

# Hazelwood Mine Fire Inquiry

Implementation of  
recommendations  
and affirmations

Annual Report 2016

Inspector-General for  
Emergency Management



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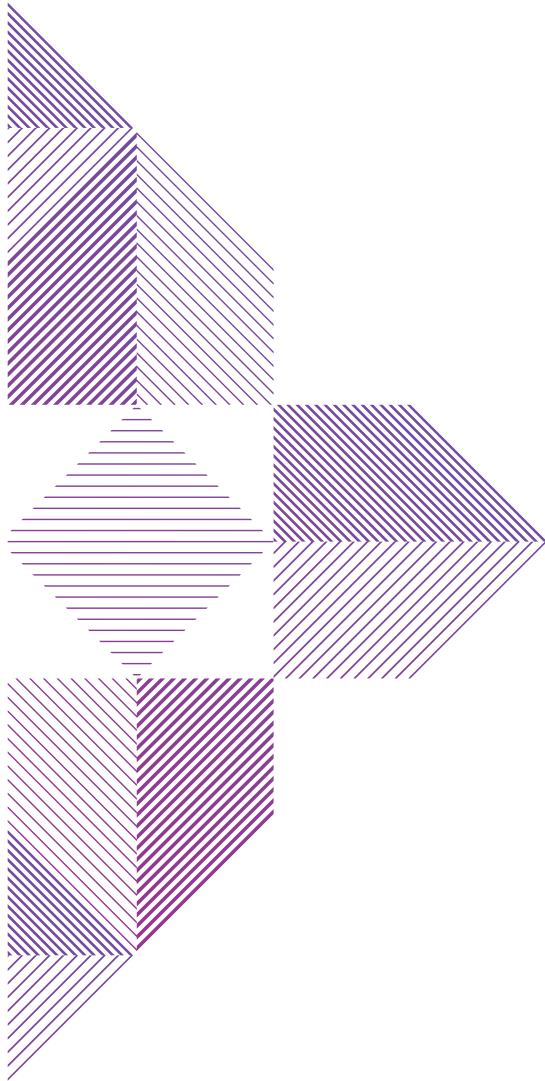
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# Preface



The 2013–14 fire season challenged the emergency management sector and Victorian communities alike. Not since 2008–09 had the state experienced such weather conditions and fire activity. Through February and March 2014 the Latrobe Valley's largest and longest-burning mine fire burned for 45 days before being declared safe.

The magnitude and impact of the Hazelwood mine fire on Latrobe Valley communities was on a scale not seen before – significantly affecting the health of local communities, the economy, the environment, and the resources required to contain it.

The independent Hazelwood Mine Fire Inquiry – conducted through 2014 and 2015–16 – tasked our government departments and agencies, public and private sector organisations with recommendations to make sure that the issues identified by the Inquiry Board do not reoccur, and our communities are not affected again by collective errors of judgement and inappropriate practices. Recommendations, actions and affirmations in themselves do not result in better community and emergency management outcomes. Only their implementation will realise these. And, it is the monitoring and public reporting of the implementation of recommendations, actions and affirmations that will provide assurance to our communities that the commitment to improvement is being met by all.

Initially monitoring of the implementation recommendations and affirmations was undertaken jointly by myself and the former Hazelwood Mine Fire Inquiry Implementation Monitor, Neil Comrie AO, APM. The outcome of our combined implementation monitoring was tabled on 25 November 2015 as the Hazelwood Mine Fire Inquiry Implementation Monitor – 2015 Annual Report.

In February 2016, I accepted the Victorian Government's request to monitor the implementation of all recommendations and affirmations associated with the 2014 Hazelwood Mine Fire Inquiry and those arising from the 2015–16 re-opened inquiry.

As Victoria's Inspector-General for Emergency Management, I have the legislated responsibility to monitor the implementation of recommendations resulting from assurance activities such as reviews and inquiries. In fulfilling this obligation my practices are underpinned by evidence. Analysis of evidence is the base from which my observations on the implementation progress, and the efficacy and effectiveness of the recommendations are made.

In completing this annual progress report, I thank Mr Comrie for his work as Implementation Monitor and extend my gratitude to all organisations in progressing implementation of the inquiry outcomes for a safer and more resilient Victoria.

**Tony Pearce**  
**Inspector-General for Emergency Management**

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# Acronyms

<b>AAQ</b>	Ambient Air Quality	<b>EMMV</b>	Emergency Management Manual Victoria
<b>AFAC</b>	Australasian Fire and Emergency Service Authorities Council	<b>EMV</b>	Emergency Management Victoria
<b>AIIMS</b>	Australasian Inter-Service Incident Management System	<b>EPA</b>	Environment Protection Authority Victoria
<b>AV</b>	Ambulance Victoria	<b>ePIMS</b>	Environment Protection Incident Management System
<b>BMS</b>	Brigade Medical Services	<b>ERR</b>	Earth Resources Regulation (DEDJTR)
<b>BNHCRC</b>	Bushfire and Natural Hazards Cooperative Research Centre	<b>ESTA</b>	Emