation milestones.
- 7.54 DEDJTR will work with the Latrobe Valley Coal Mines, in consultation with relevant agencies, research bodies and experts, to develop an integrated research plan by December 2016 that integrates the research plan of the operators of the Latrobe Valley Coal Mines and identifies common research areas and research priorities for the next 10 years.
- 7.55 The progressive rehabilitation milestones and the integrated research plan will be built into Work Plan Variations for the mines prior to final approval.
- 7.56 The research plans will be consistent with the scope of investigations to be designed and undertaken to inform the preparation of the Latrobe Valley Regional Rehabilitation Strategy, described in chapter 9. The research plans will be adapted over time to be responsive to the results from regional and mine-specific research and the Latrobe Valley Regional Rehabilitation Strategy.

## DELIVERABLES

- 7.57 The lead agencies for delivery of mine regulation are DEDJTR and WorkSafe.
- 7.58 The deliverables for Latrobe Valley Coal Mines Regulation, and the lead agency for specific actions, are set out in actions 148 to 162 of the Deliverables Table in Appendix 1.

<sup>12</sup> See <http://www.energyandresources.vic.gov.au/home>.





# 8



# CHAPTER 8: LATROBE VALLEY COAL MINE REHABILITATION BONDS

- 8.1 This chapter sets out Government's action to:
- decrease the gap between the Rehabilitation Bonds held by the Government and the estimated rehabilitation liabilities for the Latrobe Valley Coal Mines
  - implement a Rehabilitation Bond policy for the Latrobe Valley Coal Mines that mitigates financial risk to the State arising from their rehabilitation liabilities.
- 8.2 This chapter addresses recommendations 5 to 12 inclusive of the Mine Rehabilitation Report.

## OUTCOME FOR THE COMMUNITY

The financial assurance held by Government for the rehabilitation of each Latrobe Valley Coal Mine is set and maintained at the level commensurate with the assessed rehabilitation liability to mitigate risk to the State. The Victorian community has confidence that the cost of mine rehabilitation will be borne by the Latrobe Valley Coal Mines and not by the State.

## Completed Government actions

### *Rehabilitation liability assessment*

- 8.3 In April 2015, DEDJTR commissioned AECOM to develop a rehabilitation liability costing methodology and to estimate current rehabilitation liabilities for the Latrobe Valley Coal Mines, based on their approved Work Plans. The final AECOM reports were provided to the reopened Board of Inquiry.

### *Policy analysis*

- 8.4 In February 2016, DEDJTR received external advice on:
- governance options and policy, legislative or other instruments for integrating and coordinating the strategic management of coal resources and related land use planning in the Latrobe Valley, taking into account the potential interconnection of multiple mines within a common geological formation
  - mechanisms for securing the financial obligation of the mine operators for rehabilitation of the mine voids in the Latrobe Valley.

## Future Government actions

### *Interim further Rehabilitation Bonds*

- 8.5 Section 80(4) of the MR(SD) Act gives the Minister for Resources the power to issue a notice requiring a licensee to enter into a further Rehabilitation Bond if he or she is of the opinion that the amount of the current Rehabilitation Bond is insufficient. Section 80(4) of the MR(SD) Act requires the Minister for Resources to consult with a licensee prior to determining if the current Rehabilitation Bond is insufficient. Under subsection 80(2), as the Latrobe Valley Coal Mines land is private land, owned by the Latrobe Valley Coal Mine operators, the Minister for Resources must also consult with the municipal council before determining the amount of a Rehabilitation Bond. DEDJTR undertakes the consultation with the operators of the Latrobe Valley Coal Mines and Latrobe City Council on behalf of the Minister for Resources.

- 8.6 On 15 April 2016, the Minister for Energy and Resources commenced consultation under section 80(4) of the MR(SD) Act with each of the Latrobe Valley Coal Mine operators (as the licensees) and Latrobe City Council on a proposal to implement further rehabilitation bonds.
- 8.7 Consultation letters to the Latrobe Valley Coal Mine operators and Latrobe City Council outlined a proposal to revise Rehabilitation Bonds through a two-stage process, as follows:
- 30 June 2016, implement further bonds to 50 per cent of the Latrobe Valley Coal Mines self-assessed liabilities
  - 31 December 2016, implement further bonds to 100 per cent of the Latrobe Valley Coal Mines self-assessed rehabilitation liabilities.
- 8.8 Subject to the outcome of consultations with the operators of the Latrobe Valley Coal Mines and Latrobe City Council, implementation of further bonds would bring the total Rehabilitation Bonds held by the State to the following levels:

Coal Mine	Current Bond Held	Total Bond by 30 June 2016	Total Bond by 31 December 2016
Yallourn	\$11.46 million <sup>1</sup>	\$34.25 million	\$68.5 million
Hazelwood	\$15 million <sup>2</sup>	\$36.7 million	\$73.4 million
Loy Yang	\$15 million <sup>3</sup>	\$56 million	\$112 million

- 8.9 The Minister for Resources will publish a statement setting out the reasons for his or her decisions on any further Rehabilitation Bonds on the DEDJTR website, in accordance with the Government's commitment to improve public transparency in the earth resources sector.

### ***Reviewing bond policy***

- 8.10 By December 2016, DEDJTR will review the bond policy and update it as required to provide financial assurance for the State with respect to securing the rehabilitation obligations of each of the operators of the Latrobe Valley Coal Mine. This will include:
- mechanisms to address financial risk
  - the impact of progressive rehabilitation on liabilities
  - consistency and transparency in setting and reviewing bond values
  - periodic reviews
  - complementary mechanisms to secure the obligations of the Latrobe Valley Coal Mine operators, including sanctions for non-compliance and recovery from parent companies, such as the Queensland approach under the recently introduced *Environmental Protection (Chain of Responsibility) Amendment Bill 2016* (Qld).

### ***Rehabilitation liability assessments***

- 8.11 By 31 December 2016, DEDJTR will specify the manner and form for rehabilitation liability assessments for the Latrobe Valley Coal Mines. The manner and form will be based on the methodology developed for DEDJTR by AECOM. This will involve DEDJTR working with experts to:
- finalise the rehabilitation liability assessment methodology
  - provide training on the methodology and guidelines to DEDJTR staff, the operators of the Latrobe Valley Coal Mines and auditors.

<sup>1</sup> Folio F12043, registered 02/06/2005.

<sup>2</sup> Folio F6864, registered 04/10/1996.

<sup>3</sup> Folio F12043, registered 25/09/2002.



- 8.12 To ensure that appropriately qualified auditors can be engaged to undertake rehabilitation liability assessment audits:
- DEDJTR will review the necessary skills and expertise to conduct rehabilitation liability assessment audits under section 79A of the MR(SD) Act, by 31 August 2016
  - EPA will amend the accreditation criteria as necessary for auditors appointed under section 53S of the EP Act, by 31 December 2016
  - EPA and DEDJTR will subsequently assess the current pool of appointed auditors for the necessary skills and expertise, by 31 December 2016.
- 8.13 Where the auditor review determines there are insufficient appointed auditors, DEDJTR and EPA will take further steps to meet any training needs for potential auditors and run an appointment process to build the auditor pool for future rehabilitation liability assessment audits.

#### ***Further rehabilitation bonds***

- 8.14 DEDJTR will engage independent experts to prepare rehabilitation liability assessments by 30 March 2017 based on detailed examination of the Latrobe Valley Coal Mines and the rehabilitation liability manner and form specification, in consultation with the Latrobe Valley Coal Mines.
- 8.15 Depending on the outcome of the rehabilitation liability assessments, the Minister for Resources will initiate consultation under section 80 of the MR(SD) Act to implement further Rehabilitation Bonds by 30 June 2017.

#### ***Monitoring, maintenance and management costs***

- 8.16 By 30 June 2017, DEDJTR will investigate the design of a post-closure trust fund, associated governance arrangements and any complementary mechanisms, to manage the costs of ongoing monitoring, maintenance and management of the Latrobe Valley Coal Mine sites and surrounding landscapes and post-closure, taking account of land tenure.
- 8.17 DEDJTR, in collaboration with DPC, will also consider establishing a post-closure community fund for the Latrobe Valley, to mitigate the likely social and economic impacts of mine closure, taking into account the work of Latrobe Valley transition planning.
- 8.18 By 31 December 2018, DEDJTR will take actions to implement the preferred mechanism for managing ongoing costs, including policy, administrative or legislative amendments necessary for implementation.

## **DELIVERABLES**

- 8.19 The lead agencies for delivery of Latrobe Valley Coal Mine Rehabilitation Bonds are DEDJTR and EPA.
- 8.20 The deliverables for Latrobe Valley Coal Mine rehabilitation bonds are set out in actions 163 to 173 of the Deliverables Table at Appendix 1.



# 9





# CHAPTER 9: LATROBE VALLEY REGIONAL REHABILITATION STRATEGY

- 9.1 This chapter outlines the actions that will be undertaken to prepare a Latrobe Valley Regional Rehabilitation Strategy in partnership with the operators of the Latrobe Valley Coal Mines and the community, with input from technical experts. This includes:
- investigations to address knowledge gaps relating to mine rehabilitation, such as fire risk mitigation, geotechnical stability, hydrogeological and water availability at both a regional and mine-specific level
  - working with the community and the operators of the Latrobe Valley Coal Mines to understand the findings of these investigations
  - developing a Latrobe Valley Regional Rehabilitation Strategy to guide regional level planning for mining operations, rehabilitation, mine closure and post closure, taking account of the interconnectivity between the three mine voids.
- 9.2 This chapter addresses recommendations 13, 14 and 18, and affirmation 3, of the Mine Rehabilitation Report, which relate to:
- investigating groundwater and surface water impacts of the current rehabilitation plans for the Latrobe Valley Coal Mines
  - establishing an independent Latrobe Valley Mine Rehabilitation Commissioner and Statutory Authority
  - collaborating with the Latrobe Valley Coal Mine operators to develop integrated research plan.

## REGIONAL REHABILITATION PLANNING

### OUTCOME FOR THE COMMUNITY

The Latrobe Valley Regional Rehabilitation Strategy sets a safe, stable and sustainable landform for the Latrobe Valley Coal Mine voids and surrounding areas, providing assurance to the community.

### Context

- 9.3 DEDJTR is responsible for mining policy and regulation.
- 9.4 DELWP is responsible for the State planning, water management and environmental policy frameworks.

### Future Government actions

#### *Batter Stability Project*

- 9.5 In April 2016, the Minister for Energy and Resources announced the Batter Stability Project, which involves research to improve the understanding of the impact of engineering, geology and hydrogeological processes on brown coal mine stability. The Batter Stability Project is based on field-work at the Yallourn Coal Mine. It will provide an independent, scientific knowledge-base and updated geotechnical and hydrogeological models to assist in the design of safe and stable batters in the long term.
- 9.6 The results of the Batter Stability Project will inform the Latrobe Valley Regional Rehabilitation Strategy as research progresses.

## *Latrobe Valley Regional Rehabilitation Strategy*

- 9.7 The Government will:
- engage with the community, the Gunaikurnai Traditional Owner Land Management Board and the Latrobe Valley Coal Mines throughout the preparation of the Latrobe Valley Regional Rehabilitation Strategy, which will include establishing an Advisory Committee
  - conduct and coordinate investigations to address mine rehabilitation knowledge gaps including geotechnical stability, hydrogeology, environmental connectivity and water availability for the pit lake options, which will inform the integrated research plan of the operators of the Latrobe Valley Coal Mines
  - consider the estimates of water demand for mine rehabilitation with regard to any adverse effect that this use is likely to have on existing uses of water including the environment
  - prepare the Latrobe Valley Regional Rehabilitation Strategy
  - progressively apply the results of the investigations, and the Latrobe Valley Regional Rehabilitation Strategy, to mine rehabilitation plans, design of post-closure monitoring and maintenance and land use planning
  - establish an independent Latrobe Valley Mine Rehabilitation Commissioner to provide leadership and oversight of rehabilitation and closure planning.
- 9.8 The methodology for investigations will draw on expert advice and will include:
- modelling and assessing several pit-lake rehabilitation scenarios
  - building on existing data and current field programs.
- 9.9 Investigations to confirm the feasibility of the pit lake and partial pit lake rehabilitation options for the Latrobe Valley Coal Mines will include:
- regional geotechnical and hydrogeology studies to address knowledge gaps
  - regional water studies, in areas such as groundwater and surface water balance, water quality (in the pit lakes and potential impacts on downstream users), and potential impacts on: aquatic ecosystems; downstream users; long-term water availability (including climate change scenarios); and the environment
  - an assessment of potential regional impacts to the environment including to ecology, adjacent Crown land and sensitive land uses and values. This will include an assessment of the acceptability of any residual impacts on surrounding environmental values
  - an assessment of regional impacts of closure of the Latrobe Valley Coal Mines, taking into account a range of potential mining operational and closure scenarios and the interconnections with other land uses and major infrastructure in the Latrobe Valley
  - a post-closure monitoring and evaluation plan.



- 9.10 Government will also:
- consider the Latrobe Valley Coal Mines and power station water entitlements and licences that may be required to implement the Latrobe Valley Regional Rehabilitation Strategy
  - review State and local planning policies to take into account strategic land use planning, major infrastructure planning and environmental implications of closure and rehabilitation of the Latrobe Valley Coal Mines
  - identify any legislative or regulatory reforms required to implement the Latrobe Valley Regional Rehabilitation Strategy.
- 9.11 The Latrobe Valley Regional Rehabilitation Strategy will be a living document that will be progressively updated with new information and expert knowledge as it becomes available. The work program will be independently peer reviewed at key stages and adjusted to respond to progressive findings and the research programs of the operators of the Latrobe Valley Coal Mines.

## LATROBE VALLEY MINE REHABILITATION COMMISSIONER

### OUTCOME FOR THE COMMUNITY

The Latrobe Valley community has a Mine Rehabilitation Commissioner, based locally, to provide assurance that the Government and the operators of the Latrobe Valley Coal Mines are advancing planning for mine closure and the Latrobe Valley Regional Rehabilitation Strategy.

### Future Government actions

- 9.12 By 30 June 2017, DEDJTR will establish an independent Latrobe Valley Mine Rehabilitation Commissioner as a statutory appointment under the MR(SD) Act, based in the Latrobe Valley.
- 9.13 The duties of the independent Latrobe Valley Mine Rehabilitation Commissioner will include:
- providing advice to the Minister for Resources
  - monitoring the implementation and effectiveness of the Latrobe Valley Regional Rehabilitation Strategy
  - undertaking strategic audits of Government and the Latrobe Valley Coal Mines operators
  - conducting investigation into significant issues with powers to obtain information
  - planning for post-closure monitoring and maintenance, including clarifying roles and financial obligation
  - identifying processes for community and stakeholder input into the assessment of rehabilitation against closure criteria
  - coordinating parties to resolve outstanding issues
  - promoting and coordinating research to address knowledge gaps
  - sharing and publishing information including research findings
  - undertaking public education and community engagement
  - publishing an annual report.

## DELIVERABLES

- 9.14 The lead agency for delivery of the Latrobe Valley Regional Rehabilitation Strategy is DEDJTR, supported by DELWP.
- 9.15 The deliverables for the Latrobe Valley Regional Rehabilitation Strategy are set out in actions 174 to 204 of the Deliverables Table in Appendix 1.



10



# CHAPTER 10: EMERGENCY MANAGEMENT PLANNING, RESPONSE AND RECOVERY

- 10.1 This chapter outlines the Government's actions to strengthen the arrangements for emergency management planning, response and recovery. This chapter details the Government's work to:
- integrate the Latrobe Valley Coal Mines into Victoria's emergency management arrangements through integrated IMTs
  - strengthen the emergency management planning framework, integrate fire management planning and develop regional resource planning arrangements for the Latrobe Valley
  - improve emergency management training for firefighters responding to brown coal fires
  - build local government emergency management capability
  - introduce new technology for making payments during and following emergency events under the Personal Hardship Assistance Program.

## INDUSTRY INTEGRATION IN EMERGENCY MANAGEMENT

- 10.2 This section addresses recommendation 2 and affirmation 10 of the 2014 Inquiry Report.
- 10.3 The Government has:
- established the time-limited Latrobe Valley Coal Mine Taskforce as an interim measure to promote emergency management integration and collaboration between government departments and agencies, Latrobe City Council and the Latrobe Valley Coal Mines
  - established CFA District 27 as a dedicated district-based management team in the Latrobe Valley to provide enhanced planning and response capability to the unique hazard profile of the Latrobe Valley Coal Mines.
- 10.4 The Government will:
- develop processes for the establishment of integrated IMTs, which bring essential industry providers in the Latrobe Valley into the management of emergencies, as appropriate
  - implement AIIMS in integrated IMTs.

### OUTCOME FOR THE COMMUNITY

Industry in the Latrobe Valley is integrated into future emergency responses, as appropriate, in order to capture critical information and ensure a coordinated response. The community will be supported by better decision-making in any future event that impacts on the Latrobe Valley Coal Mines.

## Completed Government actions

### *Latrobe Valley Coal Mine Taskforce*

- 10.5 Following the delivery of the 2014 Inquiry Report, the Latrobe Valley Coal Mine Taskforce was established to facilitate collaboration between the operators of the Latrobe Valley Coal Mines, Government and Latrobe City Council. The terms of reference for the Latrobe Valley Coal Mine Taskforce include:
- reviewing the fire and emergency preparedness of the Latrobe Valley Coal Mines
  - supporting improved capability and interoperability between the Latrobe Valley Coal Mines, government agencies and the community
  - overseeing implementation of relevant 2014 Inquiry Report recommendations and affirmations.<sup>1</sup>
- 10.6 The Latrobe Valley Coal Mine Taskforce is chaired by the EMC, and includes representatives from CFA, DEDJTR, DELWP, DHHS, DPC, EMV, EPA, the Latrobe Valley Coal Mines, Latrobe City Council, Victorian Police and WorkSafe.
- 10.7 EMV have produced two annual reports for the Latrobe Valley Coal Mine Taskforce, in December 2014<sup>2</sup> and December 2015,<sup>3</sup> which outline the status and initiatives undertaken to improve integration between parties in emergency management.

### *CFA District 27*

- 10.8 The Latrobe Valley is now supported by CFA District 27, which became operationally active on 1 April 2015. District 27 is the first new CFA district since 1962. District 27 is a dedicated district-based management team for the Latrobe Valley, with its headquarters in Morwell. District 27 supports the prevention, preparedness and response activities of the CFA in the Latrobe Valley, which includes the Latrobe Valley Coal Mines.
- 10.9 District 27 has two heavy tankers fitted with CAFS, specifically designed to suppress coal mine fires.<sup>4</sup> District 27 is resourced to provide enhanced planning and response capability in the Latrobe Valley, and has 23 fire brigades, 83 fire-fighting vehicles, 1131 volunteer fire-fighters, 45 career firefighters and 6 district management and administration staff. A local CFA headquarters also facilitates a collaborative relationships between CFA and the broad range of industry in the Latrobe Valley, which include industry that presents complex emergency risks.

### *Industry integration for incident controllers*

- 10.10 EMV and CFA have worked with other agencies and industry to develop the Industry Integration Concept of Operations, which formalises the inclusion of Latrobe Valley Coal Mine personnel at integrated REMTs and IMTs.<sup>5</sup> The Industry Integration Concept of Operations outlines incident level functions and responsibilities during an emergency response and assigns lead and core membership for incident level functions. Industry is listed within the core membership for 'Suppression and Extinguishment', 'Emergency Responder Health and Safety' and 'Community Engagement and Information' functions.
- 10.11 The Industry Integration Concept of Operations recognises that most fires, including minor fires in coal mines, are managed at the site level by local management. As the severity of the fire escalates, management of a coordinated response occurs in accordance with the principles of Level 1 or 2 AIMS ICS management structures.

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1 <https://www.emv.vic.gov.au/our-work/current-projects/coal-mine-emergency-management-taskforce>.

2 <http://fire-com-live-wp.s3.amazonaws.com/wp-content/uploads/Coal-Mine-Emergency-Management-Taskforce-Status-report-31-Dec-2014pdf.pdf>.

3 <http://fire-com-live-wp.s3.amazonaws.com/wp-content/uploads/20141201055015/Coal-Mine-Emergency-Taskforce-Status-report-31-December-2015-V6-DraftCAedit-CLapp-and-PS-acc.pdf>.

4 CAFS are water pumping systems that enable compressed air to be added to a foam solution that can be propelled further than traditional pumping systems. The use of CAFS reduces water usage, smoke emissions and carbon monoxide emissions, and improves fire-fighter safety as a result.

5 Latrobe Valley Critical Infrastructure Major Emergency Guideline –Concept of Operations and Industry Integration for Incident Controllers (December 2015).



- 10.12 As of May 2016, 51 personnel from the Latrobe Valley Coal Mines have attained AIIMS Level 2 accreditation.<sup>6</sup> Personnel with AIIMS Level 2 accreditation are qualified to provide functional support within a multi-agency IMT.
- 10.13 CFA, EMV, MFB, Parks Victoria and VicSES have been involved in AFAC's rewrite of the AIIMS doctrine, which is due to produce version 5 in March 2017. Version 5 will formally include industry within the AIIMS structure. This will require increased training of mine personnel. AFAC, CFA, EMV, MFB, Parks Victoria and VicSES are working together to secure appropriately accredited training providers to work with the operators of the Latrobe Valley Coal Mines, who will identify and train personnel to meet the standards under the AIIMS structure at the IMT level under version 5.

### *Exercising industry integration*

- 10.14 On 8 and 9 October 2015, EMV lead 'Exercise Latrobe 15' to test the preparedness level of industry and emergency management agencies at the commencement of the 2015/16 summer season. Members of the Latrobe Valley Coal Mine Taskforce participated, including the Latrobe Valley Coal Mine operators, along with Australian Paper and Hancocks Plantations.
- 10.15 Exercise Latrobe 15 was designed to:
- test and validate the integration of industry and emergency management agencies in emergency planning and preparedness
  - display and practice the integration of industry into the AIIMS structure
  - explore the incident management arrangements in response to a major incident in the Latrobe Valley
  - recognise areas of improved capability and those requiring further attention to reduce fire risk and enhance community safety
  - explore the integration of:
    - detection, analysis and monitoring operations and information transfer into the IMT
    - public information and community engagement processes.
- 10.16 EMV undertook a review of Exercise Latrobe 15. Surveys of exercise participants were conducted to measure how successfully Exercise Latrobe 15 tested integration. The Exercise Latrobe 15 Report was distributed to all key stakeholders and learnings compiled into a working document to inform the introduction of similar models to other areas of the State with essential industry.
- 10.17 The Industry Integration Concept of Operations was finalised in December 2015, taking into consideration the outcomes of Exercise Latrobe 15.
- 10.18 Local emergency management plans were also updated in August 2015 to incorporate the integration of industry in emergency management planning and response.

## **Future Government actions**

### *Industry integration for incident controllers*

- 10.19 JSOP 02.03 Incident Management Team Readiness Arrangements for Bushfires will be updated by SCC managers in early 2017, in line with the standard 18-month cycle. This update will present an opportunity to update the State-wide JSOP 02.03 to reflect the Industry Integration Concept of Operations.
- 10.20 As JSOP 02-03 is utilised across every platform in Victoria, it is distributed broadly and training across Victoria must be updated, as appropriate.

### *Exercising industry integration*

- 10.21 The Latrobe Valley Coal Mine Taskforce will undertake an exercise on 25 and 26 August 2016. This exercise will test the integration of the Latrobe Valley Coal Mines and other industry into the IMT and will have a particular focus on communications.

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<sup>6</sup> 25 personnel from the Hazelwood Coal Mine, 17 personnel from the Loy Yang Coal Mine and 9 personnel from the Yallourn Coal Mine.

### *Industry engagement following the Latrobe Valley Coal Mine Taskforce*

- 10.22 The Latrobe Valley Coal Mine Taskforce will operate until September 2016, having been extended from its original end date of 31 December 2015 to support ongoing preparedness of the Latrobe Valley Coal Mines for the 2015/16 summer season. By December 2016, EMV will prepare and release a final report on the activities of the Latrobe Valley Coal Mine Taskforce.
- 10.23 In June 2015, CFA established an industry forum. The CFA industry forum meets monthly. The CFA industry forum provides a platform for Latrobe Valley industries and CFA to apply a consistent approach to emergency management planning, with a focus on consequence management. This is achieved through:
- developing trusted networks between industry and local emergency services
  - undertaking consistent planning approaches for response capability readiness to fires that may occur within the boundary of the Latrobe City Council, to ensure sound leadership and the development, sharing and validation of practicable policies and procedures
  - reducing impacts or consequences of fires on Victoria's critical infrastructure and the community.
- 10.24 CFA partners with the Latrobe Valley Coal Mines to run joint emergency response exercises for responding firefighters and mine personnel. The exercises are designed to facilitate site familiarisation, response planning, specialist knowledge sharing and partnership formation. Two exercises are conducted in the lead-up to each summer season. These exercises are organised in partnership between CFA and operators of the Latrobe Valley Coal Mines. In addition to these site exercises, coordinated exercises with other emergency management agencies provide a valuable opportunity for stakeholders to gain a greater understanding of the roles and responsibilities of other agencies within the emergency management arena. Exercise "Latrobe 15", conducted in October 2015, was an example of this practice.
- 10.25 District 27 headquarters in Morwell is being renovated and will have a District Command Centre to support an integrated CFA and industry response to emergency events.
- 10.26 The CGEIG Standardisation Committee is tasked with implementing a common operating platform for day-to-day operational activity. It also provides a forum for engagement with, and integration of, industry in emergency management arrangements. Members include all major industry in the Latrobe Valley, and response and regulatory agencies.

## EMERGENCY MANAGEMENT PLANNING

- 10.27 This section addresses recommendation 3 and affirmations 8, 9, 13, 36 and 37 of the 2014 Inquiry Report.
- 10.28 The Government will:
- strengthen the emergency management planning framework through legislative reform
  - formalise an approach to integrated regional resource sharing in the Latrobe Valley
  - implement the Critical Infrastructure Resilience Strategy, to require the Latrobe Valley Coal Mines to undertake emergency management, including fire, planning.

### OUTCOME FOR THE COMMUNITY

State, regional and municipal emergency management plans are in place, building the resilience of Victorian communities through improved emergency management planning.

The Latrobe Valley Coal Mines have emergency management plans in place, which are subject to the annual resilience improvement cycle, providing assurance to the community that the Latrobe Valley Coal Mines are managing their risks.

## Victoria's current framework for emergency management planning

- 10.29 Victoria's emergency management planning arrangements are primarily governed by the 1986 Emergency Management Act and the 2013 Emergency Management Act.
- 10.30 Other legislation provides arrangements for the management of specific geographies<sup>7</sup> or hazards, such as fire planning.<sup>8</sup>
- 10.31 The current emergency management planning arrangements require planning at the state and local level, and allow for planning at the regional level:
- at the State level:
    - the EMC must arrange for the preparation of a state emergency response plan, for the coordinated response to emergencies by all agencies having roles and responsibilities in relation to emergency response<sup>9</sup>
    - the Minister for Emergency Services must arrange for the preparation of a state emergency recovery plan, for the coordinated planning and management of emergency recovery. The Minister for Emergency Services has delegated this function to the EMC<sup>10</sup>
    - there is no specific legislative requirement for mitigation planning
  - at the regional level:
    - the EMC may establish regional emergency response committees to plan for the coordinate response to emergencies<sup>11</sup>
    - there is no specific legislative support for mitigation or recovery planning
  - at the local level:
    - all local governments must prepare and maintain a municipal emergency management plan that identifies available resources, and specifies how these resources will be utilised for emergency prevention, response and recovery.
- 10.32 The EMMV outlines Victoria's emergency management arrangements, including planning arrangements, and contains policy and planning documents to support emergency management. The EMMV contains the state emergency response plan and the state emergency recovery plan.
- 10.33 There is ongoing reform of Victoria's emergency management arrangements, including for emergency management planning arrangements, which is driven by the White Paper,<sup>12</sup> the Critical Infrastructure Resilience Strategy<sup>13</sup> and the Emergency Management SAP.<sup>14</sup>
- 10.34 Significant changes made to Victoria's emergency management arrangements through the current reform process include:
- establishing EMV as the responsible agency for coordination and development of whole of Government policy for emergency management in Victoria
  - establishing the EMC as the overarching management role for major emergencies
  - establishing SCRC as the peak crisis and emergency management advisory body in Victoria responsible for providing advice to the Minister for Emergency Services.

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7 see, Alpine Resorts (Management) Act 1996 (Vic).

8 see, Country Fire Authority Act 1958 (Vic).

9 Emergency Management Act 2013 (Vic) s.53(1).

10 Emergency Management Act 2013 (Vic) s.59(1).

11 Emergency Management Act 2013 (Vic) s.58.

12 Victorian Emergency Management Reform White Paper, Department of Justice, State Government of Victoria, 2012.

13 <https://www.emv.vic.gov.au/our-work/critical-infrastructure-resilience/>.

14 [http://fire-com-live-wp.s3.amazonaws.com/wp-content/uploads/EMV\\_Strategic\\_Web1.pdf](http://fire-com-live-wp.s3.amazonaws.com/wp-content/uploads/EMV_Strategic_Web1.pdf).

## Completed Government actions

### Legislative reform

- 10.35 The Emergency Management Planning Bill, released as an exposure draft for public consultation in May 2016, introduces an integrated emergency management planning framework. If enacted, the Emergency Management Planning Bill will require the preparation of plans at the state, regional and municipal levels, covering mitigation, preparation, response and recovery of all likely hazards. The new emergency management planning framework will underpin an 'all-communities, all emergencies'; integrated approach to planning.
- 10.36 Figure 10.1 demonstrates the emergency management planning framework that would be introduced by the Emergency Management Planning Bill, including the governance structure and method of approval under the framework.

### Emergency Management Planning Framework

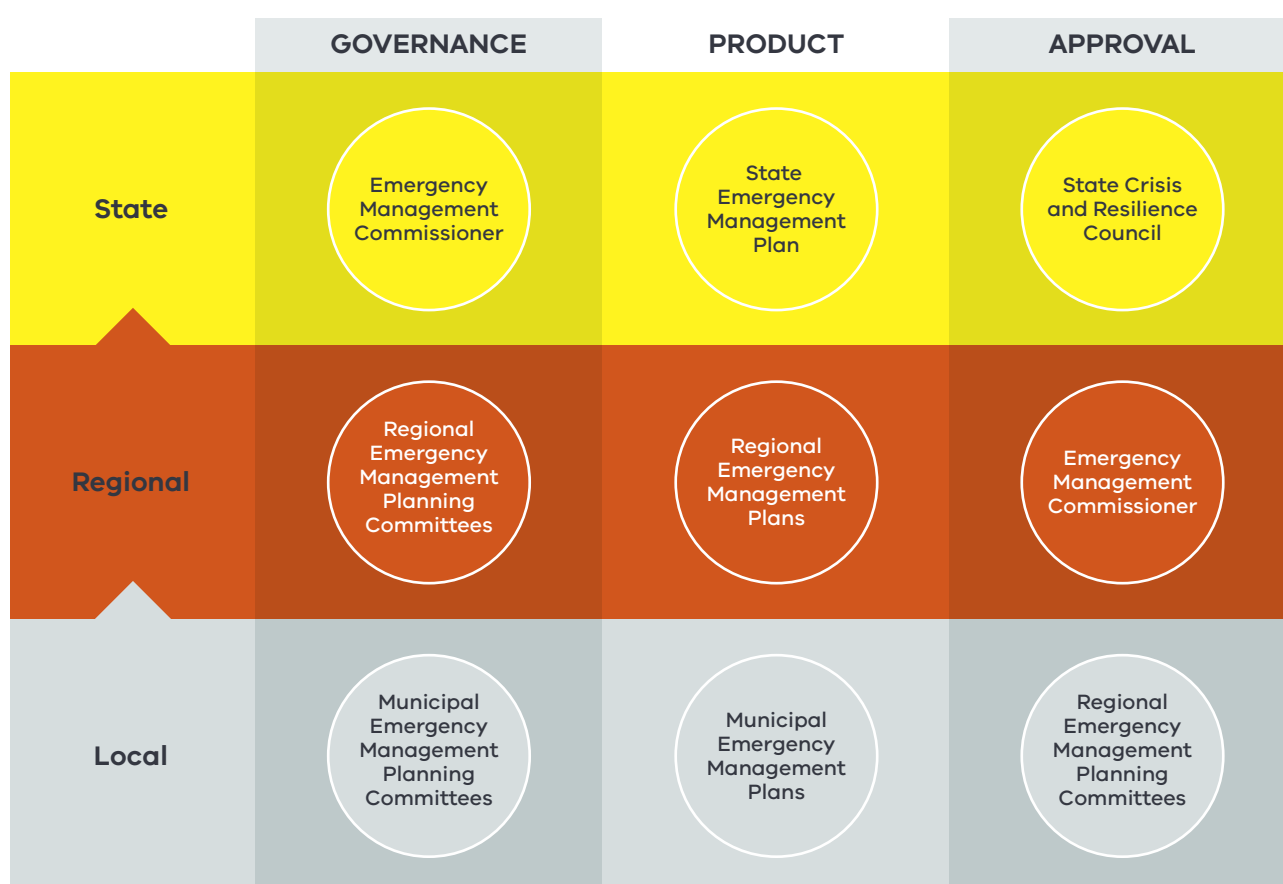


Figure 10.1 Governance structure and planning framework introduced under the Emergency Management Planning Bill

### Regional resource planning in the Latrobe Valley

- 10.37 Across Victoria, established emergency management structures, such as the SEMT and REMTs, are used to allocate resources in response to each specific emergency event. This structure supports a coordinated and collaborative approach to management of emergencies, including a focus on the effect and consequences and how these will be mitigated and managed.
- 10.38 The Industry Integration Concept of Operations formalises the regional approach to resource planning in the Latrobe Valley. Regional resource planning through the REMT, utilising the Industry Integration Concept of Operations, was subjected to and tested during Exercise Latrobe 15.

10.39 The Industry Integration Concept of Operations exists within a framework of other strategies and plans, which guide resource planning in the Latrobe Valley, including:

- Regional Emergency Response Plan
- Regional Strategic Fire Management Plan
- Regional Strategic Risk and Consequence Plan
- Latrobe City Council Municipal Fire Management Plan
- JSOPs 02.03 and 03.18
- Gippsland Regional Recovery Plan
- State Emergency Response Plan
- State Health Emergency Response Plan
- State Smoke Framework.

### ***Critical Infrastructure Resilience Strategy***

10.40 The Critical Infrastructure Resilience Strategy was published in July 2015. It works in conjunction with Part 7A of the 2013 Emergency Management Act to set out the framework for Victoria's security and emergency management arrangements for critical infrastructure.

10.41 The Critical Infrastructure Resilience Strategy and Part 7A of the 2013 Emergency Management Act require the assessment and designation of Victoria's critical infrastructure as 'local', 'significant', 'major' or 'vital'.

10.42 Owners and/or operators of 'vital' critical infrastructure are required to undertake an annual resilience improvement cycle,<sup>15</sup> which includes:

- developing an emergency risk management plan to identify and mitigate against risks to continuity of supply<sup>16</sup>
- undertaking annual exercises to test the emergency management arrangements in the risk management plans,<sup>17</sup> which are overseen by portfolio departments
- undertaking an assurance mechanism to prompt all learnings to be considered and reflected in appropriate amendments to the risk mitigation plan.<sup>18</sup>

10.43 Portfolio departments have established Sector Resilience Networks, which provide a forum for collaboration between government departments and agencies and industry stakeholders in the critical infrastructure industries of: energy; water; transport; food supply and security; banking and technology; health; and government.

10.44 EMV hosted a Sector Resilience Network All Sectors Forum in June 2015, with the new critical infrastructure resilience arrangements as its theme. A Sector Resilience Network All Sectors Forum was also held in April 2016.

### **Future Government actions**

#### ***Legislative reform***

10.45 The Emergency Management Planning Bill is scheduled to be considered by Parliament in late 2016.

10.46 If the Emergency Management Planning Bill is passed through Parliament, there will be phased implementation of the arrangements. Under the current proposed timelines, all State, regional and municipal plans are projected to be developed by December 2018.

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15 Section 74M, Emergency Management Act 2013 (Vic).

16 Section 74P, Emergency Management Act 2013 (Vic).

17 Section 74Q, Emergency Management Act 2013 (Vic).

18 Section 74N, Emergency management Act 2013 (Vic).

### *Regional resource planning*

- 10.47 The Latrobe Valley Coal Mine Taskforce will oversee a review of the regional plans for emergency events impacting on the Latrobe Valley Coal Mines. A set of guidelines will be developed to support the management of ongoing response requirements in relation to Class 1 emergencies.<sup>19</sup>
- 10.48 EMV is currently working with the Gippsland REMP Committee to establish a special subcommittee to lead resource planning in the Latrobe Valley by June 2016.

### *Critical Infrastructure Resilience Strategy*

- 10.49 Major coal-fired electricity generation infrastructure in the Latrobe Valley has been classified as 'vital' critical infrastructure.<sup>20</sup>
- 10.50 DEDJTR, as the department responsible for the energy sector, is working with the operators of the Latrobe Valley Coal Mines, as 'vital' critical infrastructure, to begin the resilience improvement cycle. This work will occur in partnership with the ERR Mine Fire and Emergency Unit and EMV.

## EMERGENCY MANAGEMENT TRAINING

- 10.51 This section addresses affirmations 11 and 12 of the 2014 Inquiry Report. The Government will:
- improve training for career and volunteer firefighters
  - update emergency response OHS to include training in the Standards for Management CO Emissions.

### OUTCOME FOR THE COMMUNITY

The Brown Coal Mine Firefighter Training Package has been developed and utilised in firefighter training, providing assurance to the Victorian community that firefighters are trained to respond to any future brown coal fires.

OHS training for emergency first responders includes training on the standards for managing CO emissions

### Completed Government actions

#### *Brown Coal Firefighter Training Package*

- 10.52 The Brown Coal Mine Firefighting Training Package has been developed. The Brown Coal Mine Firefighting Training Package is focused on improving the awareness and capability of firefighters in responding to mine fires. Education on the Standard for Managing CO Emissions and JSOP 03.20 is part of the training package.

#### *OHS in emergency response*

- 10.53 In August 2015, CFA revised its District 27 Operating Procedure for Latrobe Valley Open Cut Mines to align it with the Standard for Managing CO Emissions.
- 10.54 CFA has begun implementing a Volunteer Rehabilitation and Health Unit, which will look after firefighter welfare and recovery during events in extreme weather and conduct health monitoring, such as CO monitoring and hydration. It will incorporate provision of an increased level of support and awareness of the physiology and physical wellbeing of emergency first responders, and be available for multi agency use.
- 10.55 In November 2015, CFA began a health monitoring trial at emergency sites, with Life Aid, in Portland and Kaladbro.

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<sup>19</sup> As defined in the Emergency Management Act 2013 (Vic), Class 1 emergency means a major fire or any other major emergency for which the MFESB, CFA or SES is the control agency under the State Emergency Response Plan.

<sup>20</sup> As defined in the Executive Summary of the Critical Infrastructure Resilience Strategy, published July 2015.



- 10.56 CFA has recently commissioned a Volunteer Rehabilitation and Health Unit at Yallourn North to provide this capability locally for the Latrobe Valley. This unit commenced operations on 6 December 2015, with 16 trained and experienced personnel to resource it.
- 10.57 Across Victoria, nine volunteer units (seven health monitoring and two rehabilitation units) have been established, equipped and trained. These are strategically placed around Victoria. Deployment of these units has occurred to the Wye River fire, Portland ship fire, Somerton tip fire, Broadmeadows tyre fire, Tasmanian fires and the Kaladbro Peat Fire.

#### *CAFS capability*

- 10.58 The use of firefighting vehicles fitted with CAFS has shown to be very effective at fire suppression when incorporated into traditional fire suppression strategies, such as water assaults and building breaks. The use of CAFS trucks reduces water usage, smoke emissions and CO emissions, resulting in improved firefighter safety.
- 10.59 Two purpose built specialist CAFS trucks are in the final stages of planning. Tenders for the building of the two specialist CAFS trucks will be released by September 2016.
- 10.60 In April 2015, CFA developed two standard heavy crew cab tankers retrofitted with a CAFS capability as an interim measure. These CAFS capable tankers are stationed at Churchill and Traralgon South. They have been used locally within District 27, and were deployed to the Strathdownie peat fire and the Somerton tip fire in November 2015.



## Future Government actions

### *Brown Coal Mine Firefighter Training Package*

- 10.61 A pilot for the Brown Coal Mine Firefighting Training Package will begin in July 2016, starting in District 27. MFB will be involved in the delivery of the pilot program.
- 10.62 An online training module of the Brown Coal Mine Firefighting Training Package is being developed for access by staff and volunteers. This is a blended learning program, with a requirement for face-to-face sessions to cover skills development. The ongoing delivery and assessment of the training program will begin in November 2016, and be transitioned to BAU by October 2017.
- 10.63 As part of the Brown Coal Mine Firefighting Training Package, training for IMTs has been developed, with a focus on Incident Controllers. This training will be delivered via facilitated exercises with multi-agency involvement. The exercises were designed to improve the performance of IMTs in relation to open cut mine incidents.

### *CAFS capability*

- 10.64 District 27 is currently developing volunteer capability to support the CAFS operations by undertaking additional training from January 2016 as part of its brigade training programs.
- 10.65 A Detection Team (Scientific Officers and HAZMAT) Training Package is also being developed. Portable infrared scanning technology has been installed on both the northern and southern batters of the Hazelwood Coal Mine. Hand-held thermal imaging cameras have been allocated to Morwell, Traralgon, Traralgon South and Churchill brigades for appropriate utilisation. This will increase CFA capability to quickly identify fires within the Latrobe Valley Coal Mines.

## LOCAL GOVERNMENT CAPABILITY

- 10.66 This section addresses affirmations 31 and 38 of the 2014 Inquiry Report, which relate to building local government capability in emergency management across Victoria, and specifically within the Latrobe Valley.
- 10.67 The State will:
- coordinate local government emergency management officers across Victoria
  - review the Latrobe City Municipal Emergency Management Plan.

### OUTCOME FOR THE COMMUNITY

Networks exist between emergency management officers from local governments, which promote knowledge and resource sharing, and support local governments to build their emergency management capability and capacity to better support Victorian communities.

## Completed Government actions

### *Building emergency management capability of local government*

- 10.68 The LGWG was established in April 2015 by the Risk and Resilience Sub-Committee of SCRC to explore options to support increased emergency management capability and capacity in local governments. The LGWG is chaired by DELWP, with representatives from DHHS, DPC, EMV and MAV.
- 10.69 During 2015, the LGWG reviewed the emergency management capability and capacity of local governments. The LGWG has identified a number of strengths in local government relevant to their emergency management roles, including strong relationships, networks and knowledge of local communities. The LGWG also identified a number of factors that affect local governments in carrying out their roles, including unclear roles and responsibilities, poor alignment between these roles and responsibilities and gaps in capability and capacity.
- 10.70 LGV, within DELWP, is working to build the capability and capacity of local government to meet their emergency management responsibilities through increased coordination and collaboration.

- 10.71 Local government collaborative groups, such as MEMEGs, are groups of local governments who collaborate to achieve increased emergency management capability and capacity through, for example, resource and information sharing and joint training. There are 11 local government collaborative groups across Victoria.
- 10.72 Between January and May 2016, LGV held planning days for all local government collaborative groups to assist with strategic planning for collaborating in emergency management.
- 10.73 The State MEMEG is the coordinating body for all local government collaborative groups in Victoria. The State MEMEG conducted an annual forum in Bendigo in June 2016 for all council emergency management staff.

#### ***Latrobe Municipal Emergency Management Plan***

- 10.74 In December 2014, the Regional Emergency Management Committee completed a review of the Latrobe Municipal Emergency Management Plan and submitted it to VicSES for audit. This review was required as part of the three-year rolling audit of all Municipal Emergency Management Plans required under legislation.<sup>21</sup>
- 10.75 The VicSES audit found that the Latrobe Municipal Emergency Management Plan required amendment to meet its requirements.
- 10.76 LGV worked with Latrobe City Council to revise the Latrobe Municipal Emergency Management Plan, in line with the VicSES requirements. The Latrobe Municipal Emergency Management Plan was finalised in September 2015.

#### **Future Government actions**

##### ***Building emergency management capability of local government***

- 10.77 As part of the Emergency Management SAP, LGWG will:
- by September 2016, define the roles and responsibilities of local government in emergency management
  - by September 2016, review the current roles and responsibilities for alignment.
- 10.78 The LGWG will build upon this work and:
- by December 2017, review the capability and capacity required for local government to fulfil their roles
  - by December 2018, develop an action plan to address any capability and capacity gaps.

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<sup>21</sup> Section 21A(1), Emergency Management Act 1986 (Vic).

## PERSONAL HARDSHIP ASSISTANCE PROGRAM PAYMENTS DURING EMERGENCY EVENTS

This section addresses affirmation 30 of the 2014 Inquiry Report, which relates to implementing new technology for recording emergency assistance payments.

### OUTCOME FOR THE COMMUNITY

A new system for recording Personal Hardship Assistance Program payments allows mobile access and a real-time search functionality. Payments are processed faster, providing better support for Victorian communities.

### Completed Government actions

- 10.79 In November 2015, DHHS introduced new technology to track payments under the Personal Hardship Assistance Program, which are granted to eligible Victorians affected by an emergency event to assist them in meeting their immediate needs.
- 10.80 The new system gives DHHS the ability to operate on multiple mobile devices and systems in relief centres and other locations across Victoria. The technology has a real-time search functionality so that DHHS can process applications for assistance in a more timely manner while minimising fraudulent payments.

### DELIVERABLES

- 10.81 The lead agencies for Emergency Management Planning, Response and Recovery are CFA, DEDJTR, DELWP, DHHS, EMV and MFB.
- 10.82 The deliverables, and the lead agency for specific actions, are set out in actions 205 to 246 of the Deliverables Table in Appendix 1.



# APPENDIX 1: TABLE OF VICTORIAN GOVERNMENT DELIVERABLES

The following table sets out the deliverables, relevant recommendation or affirmation, status and lead agency for implementation:

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
<b>Governance and Accountability</b>				
1.	Convene meetings of the IDC on a quarterly basis, and more often if required, until December 2019	N/A	Quarterly until December 2019	DPC
2.	Reimburse Voices of the Valley for fee paid to Victorian Registry of Births, Deaths and Marriages for death records data	Death Investigation Report, affirmation	Completed December 2015	DPC
3.	Assist the Minister for Emergency Services to request that the IGEM begins monitoring implementation of all 2014 Inquiry Report recommendations and affirmations, by Government and GDF Suez, with annual reports on progress	2014 Inquiry report: recommendation 1 and affirmation 40	Completed February 2016	DJR
4.	Assist the Minister for Emergency Services to request that the IGEM begins monitoring implementation of all reopened Inquiry Report recommendations and affirmations by Government and non-Government organisations, with annual reports on progress	Death Investigation Report: recommendation 5 Health Improvement Report: recommendation 1 Mine Rehabilitation Report: recommendation 1	June 2016	DPC and DJR
5.	Publicly released the IGEM's annual reports in the Victorian Parliament within a reasonable time of receipt by the Minister for Emergency Services	2014 Inquiry Report: recommendation 1 and affirmation 40 Death Investigation Report: recommendation 5 Health Improvement Report: recommendation 1 Mine Rehabilitation Report: recommendation 1	Annually until 2019	DJR



No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
<b>Communications and Community Engagement</b>				
<b><i>Communications during emergencies</i></b>				
6.	Circulate a draft State Communications Strategy to EMJPIC members for consultation	2014 Inquiry Report: recommendation 11	July 2016	EMV
7.	Test the draft State Communications Strategy at the Latrobe Valley Coal Mine Taskforce August 2016 Exercise	2014 Inquiry Report: recommendation 11	August 2016	EMV
8.	Incorporate private operators of essential infrastructure in the State Communications Strategy	2014 Inquiry Report: recommendation 11	September 2016	EMV
9.	Submit the State Communications Strategy to SCRC for consideration and approval	2014 Inquiry Report: recommendation 11	September 2016	EMV
10.	Develop operational guidelines/ procedure to support the State Communications Strategy	2014 Inquiry Report: recommendation 11	October 2016	EMV
11.	Provide training to key managers at Incident, Regional and State Level (including EMJPIC members, Level 3 Controllers, Regional and State control positions) on the State Communications Strategy and supporting operational guideline/ procedure	2014 Inquiry Report: recommendation 11	November 2016	EMV
<b><i>White Paper actions</i></b>				
12.	EM-COP to be operational	2014 Inquiry Report: affirmation 6	Completed November 2015	EMV
13.	Upgrade the VicEmergency website to support all-communities all-emergencies use over 2015/16 summer season	2014 Inquiry Report: affirmation 6	Completed December 2015	EMV
14.	Launch the VicEmergency app	2014 Inquiry Report: affirmation 6	October 2016	EMV
15.	Roll all existing emergency management information systems into EM-COP, to be available for use by all emergency management personnel	2014 Inquiry Report: affirmation 6	October 2016	EMV

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
16.	Align call centre arrangements for all government departments and agencies for emergency management messaging	2014 Inquiry Report: affirmation 6	December 2017	EMV
<b>Community engagement</b>				
17.	Engage a dedicated EMV community engagement officer based in the Latrobe Valley	2014 Inquiry Report: recommendation 12	August 2016	EMV
18.	Develop a plan for the Latrobe Valley Community Engagement and Planning Project	2014 Inquiry Report: recommendation 12	February 2017	EMV
19.	Deliver the Latrobe Valley Community Engagement and Planning Project	2014 Inquiry Report: recommendation 12	June 2017	EMV
<b>EPA emergency communications</b>				
20.	Deliver the EPA Emergency Response Communications Protocol	2014 Inquiry Report: Affirmation 20	Completed December 2015	EPA
<b>EPA engagement with the Latrobe Valley community</b>				
21.	Evaluate the pilot Citizen Science Program	2014 Inquiry Report: affirmation 20	Completed August 2015	EPA
22.	Identify local community networks and their environment information sources by undertaking a social network analysis	2014 Inquiry Report: affirmation 20	Completed October 2015	EPA
23.	Evaluate the pilot communication and engagement approach	2014 Inquiry Report: affirmation 20	Completed December 2015	EPA
24.	Complete a community co-design process for a new air monitoring network (including smoke sensor sub-network)	N/A	December 2016	EPA

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
25..	Evaluate existing activities of the Citizen Science Program and adapt them as necessary to remain relevant to the local community	2014 Inquiry Report: affirmation 20	September 2017	EPA
26.	Complete the reconfiguration of the current ambient air monitoring network (including the smoke sensor sub-network)	N/A	June 2018	EPA
27.	Deliver new participation opportunities as part of the Citizen Science Program for the Latrobe Valley community	2014 Inquiry Report: affirmation 20	June 2018	EPA
<b>Health communications and public health investigations</b>				
28.	Deliver refresher contract management training for DHHS procurement staff	Death Investigation Report: recommendation 4	Completed November 2015	DHHS
29.	Engage an independent consultant to undertake a review of DHHS procurement and contract management policies and procedures for obtaining independent expert advice	Death Investigation Report: recommendation 4	Completed January 2016	DHHS
30.	Complete a review of DHHS structures for public health and emergency management related communications teams	Death Investigation Report: recommendation 3 2014 Inquiry Report: affirmation 16	Completed January 2016	DHHS
31.	Develop a plan to implement the findings and recommendations of the independent expert report on DHHS procurement and contract management policies and procedures	Death Investigation Report: recommendation 4	August 2016	DHHS
32.	Deliver the plan to implement the findings and recommendations of the independent expert report on DHHS procurement and contract management policies and procedures	Death Investigation Report: recommendation 4	December 2016	DHHS

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
33.	Establish a Communications Health and Emergency Management Team	Death Investigation Report: recommendation 3 2014 Inquiry Report: affirmation 16	Completed January 2016	DHHS
34.	Review the Better Health Channel and health.vic site	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	Completed January 2016	DHHS
35.	Develop new processes and protocols (including standard messaging templates) for Better Health Channel and health.vic site based on the review	Death Investigation Report: recommendation 3 2014 Inquiry Report: affirmation 16	Completed February 2016	DHHS
36.	Appoint a Senior Science Policy Adviser to assist in implementing the State Smoke Framework	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	Completed November 2015	DHHS
37.	Develop draft 'smoke and your health' communication materials for the 2015/16 summer season	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	Completed November 2015	DHHS
38.	Develop a 'smoke and your health' engagement strategy for 2015/16	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	Completed November 2015	DHHS
39.	Undertake community focus testing of the draft 'smoke and your health' communication materials for the 2015/16 summer season	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	Completed November 2015	DHHS
40.	Finalise the 'smoke and your health' communication materials for the 2015/16 summer season	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	Completed January 2016	DHHS
41.	Distribute 'smoke and your health' communications materials for 2015/16 summer season	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	Completed January 2016	DHHS

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
42.	Evaluate 'smoke and your health' communications materials for 2015/16 summer season	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	Completed January 2016	DHHS
43.	Develop an implementation plan for the 'smoke and your health' engagement strategy that outlines target groups, methods of engagement and timeframes until November 2017	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	May 2016	DHHS
44.	Evaluate the 'smoke and your health' community engagement strategy	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	October 2016	DHHS
45.	Update the 'smoke and your health' community engagement strategy to reflect learnings from engagement with stakeholders and the evaluation	2014 Inquiry Report: recommendation 9 2014 Inquiry Report: affirmation 24	November 2016	DHHS
<b>Health in the Latrobe Valley</b>				
<b>Governance</b>				
46.	Appoint a dedicated community engagement officer, based in the DHHS Traralgon office	2014 Inquiry Report: affirmation 26	Completed December 2015	DHHS
47.	Establish a Health and Wellbeing Working Group of the IDC, which will meet at least quarterly in the Latrobe Valley and have representation from DHHS, EPA, EMV, DET, DELWP, DPC (observer) and others as required	N/A	Completed May 2016	DHHS
48.	Designate the Latrobe Valley as the Latrobe Valley Health Zone	Health Improvement Report: recommendation 2	July 2016	DHHS
49.	Establish a time-limited Latrobe Health Taskforce to support the creation of the Latrobe Valley Health Assembly	Health Improvement Report: recommendation 10	July 2016	DHHS

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
50.	Work with the Latrobe Health Taskforce to map current area partnerships	Health Improvement Report: recommendation 5	July 2016	DHHS
51.	Assist the Latrobe Health Taskforce to recruit an initial local team to support the work of the taskforce and Latrobe Health Assembly	Health Improvement Report: recommendation 3 and 10	August 2016	DHHS
52.	Develop an engagement strategy to help the Latrobe Health Taskforce to identify and attract broad community and business and industry representatives to consider membership of the Latrobe Health Assembly	Health Improvement Report: recommendation 3	August 2016	DHHS
53.	Begin an expression of interest process to establish the membership of the Latrobe Health Assembly	Health Improvement Report: recommendation 3	August 2016	DHHS
54.	Support the Latrobe Health Taskforce to develop and finalise terms of reference and associated operating model in active partnership with the Latrobe community and incorporating development of: <ul style="list-style-type: none"> <li>the governance structure of the Latrobe Health Assembly, including forums and groups reporting to the Assembly</li> <li>a constitution, partnering agreement or MOU (as appropriate) for the Latrobe Health Assembly</li> <li>preparation of information to assist the Latrobe Health Assembly to identify outcomes and processes for monitoring and reporting</li> </ul>	Health Improvement Report: recommendation 3	October 2016	DHHS
55.	Facilitate the appointment of the Latrobe Valley Health Assembly, and an independent Chair of the Latrobe Valley Health Assembly	Health Improvement Report: recommendation 3	October 2016	DHHS

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
56.	Facilitate consideration by the Latrobe Health Assembly of all draft documents prepared by the Latrobe Health Taskforce for amendment and adoption	Health Improvement Report: recommendation 3	November 2016	DHHS
57.	Develop the roles and responsibilities of the Health Advocate, in consultation with the Latrobe Health Assembly	Health Improvement Report: recommendation 5	December 2016	DHHS
58.	Work with the Latrobe Health Assembly to develop a measurement and reporting plan, utilising an outcomes framework, so that the impact of health innovation in the Latrobe Valley Health Zone can be monitored	Health Improvement Report: recommendation 3	December 2016	DHHS
59.	Participate as a member of the Latrobe Health Assembly to identify priorities	Health Improvement Report: recommendation 3	Ongoing (transition to business as usual by December 2017)	DHHS
60.	Work with the Latrobe Health Assembly to conduct annual monitoring of the impact of innovation	Health Improvement Report: recommendations 3 and 5	Annually in December (transition to business as usual by December 2018)	DHHS
<b>Engagement with the Commonwealth</b>				
61.	Develop a proposal for a COAG integrated chronic disease trial in Victoria, with Gippsland as the preferred priority location	Health Improvement Report: recommendation 8	Completed April 2015	DHHS
62.	Engage directly with the Federal Minister for Health to identify the health needs of the Latrobe Valley community and the importance of the recommendations of the Health Improvement Report	Health Improvement Report: recommendation 8	Completed February 2016	DHHS



No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
63.	Present the Gippsland proposal for integrated chronic disease trial to Commonwealth officials	Health Improvement Report: recommendation 8	Completed April 2016	DHHS
64.	Progress a bilateral agreement with joint Commonwealth and State investment for a chronic disease integration trial in Gippsland if selected by the Commonwealth as trial site	Health Improvement Report: recommendation 8	December 2016	DHHS
<b>Prevention</b>				
65.	Provide information and evidence regarding previous place-based prevention interventions to inform the Latrobe Health Taskforce and the Latrobe Health Assembly's work	Health Improvement Report: recommendation 5	July 2016	DHHS
66.	Support the Latrobe Health Taskforce and the Latrobe Health Assembly to partner with Latrobe City Council in the development of the Latrobe MPHWP Plan 2017-21	Health Improvement Report: recommendation 5	Ongoing from July 2016	DHHS
67.	Facilitate active and ongoing partnerships with both local and statewide organisations to drive an integrated, place-based approach to preventive health in the Latrobe Valley	Health Improvement Report: recommendation 5	Ongoing from July 2016	DHHS
68.	Allocate funding to support locally determined actions to improve health and wellbeing in agreed priority areas and settings	Health Improvement Report: recommendation 5	Annually in July until 2019	DHHS
<b>Early detection and high risk screening</b>				
69.	Review current population and opportunistic screening rates, practices and services in the Latrobe Valley	Health Improvement Report: recommendation 5	December 2016	DHHS

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
70.	In consultation with the community and other relevant stakeholders, develop a plan for implementing a system-wide approach to encourage health professionals to ask patients about their smoking and offer support to quit	Health Improvement Report: recommendation 5	December 2016	DHHS
71.	Implement the smoking cessation initiative, in partnership with the Latrobe Health Assembly, the community and other stakeholders	Health Improvement Report: recommendation 5	July 2017	DHHS
72.	Based on the outcomes of the review of population screening rates, practices and services, develop a strategy and implementation plan to improve access to screening services for vulnerable and high-risk groups	Health Improvement Report: recommendation 5	July 2017	DHHS
73.	Based on the outcomes of the review of opportunistic screening rates, practices and services, support the Latrobe Health Assembly to develop a strategy and implementation plan to improve access to opportunistic screening and early intervention services for identified priority areas	Health Improvement Report: recommendation 5	July 2017	DHHS
74.	Support the Latrobe Health Assembly to commence a trial of integrated screening and assessment approaches for chronic disease	Health Improvement Report: recommendation 5	July 2017	DHHS
75.	Promote, and increase the use of, existing primary care systems to assist healthcare providers to identify clients for screening	Health Improvement Report: recommendation 5	December 2017	DHHS
76.	Partner with providers across the Latrobe Valley's health system to develop and implement recruitment and health promotion strategies to encourage community participation in available health screening opportunities	Health Improvement Report: recommendation 5	December 2017	DHHS

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
77.	Embed the smoking cessation initiative, in partnership with key service providers	Health Improvement Report: recommendation 5	July 2018	DHHS
<b><i>Expanding services for people with multiple chronic conditions</i></b>				
78.	Facilitate the establishment of a Chronic Disease Forum, involving both local and statewide providers and experts, to work with the Latrobe Health Assembly to design and develop care pathways to improve coordination for people with chronic disease	Health Improvement Report: recommendation 5	December 2016	DHHS
79.	Invite primary health partner agencies to investigate options for co-location of respiratory nurses within general practices in the Latrobe Valley	Health Improvement Report: recommendation 5	July 2017	DHHS
80.	Provide an additional 1,000 hours of respiratory nursing service at Latrobe Community Health Service (compared to 2015/16 base level)	Health Improvement Report: recommendation 5	September 2017	DHHS
81.	Expand the early intervention in chronic disease program, delivered by Latrobe Community Health Service, to provide an additional 2,500 hours of allied health and care coordination services (compared to 2015/16 base level)	Health Improvement Report: recommendation 5	September 2017	DHHS
82.	Provide an additional 1,500 hours of respiratory nursing service (compared to 2015/16 base level)	Health Improvement Report: recommendation 5	September 2018 and September 2019	DHHS
83.	Provide an additional 3,400 hours of allied health and care coordination services (compared to 2015/16 base level)	Health Improvement Report: recommendation 5	September 2018 and September 2019	DHHS

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
<b><i>Mental health</i></b>				
84.	Facilitate the establishment of a Latrobe Community Mental Health Forum, comprising both local and statewide providers, experts and the community, to focus on strategies and opportunities to work with the Latrobe Health Assembly to enhance the mental health of the Latrobe Valley community	Health Improvement Report: recommendation 5	December 2016	DHHS
85.	Work with health and community sector partners to develop an approach to the delivery of workforce skills in primary mental health service delivery, which will involve mentoring, supervision and training (where required) in managing mental health issues associated with chronic disease	Health Improvement Report: recommendation 5	Ongoing from December 2016	DHHS
86.	Provide funding for the development of strategies to increase awareness and community understanding of mental health issues, and how and where to get help	Health Improvement Report: recommendation 5	January 2017	DHHS
87.	Expand local mental health support in line with agreed community priorities	Health Improvement Report: recommendation 5	July 2017	DHHS
88.	Provide funding for the development and delivery of programs to increase awareness of mental health issues	Health Improvement Report: recommendation 5	July 2017	DHHS
<b><i>Expanding options to access specialist services</i></b>				
89.	Develop and implement a marketing campaign to promote telehealth as an option for accessing health services	Health Improvement Report: recommendation 5	December 2016	DHHS
90.	Enable telehealth capacity at more points of primary and acute healthcare	Health Improvement Report: recommendation 5	June 2017	DHHS

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
91.	Facilitate the development of telehealth education and training packages targeted to health service providers	Health Improvement Report: recommendation 5	June 2017	DHHS
92.	Facilitate the delivery of telehealth education and training packages to health service providers in the Latrobe Valley	Health Improvement Report: recommendation 5	June 2017	DHHS
<b>Aboriginal health</b>				
93.	Work with the local Latrobe Aboriginal community to identify priorities for investment	Health Improvement Report: recommendation 7	March 2017	DHHS
94.	Work with the Latrobe Local Aboriginal Community Partnership to scope the potential for a gathering place	Health Improvement Report: recommendation 7	March 2017	DHHS
95.	Support implementation of initiatives to address priorities identified with the local Latrobe Aboriginal community	Health Improvement Report: recommendation 7	June 2017	DHHS
<b>Long Term Health Study</b>				
96.	Provide mortality and allied data to the Long Term Health Study lead contractor	2014 Inquiry Report: recommendation 10 and affirmations 15 and 28	Completed July 2015	DHHS
97.	Publicly release the first annual Monash University Report on the Long Term Health Study	2014 Inquiry Report: recommendation 10 and affirmations 15 and 28	Completed November 2015	DHHS
98.	Publicly release the second annual Monash University Report on the Long Term Health Study	2014 Inquiry Report: recommendation 10 and affirmations 15 and 28	November 2016	DHHS
99.	Publicly release the third annual Monash University Report on the Long Term Health Study	2014 Inquiry Report: recommendation 10 and affirmations 15 and 28	November 2017	DHHS
100.	Engage an independent contractor to review the scope and structure of the Long Term Health Study	Health Improvement Report: recommendation 6	Completed April 2016	DHHS

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
101.	Agree on a project plan for the review of the scope and structure of the Long Term Health Study	Health Improvement Report: recommendation 6	Completed April 2016	DHHS
102.	Agree of the consultation and stakeholder engagement strategy for the review of the scope and structure of the Long Term Health Study	Health Improvement Report: recommendation 6	Completed May 2016	DHHS
103.	Publicly release contractor report on the review of the scope and structure of the Long Term Health Study	Health Improvement Report: recommendation 6	July 2016	DHHS
104.	Response to report on the review of the scope and structure of the Long Term Health Study released	Health Improvement Report: recommendation 6	September 2016	DHHS
<b>Ash in roof cavities</b>				
105.	Develop a project proposal for sampling ash residue in roof cavities in Morwell	Health Improvement Report: recommendation 9	Completed March 2016	DHHS
106.	Publish a factsheet on hazards in roof cavities to provide advice to the community on how to protect their health when entering roof cavities	Health Improvement Report: recommendation 9	Completed April 2016	DHHS
107.	Engage with key stakeholders, such as the Long Term Health Study Community Advisory Committee, Latrobe Valley Health Assembly and Voices of the Valley, in a workshop to discuss the proposed implementation plan to assess the risk from exposure to ash in roof cavities (as a result of the Hazelwood Mine Fire)	Health Improvement Report: recommendation 9	June 2016	DHHS
108.	Engage an independent expert (with project management and health risk assessment expertise) to: <ul style="list-style-type: none"> <li>refine the proposed sampling plan for the analysis of ash residue in roof cavities</li> <li>assist with implementation of the project</li> </ul>	Health Improvement Report: recommendation 9	September 2016	DHHS



No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
109.	Establish communication tools including a dedicated web page for project updates and other tools recommended by the key stakeholders in the initial engagement	Health Improvement Report: recommendation 9	September 2016	DHHS
110.	Hold a community forum to engage with community stakeholders on: <ul style="list-style-type: none"> <li>• final project plan and planned activities in Morwell</li> <li>• finalised sampling plan</li> <li>• communication tools</li> </ul>	Health Improvement Report: recommendation 9	September 2016	DHHS
111.	Commence project with sampling activities (recruitment of houses, testing and analysis). The independent expert will engage an occupational hygienist to conduct the testing and analysis	Health Improvement Report: recommendation 9	March 2017	DHHS
112.	Publicly release independent expert report	Health Improvement Report: recommendation 9	June 2017	DHHS
113.	Engage stakeholders through open house to communicate and discuss the report's assessment of the health risk from exposure to ash in roof cavities as a result of the coal mine fire in 2014	Health Improvement Report: recommendation 9	June 2017	DHHS
<b>Air Quality and Wellbeing</b>				
<b><i>Rapid air quality monitoring</i></b>				
114.	Endorse the Rapid Deployment of Air Quality Monitoring for Community Health Guideline	2014 Inquiry Report: recommendation 5 and affirmation 17	Completed October 2015	EPA
115.	Endorse the JSOP 03.18 for Rapid Deployment of Air Quality Monitoring for Community Health	2014 Inquiry Report: recommendation 5 and affirmation 17	Completed December 2015	EPA
116.	Deliver rapid response monitoring capacity for PM2.5 and CO, including transitional data and information management processes for decision making during an event	2014 Inquiry Report: recommendation 5 and affirmation 17	Completed March 2016	EPA

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
117.	Refine the response model, decision support tools and deployment procedures for 2016/17 summer fire season by incorporating lessons learned	2014 Inquiry Report: recommendation 5 and affirmation 17	October 2016	EPA
118.	Two mobile stations built and operational for deployment to complex events of extended duration and significant community impact	2014 Inquiry Report: recommendation 5 and affirmation 17	December 2016	EPA
119.	Train relevant staff in EPA regional offices in air quality equipment deployment during emergency events	2014 Inquiry Report: recommendation 5 and affirmation 17	December 2016	EPA
120.	Pre-deploy smoke monitors to identified high-risk sites across regional Victoria	2014 Inquiry Report: recommendation 5 and affirmation 17	April 2017	EPA
121.	Establish EPA and VicSES partnership and train VicSES staff in deployment of smoke monitors	2014 Inquiry Report: recommendation 5 and affirmation 17	April 2017	EPA
122.	Deliver a fully functional integrated air quality monitoring and information systems	2014 Inquiry Report: recommendation 5 and affirmation 17	June 2017	EPA
<b>State Smoke Framework</b>				
123.	Endorse State Smoke Framework, Version 2.0	2014 Inquiry Report: recommendation 9 and affirmations 24 and 25	Completed December 2015	DHHS and EMV
124.	Revise the fire warning templates to include smoke and health messaging	2014 Inquiry Report: recommendation 9 and affirmations 24 and 25	Completed December 2015	DHHS and EMV
125.	Engage an independent consultant to undertake a review of the use of the protocols under the State Smoke Framework and during a smoke event in the 2015/16 summer season (Somerton tip fire)	Death Investigation Report: recommendation 1	Completed May 2016	EMV

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
126.	Publicly release independent consultant report on the review of the use of the State Smoke Framework and associated protocols during the Somerton tip fire	Death Investigation Report: recommendation 1	Completed May 2016	EMV
127.	Engage appropriate experts to undertake a review of internationally recognised graduated smoke frameworks and the epidemiological basis for these frameworks	2014 Inquiry Report: recommendation 8 and affirmation 19	December 2016	DHHS
128.	Undertake a plume modelling project to develop an enhanced capability for the prediction of toxic smoke and chemical releases from fires and hazardous material incidents	2014 Inquiry Report: recommendation 9 and affirmations 24 and 25	June 2017	CFA
<b><i>Develop integrated predictive services framework</i></b>				
129.	Establish sector governance arrangements for the Predictive Services Framework, including Project Control Board comprising representation from EMV, DELWP, CFA and MFB	2014 Inquiry Report: recommendation 9 and affirmations 24 and 25	November 2015	DELWP
130	Undertake a user and decision making needs assessment of community, industry and emergency management sector to inform development of predictive services systems, tools and products before, during and after hazard events	2014 Inquiry Report: recommendation 9 and affirmations 24 and 25	December 2016	DELWP
131.	Design an ICT system architecture (design) for the Predictive Services ICT Platform	2014 Inquiry Report: recommendation 9 and affirmations 24 and 25	September 2016	DELWP
132.	Build an ICT platform for hazard prediction (including smoke) models	2014 Inquiry Report: recommendation 9 and affirmations 24 and 25	June 2017	DELWP
133.	Design data management requirements for the Predictive Services Framework	2014 Inquiry Report: recommendation 9 and affirmations 24 and 25	March 2017	DELWP

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
134.	Incorporate Predictive Services smoke intelligence module, to incorporate social media, field sensors and satellite image data to calibrate and validate smoke predictions	2014 Inquiry Report: recommendation 9 and affirmations 24 and 25	June 2018	DELWP
<b>Managing exposure to carbon monoxide</b>				
135.	Endorse a revised Standard for Managing Exposure to Significant Carbon Monoxide Emissions, which incorporates the expert panel assessment of CO air quality reference values and: <ul style="list-style-type: none"> <li>• Latrobe Valley Coal Fire Carbon Monoxide Response Protocol (February 2014)</li> <li>• Standard for Managing Significant Carbon Monoxide Emission (for Occupational Exposure) (August 2014)</li> </ul>	2014 Inquiry Report: recommendation 7 and affirmations 12 and 19	Completed July 2015	DHHS
136.	Endorse the JSOP 03.20 for Managing Significant Community Exposure to Carbon Monoxide from Smoke	2014 Inquiry Report: recommendation 7 and affirmations 12 and 19	Completed December 2015	DHHS
<b>Community Smoke, Air Quality and Health Standard</b>				
137.	Endorse the Community Smoke, Air Quality and Health Protocol	2014 Inquiry Report: recommendation 8 and affirmation 19	Completed July 2015	DHHS
138.	Endorse the Community Smoke, Air Quality and Health Standard	2014 Inquiry Report: recommendation 8 and affirmation 19	Completed December 2015	DHHS
139.	Endorse the JSOP 03.19 for Managing Significant Community Exposures to Fine Particles from Smoke	2014 Inquiry Report: recommendation 8 and affirmation 19	Completed December 2015	DHHS and EMV
<b>National Compliance Standard</b>				
140.	Advocate for NEPC decision on particulate standards for NEPM AAQ	2014 Inquiry Report: recommendation 6 and affirmation 23	Completed December 2015	EPA

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
141.	Amend the SEPP AAQ to formally adopt the national PM2.5 standard, once approved	2014 Inquiry Report: recommendation 6 and affirmation 23	December 2016	DELWP and EPA
<b><i>EPA Protocols</i></b>				
142.	Revise the EPA's emergency management accountabilities	2014 Inquiry Report: affirmation 16	Completed October 2015	EPA
143.	Conduct exercises to test EPA protocols	2014 Inquiry Report: affirmation 16	Completed October 2015	EPA
144.	Establish the Environment Protection Incident Management System, using the AIIMS structure	2014 Inquiry Report: affirmation 16	Completed December 2015	EPA
145.	Refine the relevant EPA protocols, incorporating lessons from exercises	2014 Inquiry Report: affirmation 16	Completed December 2015	EPA
146.	Train staff in emergency management and response protocols for 2015/16 summer fire season	2014 Inquiry Report: affirmation 16	Completed December 2015	EPA
<b><i>EPA meta-analysis</i></b>				
147.	Release a report on information and knowledge generated from the Hazelwood Mine Fire meta-analysis	2014 Inquiry Report: affirmation 18	December 2016	EPA
<b><i>Latrobe Valley Coal Mine Regulation</i></b>				
148.	Develop a Latrobe Valley Mine Dust – Industry Sector Strategy	2014 Inquiry Report: recommendation 4	Completed September 2015	EPA
149.	Bring forward the commencement of amendments to the MR(SD) Act, to facilitate the requirement that approved Work Plans specifically address fire prevention, mitigation and suppression	2014 Inquiry Report: recommendation 4	Completed December 2015	DEDJTR

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
150.	Endorse schedules to the DEDJTR and EPA Statement of Agreement	2014 Inquiry Report: recommendation 4	Completed December 2015	DEDJTR and EPA
151.	Establish a Mine Fire and Emergency Unit	2014 Inquiry Report: recommendation 4 Mine Rehabilitation Report: affirmation 2	Completed March 2016	DEDJTR
152.	Establish a Victorian Earth Resources Regulator Forum, with membership including WorkSafe and EPA	2014 Inquiry Report: affirmation 39 Mine Rehabilitation Report: affirmation 2	July 2016	DEDJTR
153.	Undertake twice yearly workshops on the MOU between DEDJTR and WorkSafe	2014 Inquiry Report: recommendation 4	Ongoing twice yearly (transition to BAU July 2017)	DEDJTR and WorkSafe
154.	Engage technical specialists to assist WorkSafe in the assessment of coal mine fire risk	2014 Inquiry Report: recommendation 4	August 2016	WorkSafe
155.	Deliver DEDJTR ERR 2015-16 Action Plan	Mine Rehabilitation Report: affirmation 2	September 2016	DEDJTR
156.	Employ or engage suitable expertise in mine closure and rehabilitation liability assessments	Mine Rehabilitation Report: recommendation 2	December 2016	DEDJTR
157.	Sign an MOU (DEDJTR and CFA) that describes roles and responsibilities around fires and fire risk at earth resource sites	2014 Inquiry Report: recommendation 4	December 2016	DEDJTR and CFA
158.	Develop progressive rehabilitation milestones, with support from the TRB or other experts	Mine Rehabilitation Report: recommendation 4	December 2016	DEDJTR
159.	Contribute to the preparation of an integrated research plan, which identifies common research areas between the operators of the Latrobe Valley Coal Mines for the next 10 years	Mine Rehabilitation Report: recommendation 18	December 2016	DEDJTR



No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
160.	Review the regulatory framework for the Latrobe Valley Coal Mines and develop options for policy, administrative and legislative reform	Mine Rehabilitation Report: recommendation 17	June 2017	DEDJTR
161.	Consult with the Latrobe Valley Mine Rehabilitation Commissioner about the options for policy, administrative and legislative reform for the Latrobe Valley Coal Mines' regulatory framework	Mine Rehabilitation Report: recommendation 14	December 2017	DEDJTR
162.	Implement policy, administrative and legislative reforms for the Latrobe Valley Coal Mines' regulatory framework	Mine Rehabilitation Report: recommendation 17	June 2018	DEDJTR
<b>Latrobe Valley Coal Mine Rehabilitation Bonds</b>				
163.	Consult under section 80 of the MR(SD) Act with each of the Latrobe Valley Coal Mines' licensees and the Latrobe City Council on the proposal to implement further Rehabilitation Bonds at 50 per cent of the Latrobe Valley Coal Mines self-assessed liabilities	Mine Rehabilitation Report: recommendation 9	June 2016	DEDJTR
164.	Consult under section 80 of the MR(SD) Act with each of the Latrobe Valley Coal Mine licensees and the Latrobe City Council on the proposal to implement further rehabilitation bonds at 100 per cent of the Latrobe Valley Coal Mines self-assessed liabilities	N/A	December 2016	DEDJTR
165.	Publish a statement of reasons for any decision to implement further rehabilitation bonds on the DEDJTR website	N/A	December 2016	DEDJTR
166.	Complete bond policy review	Mine Rehabilitation Report: recommendation 11	December 2016	DEDJTR
167.	Specify the manner and form for rehabilitation liability assessments for the Latrobe Valley Coal Mines	Mine Rehabilitation Report: recommendation 5	December 2016	DEDJTR

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
168.	Identify skills and expertise for the conduct of rehabilitation liability assessment audits	Mine Rehabilitation Report: recommendation 6	August 2016	DEDJTR
169.	Amend the accreditation criteria as necessary for auditors appointed under section 53S of the EP Act	Mine Rehabilitation Report: recommendation 6	December 2016	EPA
170.	Assess current pool of appointed auditors for the appropriate skills and expertise	Mine Rehabilitation Report: recommendation 6	December 2016	DEDJTR and EPA
171.	Finalise rehabilitation liability assessments	Mine Rehabilitation Report: recommendations 7 and 8	March 2017	DEDJTR
172.	Implement further Rehabilitation Bonds if required based on final rehabilitation liability assessments, bond policy review and Inquiry findings, and publish statement of reasons for decision on the DEDJTR website	Mine Rehabilitation Report: recommendation 10	June 2017	DEDJTR
173.	Determine an effective mechanism to manage:  -the costs of ongoing monitoring, maintenance and management of the earth resources industry sites  - risks of closure on the community's social and economic welfare	Mine Rehabilitation Report: recommendation 12	June 2017	DEDJTR
<b>Latrobe Valley Rehabilitation Strategy</b>				
<b><i>Batter Stability Project</i></b>				
174.	Execute contracts with Energy Australia and Federation University for the Batter Stability Project	Mine Rehabilitation Report: affirmation 3	Completed March 2016	DEDJTR
175.	Appoint Project Manager within DEDJTR to review progress reports and report to the DEDJTR Project Control Board	Mine Rehabilitation Report: affirmation 3	Completed March 2016	DEDJTR
176.	Public launch of the Batter Stability Project	Mine Rehabilitation Report: affirmation 3	Completed April 2016	DEDJTR

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
177.	Participate in the Technical Advisory Group administered by Federation University as required	Mine Rehabilitation Report: affirmation 3	Ongoing	DEDJTR
178.	Provide funding upon completion of milestones as per schedules to the contracts with Energy Australia and Federation University	Mine Rehabilitation Report: affirmation 3	As per contract milestones	DEDJTR
<b>Regional Latrobe Valley Rehabilitation Strategy Project initiation (Stage 1)</b>				
179.	Establish MOU between DEDJTR and DELWP to implement the project as a schedule to the existing partnership agreement	Mine Rehabilitation Report: recommendations 14, 15, 17 and 18	June 2016	DEDJTR
180.	Prepare an overarching stakeholder engagement strategy for the project (and refine in response to experience)	Mine Rehabilitation Report: recommendations 14, 15, 17 and 18	October 2016	DEDJTR
181.	Appoint independent peer reviewers	Mine Rehabilitation Report: recommendations 14, 15, 17 and 18	November 2016	DEDJTR
182.	Conduct workshop(s) to develop project scope, methodology, including consultation with the operators of the Latrobe Valley Coal Mines to ensure integration with research program to be undertaken by the operators	Mine Rehabilitation Report: recommendations 14, 15, 17 and 18	November 2016	DEDJTR
183.	Establish Latrobe Valley Mine Rehabilitation Advisory Committee	Mine Rehabilitation Report: recommendations 14, 15, 17 and 18	December 2016	DEDJTR
184.	Review Stage 1 Project outputs and confirm Stage 2 work plan, including technical peer review	Mine Rehabilitation Report: recommendations 14, 15, 17 and 18	December 2016	DEDJTR
<b>Regional Latrobe Valley Rehabilitation Strategy - Existing conditions review (Stage 2)</b>				
185.	Review current mine rehabilitation strategies, in consultation with DELWP and EPA, to identify water requirements for mine closure and restoration strategies	Mine Rehabilitation Report: recommendation 13	December 2016	DEDJTR
186.	Establish the Latrobe Valley Mine Rehabilitation Commissioner as a statutory appointment under the MR(SD) Act	Mine Rehabilitation Report: recommendation 14	June 2017	DEDJTR

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
187.	Review of existing Latrobe Valley coal mine and power station water entitlements and water licensing (groundwater and surface waters)	Mine Rehabilitation Report: recommendations 14, 15 and 17	June 2017	DELWP
188.	Report on existing water use, water availability, aquatic ecosystems and water quality to provide baseline data and inform the works program	Mine Rehabilitation Report: recommendations 14, 15 and 17	June 2017	DELWP
189.	Brief the Latrobe Valley Mine Rehabilitation Commissioner, upon commencement, on the work program delivered to date, the forecast work program and the engagement approach	Mine Rehabilitation Report: recommendations 14, 15 and 17	July 2017	DEDJTR
190.	Conduct annual progress review and produce a report	Mine Rehabilitation Report: recommendations 14, 15, 17 and 18	July 2017	DEDJTR
191.	Assess possible impacts on water availability due to climate change and climate variability (not including possible additional water demand for mine closures) to be used in the modelling on water availability and potential impacts	Mine Rehabilitation Report: recommendations 14, 15 and 17	December 2017	DELWP
192.	Review Stage 2 Project outputs and confirm Stage 3 work plan, including technical peer review	Mine Rehabilitation Report: recommendations 14, 15 and 17	December 2017	DEDJTR
<b>Regional Latrobe Valley Rehabilitation Strategy - Modelling and analysis (Stage 3)</b>				
193.	Integrate findings and outcomes from parallel studies related to mine rehabilitation including the Batter Stability Project, MR(SD) Act review and local and state land planning policy review.	Mine Rehabilitation Report: recommendations 14, 15 and 17	January 2019	DEDJTR
194.	5.2.1.1.1 Deliver a regional geotechnical study including: <ul style="list-style-type: none"> <li>• investigation of potential water demands for pit lake fill scenarios</li> <li>• investigation of regional ground stability and associated potential impacts on land use, communities and infrastructure</li> <li>• monitoring – outline likely requirements for long-term regional geotechnical monitoring</li> </ul>	Mine Rehabilitation Report: recommendations 14, 15 and 17	March 2019	DEDJTR

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
195.	<p>Deliver a regional water study on the viability of pit lake filling options and impacts, including:</p> <ul style="list-style-type: none"> <li>• potential water availability and use of regional water resources</li> <li>• analysis of potential alternative sources of water to those currently available to the Latrobe Valley Coal Mines, including a high-level technical and financial assessment</li> <li>• potential water quality impacts in pit lakes, groundwater and off-site surface waters</li> <li>• potential impacts on aquatic ecosystems and downstream users</li> <li>• the scope of likely requirements for long-term regional groundwater monitoring</li> </ul>	Mine Rehabilitation Report: recommendations 14, 15 and 17	March 2019	DELWP
196.	Review Stage 3 Project outputs and confirm Stage 4 work plan, including technical peer review	Mine Rehabilitation Report: recommendations 14, 15 and 17	March 2019	DEDJTR
197.	Conduct annual progress review and produce a report	Mine Rehabilitation Report: recommendations 14, 15 and 17	July 2019	DEDJTR
<b>Regional Latrobe Valley Rehabilitation Strategy - Integrate findings (Stage 4)</b>				
198.	Review and identify policy, administrative or legislative mechanisms necessary to implement the Latrobe Valley Regional Rehabilitation Strategy and require the Latrobe Valley Coal Mine licence holders to comply	Mine Rehabilitation Report: recommendation 17	June 2019	DEDJTR
199.	Review of the Latrobe Valley Coal Mine and power generator water entitlements and licences that may be required to implement and comply with the Latrobe Valley Regional Rehabilitation Strategy	Mine Rehabilitation Report: recommendations 14 and 15	June 2019	DELWP
200.	Release draft assessment of potential impacts at a regional scale for consultation	Mine Rehabilitation Report: recommendations 14 and 15	December 2019	DEDJTR (with DELWP support)

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
201.	Release draft integrated regional scale mine rehabilitation Strategy for consultation	Mine Rehabilitation Report: recommendations 14 and 15	December 2019	DEDJTR
202.	Assess potential impacts at a regional scale	Mine Rehabilitation Report: recommendations 14 and 15	June 2020	DEDJTR (with DELWP support)
203.	Deliver Integrated regional scale mine rehabilitation strategy	Mine Rehabilitation Report: recommendations 14 and 15	June 2020	DEDJTR
<b>Stage 5 - Ongoing review and adaptation (subsequent work)</b>				
204.	Ongoing monitoring and adaptation of the Latrobe Valley Regional Rehabilitation strategy as new information becomes available, including research and in-mine trials by the operators of the Latrobe Valley Coal Mines and progressive rehabilitation	Mine Rehabilitation Report: recommendations 4 and 18	Business as Usual by June 2020	DEDJTR
<b>Emergency Management Planning, Response and Recovery</b>				
<b>Industry integration in emergency management</b>				
205.	Convene an industry forum in the Latrobe Valley, with quarterly attendance	2014 Inquiry Report: recommendation 2 and affirmation 10	Completed June 2015	CFA
206.	Update local emergency management plans to incorporate industry into emergency management planning and response <sup>1</sup>	2014 Inquiry Report: recommendation 2 and affirmation 10	Completed August 2015	EMV
207.	Develop the Latrobe Valley Coal Mines Major Emergency – Strategic Concept of Operations and Industry Integration	2014 Inquiry Report: recommendation 2 and affirmation 10	Completed September 2015	EMV
208.	Hold Exercise “Latrobe 15” to implement and test the pilot integrated management structure, fully integrating industry into the REMT and IMTs	2014 Inquiry Report: recommendation 2 and affirmation 10	Completed October 2015	EMV
209.	Finalise the Latrobe Valley Coal Mines Major Emergency – Strategic Concept of Operations and Industry Integration	2014 Inquiry Report: recommendation 2 and affirmation 10	Completed December 2015	EMV



No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
210.	Train Emergency Commanders and identified staff in AIIMS Level 2 accreditation <sup>2</sup> and enable designated ENGIE personnel to attend regional ICC during incidents that have potential to impact the mine.	2014 Inquiry Report: recommendation 2 and affirmation 10	Completed December 2015	EMV
211.	Finalise the Coal Mine Emergency Taskforce Status Report detailing the status and initiatives undertaken by the Taskforce members	2014 Inquiry Report: recommendation 2 and affirmation 10	Completed March 2016	EMV
212.	Hold Coal Mine Taskforce Exercise to further implement and test the pilot integrated management structure, fully integrating industry into the REMT and IMTs	2014 Inquiry Report: recommendation 2 and affirmation 10	August 2016	EMV
213.	District 27 District Command Centre is operational	2014 Inquiry Report: recommendation 2	December 2016	CFA
214.	Deliver the Final Report of the Latrobe Valley Coal Mine Taskforce	2014 Inquiry Report: recommendation 2 and affirmation 10	December 2016	EMV
215.	Attend bi-monthly CGEIG Standardisation Committee meetings	2014 Inquiry Report: recommendation 2 and affirmation 10	Ongoing (transition to BAU by December 2016)	EMV and CFA
216.	Update EMV Joint Standing Operating Procedure for Incident Management Team Operations to incorporate industry integration into IMT operations	2014 Inquiry Report: recommendation 2 and affirmation 10	March 2017	EMV
217.	Assist in the re-write of the AIIMS doctrine to accommodate the full integration of industry into the AIIMS structure and process	2014 Inquiry Report: recommendation 2 and affirmation 10	March 2017	EMV
<b>Emergency management planning</b>				
218.	Publish the Critical Infrastructure Resilience Strategy	2014 Inquiry Report: affirmation 36	Completed July 2015	EMV

1 The Gippsland Region Emergency Relief and Recovery Plan; the Gippsland Risk and Consequence Plan Bushfire and heat 2015-16; and the Gippsland RCT and REMT Fire Readiness Matrix 2015-16.

2 Training was used by personnel during mine declared SEVERE & EXTREME fire danger days in 2015-16. See Initiatives from the Coal Mine Taskforce Status report December 2015. <http://fire-com-live-wp.s3.amazonaws.com/wp-content/uploads/2014/201055015/Coal-Mine-Emergency-Taskforce-Status-report-31-December-2015-V6-DraftCAedit-CLapp-and-PS-acc.pdf>.

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
219.	Enact the Emergency Management (Critical Infrastructure Resilience) Act 2014	2014 Inquiry Report: affirmation 36	Completed July 2015	EMV
220.	Declare 'vital' critical infrastructure in the Latrobe Valley	2014 Inquiry Report: affirmation 36	Completed August 2015	EMV
221.	Develop guidelines to support the management of ongoing response requirements in relation to Class 1 emergencies impacting on the Latrobe Valley Coal Mines	2014 Inquiry Report: affirmation 13	Completed April 2016	EMV
222.	Release the draft Emergency Management Legislative Amendment (Planning) Bill 2016 for public consultation	2014 Inquiry Report: recommendation 3 and affirmations 8 and 37	Completed May 2016	EMV
223.	Begin the Critical Infrastructure Resilience Improvement Cycle	2014 Inquiry Report: affirmation 36	July 2016	DEDJTR and EMV
224.	Consider emergency resource planning in CFA's District 27 boundaries at the industry forum	2014 Inquiry Report: affirmation 13	Ongoing (transition to BAU by September 2017)	CFA
225.	Full implementation of the Emergency Management Legislative Amendment (Planning) Bill 2016	2014 Inquiry Report: recommendation 3 and affirmations 8 and 37	December 2018 (dependent upon enactment)	EMV
<b><i>Emergency management training</i></b>				
226.	Retrofit two heavy tankers with specialist CAFS capability for deployment in Churchill and Traralgon South (within District 27)	2014 Inquiry Report: affirmation 11	Completed April 2015	CFA
227.	Undertake a health monitoring trial with LifeAid at emergency site in Portland and Kaladbro	2014 Inquiry Report: affirmation 12	Completed November 2015	CFA
228.	Locate CFA Health monitoring teams located at nine locations across Victoria (eight regionally, and one at headquarters)	2014 Inquiry Report: affirmation 12	Completed December 2015	CFA

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
229.	Release the revised CFA District 27 Operating Procedures for Latrobe Valley Open Cut Mines, which aligns to the Standard for Managing Exposure to Significant Carbon Monoxide Emissions (July 2015)	2014 Inquiry Report: affirmation 12	Completed August 2016	CFA
230.	Develop a pilot Brown Coal Mine Fire-fighting Training Package, which incorporates Standard for Managing Exposure to Significant Carbon Monoxide Emissions and associated JSOPs	2014 Inquiry Report: affirmations 11 and 12	Completed August 2016	CFA
231.	Development of a Detection Team (Scientific Officers and HAZMAT) Training Package	2014 Inquiry Report: affirmation 11	June 2016	CFA and MFB
232.	Contract on-call capability with health services and fire services	2014 Inquiry Report: affirmation 12	June 2016	CFA and MFB
233.	Provide personal monitoring equipment to MFB firefighters	2014 Inquiry Report: affirmation 12	June 2016	MFB
234.	Release tender for two purpose-built specialist CAFS trucks	2014 Inquiry Report: affirmation 11	September 2016	CFA
235.	Convert pilot Brown Coal Mine Fire-fighting Training Package into a blended learning program (e-learning and face-to-face)	2014 Inquiry Report: affirmation 11	October 2016	CFA
236.	Develop and deliver training to IMTs with a focus on Incident Controllers	2014 Inquiry Report: affirmation 11	October 2016	CFA and MFB
237.	Deliver Detection Team Training (Scientific Officers and HAZMAT)	2014 Inquiry Report: affirmation 11	October 2016	CFA and MFB
238.	Deliver Brown Coal Mine Fire-fighting Training Package	2014 Inquiry Report: affirmation 11	November 2016 (transition to BAU by October 2017)	CFA and MFB

No.	Government Action	Recommendation / Affirmation	Status / Due Date	Lead Agency
<b>Local Government Capability</b>				
239.	Assist the Latrobe City Council to finalise their Municipal Emergency Management Plan, based on the review undertaken by Regional Emergency Management Committee and the audit by VicSES	2014 Inquiry Report: affirmation 38	Completed September 2015	DELWP
240.	Hold planning days with all 11 collaborative council clusters to assist with strategic planning	2014 Inquiry Report: affirmation 31	Completed May 2016	DELWP
241.	Conduct an annual forum for all council emergency management staff in Bendigo	2014 Inquiry Report: affirmation 31	June 2016	DELWP
242.	Define the roles and responsibilities of local government in emergency management	2014 Inquiry Report: affirmation 31	September 2016	DELWP
243.	Review the current roles and responsibilities of local government in emergency management for alignment with the defined roles and responsibilities	2014 Inquiry Report: affirmation 31	September 2016	DELWP
244.	Review the capability and capacity required for local government to fulfil their emergency management roles and responsibilities	2014 Inquiry Report: affirmation 31	December 2017	DELWP
245.	Develop an action plan to address any local government emergency management capability and capacity gaps	2014 Inquiry Report: affirmation 31	December 2018	DELWP
<b>National Disaster Recovery Assistance Payment</b>				
246.	Introduce new technology to track payments	2014 Inquiry Report: affirmation 30	Completed November 2015	DHHS

# APPENDIX 2: RECOMMENDATIONS AND AFFIRMATIONS DIRECTED TO THE VICTORIAN GOVERNMENT

The following table sets out the recommendations directed to the Government in the Inquiry Reports:

2014 Inquiry Report			
No.	Recommendation	Lead Agency	Page ref. in this Plan
1.	<p>The State empower and require the Auditor-General or another appropriate agency to:</p> <ul style="list-style-type: none"> <li>• oversee the implementation of these recommendations and the commitments made by the State and GDF Suez during this Inquiry; and</li> <li>• report publicly every year for the next three years on the progress made in implementing recommendations and commitments.</li> </ul>	DJR	10 – 11
2.	<p>The State establish, for any future incident, integrated incident management teams with GDF Suez and other Victorian essential industry providers to:</p> <ul style="list-style-type: none"> <li>• require that emergency services personnel work with GDF Suez and other appropriate essential industry providers; and</li> <li>• implement the Australasian Inter-service Incident Management System.</li> </ul>	EMV	67 – 71
3.	<p>The State enact legislation, to:</p> <ul style="list-style-type: none"> <li>• require Integrated Fire Management Planning; and</li> <li>• authorise the Emergency Management Commissioner to develop and implement regional and municipal fire management plans.</li> </ul>	EMV	71 – 75

## 2014 Inquiry Report

No.	Recommendation	Lead Agency	Page ref. in this Plan
4.	<p>The State:</p> <ul style="list-style-type: none"> <li>bring forward the commencement date of s.16 of the Mineral Resources (Sustainable Development) Amendment Act 2014 (Vic), to facilitate the requirement that approved work plans specifically address fire prevention, mitigation and suppression; and</li> <li>acquire the expertise necessary to monitor and enforce compliance with fire risk measures adopted by the Victorian coal mining industry under both the mine licensing and occupational health and safety regimes.</li> </ul>	<p>DEDJTR (mines)</p> <p>VWA (OHS)</p>	52 – 56
5.	<p>The State equip itself to undertake rapid air quality monitoring in any location in Victoria, to:</p> <ul style="list-style-type: none"> <li>collect all relevant data, including data on PM2.5, carbon monoxide and ozone; and</li> <li>ensure this data is used to inform decision-making within 24 hours of the incident occurring.</li> </ul>	EPA	38 – 41
6.	<p>The State take the lead in advocating for a national compliance standard for PM2.5.</p>	EPA	46 – 47
7.	<p>The State review and revise the community carbon monoxide response protocol and the firefighter carbon monoxide response protocol, to:</p> <ul style="list-style-type: none"> <li>ensure both protocols are consistent with each other;</li> <li>ensure both protocols include assessment methods and trigger points for specific responses;</li> <li>ensure GDF Suez and other appropriate essential industry providers are required to adopt and apply the firefighter carbon monoxide protocol; and</li> <li>inform all firefighters about the dangers of carbon monoxide poisoning, and in particular highlight the increased risks for those with health conditions and those who are pregnant.</li> </ul>	EMV and DHHS	43 – 45
8.	<p>The State review and revise the Bushfire Smoke Protocol and the PM2.5 Health Protection Protocol, to:</p> <ul style="list-style-type: none"> <li>ensure both protocols are consistent with each other; and</li> <li>ensure both protocols include assessment methods and trigger points for specific responses.</li> </ul>	DHHS	44 – 45

## 2014 Inquiry Report

No.	Recommendation	Lead Agency	Page ref. in this Plan
9.	<p>The State develop and widely disseminate an integrated State Smoke Guide, to:</p> <ul style="list-style-type: none"> <li>• incorporate the proposed State Smoke Plan for the management of public health impacts from large scale, extended smoke events;</li> <li>• include updated Bushfire Smoke, carbon monoxide and PM2.5 protocols; and</li> <li>• provide practical advice and support materials to employers, communities and individuals on how to minimise the harmful effects of smoke.</li> </ul>	DHHS and EMV	41 – 46
10.	<p>The State should continue the long-term health study, and:</p> <ul style="list-style-type: none"> <li>• extend the study to at least 20 years;</li> <li>• appoint an independent board, which includes Latrobe Valley community representatives, to govern the study; and</li> <li>• direct that the independent board publish regular progress reports.</li> </ul>	DHHS	33 – 36
11.	<p>The State review and revise its communication strategy, to:</p> <ul style="list-style-type: none"> <li>• ensure all emergency response agencies have, or have access to, the capability and resources needed for effective and rapid public communications during an emergency; and</li> <li>• ensure, where appropriate, that private operators of essential infrastructure are included in the coordination of public communications during an emergency concerning that infrastructure.</li> </ul>	EMV	12 – 13
12.	<p>The State, led by Emergency Management Victoria, develop a community engagement model for emergency management to ensure all State agencies and local governments engage with communities and already identified trusted networks as an integral component of emergency management planning.</p>	EMV	15 – 17



## 2014 Inquiry Report

No.	Affirmation	Lead Agency	Page ref.
1.	The State develop a Strategic Action Plan to improve and strengthen Victoria's emergency management capability.	EMV	Complete <sup>1</sup>
2.	The State establish Emergency Management Victoria as the new overarching body for emergency management in Victoria.	EMV	Complete <sup>2</sup>
3.	The State establish an Emergency Management Commissioner to ensure that control arrangements are in place, and coordinate the response roles of relevant agencies' resources.	EMV	Complete <sup>3</sup>
4.	The State establish Inspector General Emergency Management as the assurance authority for Victoria's emergency management arrangements.	EMV	Complete <sup>4</sup>
5.	The State establish a Volunteer Consultative Forum for the government to consult with volunteers and ensure their views are heard.	EMV	Complete <sup>5</sup>
6.	The State implement actions set out in the White Paper on Emergency Management Reform to improve community awareness and education, and make information available during emergencies.	EMV	13 – 15
7.	The State strengthen industry engagement with the community.	EMV	71 – 75
8.	The State improve the State planning framework for emergencies.	EMV	71 – 75
9.	The State improve government engagement with the coal mine sector regarding emergency management plans.	EMV	71 – 75
10.	The State improve integration of industry in the response to an emergency.	EMV	67 – 71
11.	The State improve training for career and volunteer firefighters to include lessons highlighted by the Hazelwood mine fire.	CFA and MFB	75 – 77
12.	The State improve OHS in emergency response to include lessons highlighted by the Hazelwood mine fire.	CFA and MFB	75 – 77
13.	The State develop an integrated emergency resource planning framework for the Latrobe Valley.	EMV	71 – 75

1 This affirmation was marked as complete by the IGEM in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 142.

2 This affirmation was marked as complete by the IGEM in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 142.

3 This affirmation was marked as complete by the IGEM in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 143.

4 This affirmation was marked as complete by the IGEM in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 144.

5 This affirmation was marked as complete by the IGEM in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 144.

## 2014 Inquiry Report

No.	Affirmation	Lead Agency	Page ref.
14.	<p>The State review emergency management communications arrangements across government commissioned by the State Crisis and Resilience Council, including consideration of:</p> <ul style="list-style-type: none"> <li>• the roles and functions of emergency communications committees;</li> <li>• enhancing specialist crisis communications capability within government;</li> <li>• the use of established local networks as a way to communicate during emergencies;</li> <li>• additional emergency communications training for government employees; and</li> <li>• developing a coordinated approach to the use of social media by government during emergencies.</li> </ul>	DPC	12 – 13
15.	The State conduct a National Review of Warnings and Information.	EMV	Complete <sup>1</sup>
16.	The State review Environment Protection Authority (EPA) emergency protocols, incorporating lessons from the Hazelwood mine fire.	EPA	47 – 48
17.	The State clarify future expectations of incident air monitoring and scenarios, and determine the appropriate inventory of equipment.	EPA	38 – 41
18.	EPA to coordinate a meta-analysis, including smoke plume modelling, of air monitoring data and other relevant information collected during the Hazelwood mine fire to create a body of knowledge of the impacts of extended brown coal fire events.	EPA	48 – 49
19.	The Department of Health and EPA to undertake further development on the carbon monoxide and PM2.5 protocols and an engagement and education programs around environmental and health standards.	DHHS	41 – 46
20.	EPA review its communications response and implement a structured community engagement process with the Morwell and surrounding communities.	EPA	17 – 19
21.	EPA will be monitoring PM2.5 at all its fixed automatic air quality monitoring locations by the end of July 2014.	EPA	Complete <sup>2</sup>
22.	The State will have an automatic air quality monitoring station in the south of Morwell for the next 12 months [to March 2015].	EPA	Complete <sup>3</sup>
23.	The State review the State Environment Protection Policy for Ambient Air Quality.	DELWP and EPA	46 – 47

1 This affirmation was marked as complete by the IGEM in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 127.

2 This affirmation was marked as complete by the Implementation Monitor in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 72.

3 This affirmation was marked as complete by the Implementation Monitor in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 43.

## 2014 Inquiry Report

No.	Affirmation	Lead Agency	Page ref.
24.	The State develop a State Smoke Plan covering the management of potential public health impacts from large scale, extended smoke events.	DHHS	41 – 46
25.	The State undertake projects to understand health impacts and predict the movement of smoke from planned burning and bushfires.	DELWP	33 – 36 41 – 46
26.	The State improve local engagement on health issues.	DHHS	19 – 22 24 – 30
27.	The State improve communication around psycho-social support to communities affected by emergencies.	DHHS	Complete <sup>1</sup>
28.	The State commission a long-term study into the long-term health effects of the smoke from the Hazelwood mine fire.	DHHS	33 – 36
29.	The State review the Personal Hardship Assistance Program and Implementation Guidelines for consistency and clarity of purpose.	DHHS	Complete <sup>2</sup>
30.	The State implement new technology for recording emergency assistance payments.	DHHS	79
31.	Local Government Victoria coordinate emergency management officers across local councils.	DELWP	77 – 79
32.	The State improve relief and recovery information available to Culturally and Linguistically Diverse communities.	DHHS	19 – 22
33.	The State review relief and recovery communications and community engagement initiatives.	DHHS	19 – 22
34.	The State prepare Regional Growth Plans.	DELWP	Complete <sup>3</sup>
35.	The State implement a risk-based approach for work plans.	DEDJTR	50 – 53
36.	The State implement the Victorian Critical Infrastructure Resilience Strategy.	EMV	71 – 75
37.	The State enhance emergency risk mitigation planning.	EMV	71 – 75
38.	The State review the Latrobe City Municipal Emergency Management Plan.	DELWP	77 – 78

<sup>1</sup> This affirmation was marked as complete by the IGEM in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 128.

<sup>2</sup> This affirmation was marked as complete by the IGEM in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 129.

<sup>3</sup> This affirmation was marked as complete by the IGEM in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 145.

## 2014 Inquiry Report

No.	Affirmation	Lead Agency	Page ref.
39.	The State initiate a joint program for regulators, emergency service agencies and the Emergency Management Commissioner to assess the prevention and preparedness controls on sites across Victoria.	EMV	54 – 58
40.	The State establish an appropriate mechanism to monitor implementation of the actions set out in its submission and the government's response to the Board of Inquiry's recommendations.	DPC	Complete <sup>1</sup>

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<sup>1</sup> This affirmation was marked as complete by the IGEM in the Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management) October 2015, at page 145.

## Death Investigations Report

No.	Recommendation	Lead Agency	Page ref.
1.	The State should review the State Smoke Framework and the Community Smoke Air Quality and Health Protocol in light of the findings of this Inquiry about an increased risk of death from air pollution due to fire. The State should engage independent expert consultants to assist in this review.	EMV	45
2.	The State should reconsider, as a matter of priority, its approach to improving community engagement relevant to the health of the Latrobe Valley, which it committed to improving in the Hazelwood Mine Fire Inquiry Report Victorian Government Implementation and Monitoring Plan, October 2014.	DHHS	19 – 22 24 – 30
3.	The State should strengthen its processes to ensure that health information provided by the State to the general public is transparent, reliable and appropriate, to facilitate a good understanding of public health issues as required by the Public Health and Wellbeing Act 2008 (Vic).	DHHS	19 – 22
4.	The State should mandate a rigorous process for the investigation of matters of public health concern to avoid real or perceived conflicts of interest, which includes requiring independent experts to declare whether the State has suggested any substantial changes to their advice and whether any changes have been adopted.	DHHS	19 – 22
5.	The State should engage the Hazelwood Mine Fire Implementation Monitor to monitor and report publicly, on a regular basis, the implementation of the recommendations adopted by the State arising from this report.	DJR	10 – 11
No.	Affirmation	Lead Agency	Page ref.
1.	The Board affirms the State's commitment to reimburse Voices of the Valley the amount it paid to the Victorian Registry of Births, Deaths and Marriages for death records data.	DPC	11

## Health Improvement Report

No.	Recommendation	Lead Agency	Page ref.
1.	<p>Empower the Hazelwood Mine Fire Implementation Monitor or another appropriate agency to:</p> <p>Oversee the implementation of these recommendations.</p> <p>Report publicly on progress every year for the next eight years.</p> <p>Identify in each report any additional actions the State should take to ensure the intent of this report is achieved.</p>	DJR	10 – 11
2.	<p>Designate the Latrobe Valley as a special geographical zone for health improvement (Latrobe Valley Health Zone) for a minimum of eight years (two electoral cycles), with a focus on innovation, integration, and community engagement.</p>	DHHS	24 – 25

## Health Improvement Report

No.	Recommendation	Lead Agency	Page ref.
3.	<p>Establish the Latrobe Valley Health Assembly and executive Board to promote, support and oversee the development of the Latrobe Valley Health Zone.</p> <p>The Latrobe Valley Health Assembly should ensure that:</p> <ul style="list-style-type: none"> <li>• Health improvement strategies: <ul style="list-style-type: none"> <li>— are informed by a strong community engagement process</li> <li>— focus on reducing health inequities</li> <li>— draw on the capacity, goodwill and opportunities present</li> <li>— integrate actions across relevant providers</li> <li>— are evaluated for their wider applicability across Victoria.</li> </ul> </li> <li>• Initial health improvement programs are focused on innovative ways to deliver: <ul style="list-style-type: none"> <li>— social marketing programs which build pride of place</li> <li>— integrated care for people with chronic diseases, especially those with related mental health conditions</li> <li>— tele-medicine services to reduce the barriers of access to medical specialists and other health practitioners</li> <li>— promotion of mental wellbeing, including the prevention of family violence</li> <li>— smoking cessation programs which are effective for priority groups.</li> </ul> </li> <li>• In allocating funding for health improvement programs, serious consideration is given to the proposals supported by the Board in Parts 4–7 of this report.</li> <li>• Funds are principally distributed to the organisations of the Latrobe Valley that may singly or in partnership deliver health improvement programs supported by the Latrobe Valley Health Assembly. The Board of the Latrobe Valley Health Assembly may also directly fund and manage programs through the Office of the Health Advocate.</li> </ul>	DHHS	24 – 26
4.	<p>Appoint a suitably qualified Health Advocate on the recommendation of the executive Board of the Latrobe Valley Health Assembly, to be supported by an office</p>	DHHS	24 – 26



## Health Improvement Report

No.	Recommendation	Lead Agency	Page ref.
5.	<p>Support and fund the development and delivery of health improvement strategies in the Latrobe Valley Health Zone.</p> <p>The State should:</p> <ul style="list-style-type: none"> <li>• Provide earmarked funding for the Health Zone and the establishment of the Office of the Health Advocate to the Board of the Latrobe Valley Health Assembly, which will be held accountable for the appropriate use of such funding.</li> <li>• Allocate funding that is at least three times that for the Hazelwood Mine Fire Health Study per annum, and not less than \$8.1 million per year (indexed to inflation) for an initial period of eight years.</li> <li>• Require that the funding for the health improvement strategies is allocated to reduce health inequities by: <ul style="list-style-type: none"> <li>— strengthening health services (including chronic disease management, mental health services, early detection and high risk screening, health workforce development)</li> <li>— promoting health living (including health behaviours, healthy workplaces, healthy environments, children and young people, mental wellbeing and prevention of family violence)</li> <li>— building pride of place (including community, community engagement and social marketing).</li> </ul> </li> </ul>	DHHS	24 27 – 30
6.	<p>Review the scope and structure of the Hazelwood Mine Fire Health Study.</p> <p>The State should:</p> <ul style="list-style-type: none"> <li>• Review the scope of the Hazelwood Mine Fire Health Study to consider whether the Adult Survey can include additional cohorts who do not reside in Morwell, including emergency responders to the Hazelwood mine fire.</li> <li>• Reaffirm its commitment to a 20 year study and the importance of having a strong governance structure which ensures that the interests of the Latrobe Valley community are foremost in the short, medium and longer-term.</li> <li>• Establish a process whereby key health information obtained through the Health Study about the health status of the population and the effects from the Hazelwood mine fire is provided to the study participants, the community, local health practitioners and the Latrobe Valley Health Assembly.</li> <li>• Establish a process whereby policy-relevant health information obtained through the Health Study is considered by the State for action to improve the health of the Latrobe Valley and other populations in Victoria.</li> </ul>	DHHS	33 – 36

## Health Improvement Report

No.	Recommendation	Lead Agency	Page ref.
7.	Assist in establishing an independent community controlled health organisation for the Latrobe Valley Aboriginal community and co-fund a new culturally appropriate health and community facility which will help with the engagement of Aboriginal young people.	DHHS	30 – 33
8.	Engage with the Commonwealth Government at the highest ministerial level so that the Commonwealth Department of Health: <ul style="list-style-type: none"> <li>Formally recognises the designation of the Latrobe Valley as the Latrobe Valley Health Zone.</li> <li>Pools funding with the State to provide integrated services for the management of chronic disease and mental health conditions in the Latrobe Valley.</li> <li>Provides health innovation funding to the Gippsland Primary Health Network, commensurate to innovation funds provided by the State for community health and health promotion in the Latrobe Valley.</li> </ul>	DHHS	24 – 26
9.	Ensure that ash contained in roof cavities in Morwell is analysed and acted on. The State should: <ul style="list-style-type: none"> <li>Commission an analysis of the ash contained in roof cavities of houses in Morwell and publish the results of that analysis to the community and Latrobe Valley Health Assembly, together with clear advice about the potential known, or unknown health effects.</li> <li>If the analysis of the ash residue in roof cavities reveals any content that is potentially hazardous to health or of unknown impact on health, conduct an audit of the extent of the exposure to ash and develop an action plan to remove the ash from all affected houses.</li> </ul>	DHHS	36 – 37
10.	Create, as an interim measure for 12 months, a Latrobe Valley Health Innovation Taskforce to assist in progressing recommendations 1–4.	DHHS	26
No.	Affirmation	Lead Agency	Page ref.
5.	The Board affirms the proposal of the State to move towards a 'person-centred' healthcare system with equitable access, as documented in the Health 2040 Summit discussion paper.	DHHS	24 – 30

## Mine Rehabilitation Reportt

No.	Recommendation	Lead Agency	Page ref.
1.	Empower the Hazelwood Mine Fire Implementation Monitor, in a legislated role independent from the Victorian public service, to: <ul style="list-style-type: none"> <li>• oversee the implementation of these recommendations and the commitments made by the State and the mine operators during this Inquiry for the next three years</li> <li>• report publicly on an annual basis on the progress made in implementing the recommendations and commitments for the next three years</li> </ul>	DJR	10 – 11
2.	Redress gaps in expertise by employing or engaging suitably skilled and experienced personnel in mine closure and rehabilitation liability assessments, and obtaining regular advice and guidance from the Technical Review Board.	DEDJTR	54 – 56
3.	Provide appropriate and ongoing resources to the Technical Review Board, particularly for the purpose of providing strategic advice on mine stability and rehabilitation.	DEDJTR	
4.	Increase the rate of progressive rehabilitation by developing milestones within the mines' progressive rehabilitation plans in consultation with the mine operators and the Technical Review Board, and require the successful achievement of the milestones.	DEDJTR	50 58
5.	By 31 December 2016, specify the manner and form of rehabilitation liability assessments for use by the Latrobe Valley mine operators in their 2016–17 rehabilitation liability assessments and future assessments.	DEDJTR	59 – 62
6.	By 31 December 2016, review whether the criteria for accreditation of auditors under s. 53S of the Environment Protection Act 1970 (Vic) are appropriate having regard to the necessary skills and expertise required to conduct an audit under s. 79A of the Mineral Resources (Sustainable Development) Act 1990 (Vic). If necessary, the Mineral Resources Act and the accreditation process should be amended to ensure appropriately qualified auditors can be engaged for s. 79A audits.	DEDJTR and EPA	59 – 62
7.	Require that the 2016–17 rehabilitation liability assessments provided by mine operators are conducted in accordance with the requirements developed under Recommendation 5.	DEDJTR	59 – 62

## Mine Rehabilitation Reportt

No.	Recommendation	Lead Agency	Page ref.
8.	By 30 June 2017, require each of the Latrobe Valley mine operators to engage an auditor, under s. 79A(3) of the Mineral Resources (Sustainable Development) Act 1990 (Vic), to certify that its 2016–17 rehabilitation liability assessment has been prepared in accordance with the rehabilitation liability assessment guidelines (as per Recommendations 5 and 7); to certify that the assessment is accurate; and pursuant to s. 79A(4) of the Act, to forward a copy of the certificate to the Minister for Resources.	DEDJTR	59 – 62
9.	<p>By 30 June 2016, request the Minister for Resources to consider the sufficiency of the existing rehabilitation bonds pursuant to s. 80(4) of the Mineral Resources (Sustainable Development) Act 1990 (Vic) having regard to this report and any other relevant material.</p> <ul style="list-style-type: none"> <li>• If the Minister for Resources deems the existing rehabilitation bonds insufficient, the Minister should consider increasing the rehabilitation bonds on an interim basis to at least: <ul style="list-style-type: none"> <li>— Yallourn mine: \$34.25 million</li> <li>— Hazelwood mine: \$36.7 million</li> <li>— Loy Yang mine: \$56 million</li> </ul> </li> <li>• The interim increase should be undertaken in accordance with s. 80(4) of the Mineral Resources Act.</li> <li>• If the Minister deems the existing rehabilitation bonds sufficient, the Minister should publish a statement setting out the reasons for that conclusion on the website of the Department of Economic Development, Jobs, Transport and Resources.</li> </ul>	DEDJTR	59 – 62
10.	Upon completing the Bond Review Project, review the bond amount required by the mine operators. This should take into account the mine operators' 2016–17 rehabilitation liability assessment, conducted in accordance with Recommendations 5, 7 and 8 and the findings of this Inquiry. The Minister for Resources should then require the mine operators to enter into further rehabilitation bonds, if the rehabilitation bonds are deemed to be insufficient.	DEDJTR	59 – 62

## Mine Rehabilitation Reportt

No.	Recommendation	Lead Agency	Page ref.
11.	Include risk-based financial assurance mechanisms in the revised financial assurance system, as a method of encouraging progressive rehabilitation. The mechanisms should take into account the size, assets and ownership of the mine operator; the mine operator's history of compliance; demand for coal; and the nature of the mine operation. The mechanisms should also be consistent and transparent, with the level of the financial assurance assessed on a case-by-case basis.	DEDJTR	59 – 62
12.	Establish a post-closure trust fund to mitigate the likely costs arising from ongoing monitoring, maintenance and management of the rehabilitated mine sites after closure. The State should also consider establishing a post-closure community fund for the Latrobe Valley, to mitigate the likely social and economic impacts of mine closure. The mine operators and the State should contribute to both of these funds.	DEDJTR	59 – 62
13.	By 31 December 2016, undertake Action 6.8 of the 2011 Gippsland Region Sustainable Water Strategy, to review the mines' rehabilitation strategies and consider impacts on groundwater and surface water resources.	DEDJTR	63 – 65
14.	<p>By 30 June 2017, establish an independent Latrobe Valley Mine Rehabilitation Commissioner, until the Statutory Authority is established under Recommendation 15. It should be a statutory appointment by amendment to the Mineral Resources (Sustainable Development) Act 1990 (Vic) with the following core functions relevant to mine rehabilitation:</p> <ul style="list-style-type: none"> <li>• Advising the Minister, State and industry on a range of matters, including policy, legislation and regulation.</li> <li>• Monitoring the implementation and effectiveness of strategies.</li> <li>• Undertaking strategic audits of State departments and mine operators.</li> <li>• Conducting investigations into significant issues with powers to obtain information.</li> <li>• Coordinating parties to resolve outstanding issues.</li> <li>• Promoting and coordinating research to address knowledge gaps, as contained in Recommendation 18.</li> <li>• Sharing and publishing information including research findings.</li> <li>• Undertaking public education and community engagement</li> <li>• Publishing an annual report.</li> </ul>	DEDJTR	65 – 66

## Mine Rehabilitation Reportt

No.	Recommendation	Lead Agency	Page ref.
15.	<p>Establish an independent Latrobe Valley Mine Rehabilitation Authority, as a statutory body by amendment to the Mineral Resources (Sustainable Development) Act 1990 (Vic) to commence no later than 2026, or earlier in the event of premature closure of one of the Latrobe Valley mines.</p> <p>The Statutory Authority's responsibilities should include those of the Commissioner, with increased or additional focus on the following:</p> <ul style="list-style-type: none"> <li>• Planning for post-closure monitoring and maintenance, including clarifying roles and financial obligations.</li> <li>• Identifying processes for community and key stakeholder input into the assessment of rehabilitation against closure criteria.</li> <li>• Addressing key issues that arise as a result of final rehabilitation.</li> <li>• Monitoring water availability and conducting regional water modelling that more accurately estimates pit lake fill times.</li> </ul>	DEDJTR	N/A <sup>1</sup>
16.	Consult with the Commissioner and subsequent Statutory Authority about all work plan variations for the Latrobe Valley Coal Mines, and the development of policy, legislation and regulation relating to mine rehabilitation in the Latrobe Valley	DEDJTR	N/A <sup>2</sup>
17.	<p>Amend the Mineral Resources (Sustainable Development) Act 1990 (Vic) and the Mineral Resources (Sustainable Development)(Mineral Industries) Regulations 2013 (Vic) to address the issues that have been raised throughout the Inquiry, such as the need for:</p> <ul style="list-style-type: none"> <li>• a dedicated Part of the Mineral Resources Act that exclusively regulates the Latrobe Valley mines</li> <li>• definitions and criteria for progressive and final rehabilitation</li> <li>• definitions and criteria for closure</li> <li>• transparent processes for the referral of work plans and work plan variations to relevant State agencies and referral authorities, which compel the Mining Regulator to act on the advice received</li> <li>• strengthened criteria for community consultation and engagement under s. 39A of the Mineral Resources Act and/or in community engagement plans</li> <li>• clarity about the roles of the mine operators and the State in ongoing post-closure monitoring and maintenance</li> <li>• clarity about the role and required skills and expertise of auditors of rehabilitation liability assessments and the auditor accreditation process (see Recommendation 6).</li> </ul>	DEDJTR	52 – 53

<sup>1</sup> This Plan addresses Government actions for the next three years, until October 2019. Due to the timeframes for this recommendations, this action is beyond the scope of this Plan and will be implemented after October 2019.

<sup>2</sup> This Plan addresses Government actions for the next three years, until October 2019. Due to the timeframes for this recommendations, this action is beyond the scope of this Plan and will be implemented after October 2019.

## Mine Rehabilitation Report

No.	Affirmation	Lead Agency	Page ref.
2.	<p>The Board affirms the commitments of the Mining Regulator contained in the Earth Resources Regulation 2015–16 Action Plan to:</p> <ul style="list-style-type: none"> <li>• lead and strengthen its relationship with the Department of Environment, Land, Water and Planning and other regulators (for example, the Environment Protection Authority and WorkSafe) to ensure information is shared, and there is consistency and cooperation in carrying out regulatory functions</li> <li>• draft a guideline for providing clear information to industry about requirements under risk-based work plans</li> <li>• build its operational technical capability by drawing on the Technical Review Board to provide more strategic technical advice</li> <li>• implement risk-based mining work plans as required by recent changes to the Mineral Resources Act and the Mineral Industries Regulations</li> <li>• establish a work plan assessment taskforce to identify relevant high-risk sites to submit risk-based work plans (which will most likely include the Latrobe Valley mines)</li> <li>• establish a Mine Fire Safety Unit to provide advice and lead regulatory, compliance and education activities related to fire safety.</li> </ul>	DEDJTR	56 – 58
3.	<p>The Board affirms the commitment of the Mining Regulator, the mine operators and research groups to progress key studies such as the Mine Batter Stability Project at the Yallourn mine and the Loy Yang mine rehabilitation trials.</p>	DEDJTR	63 – 65





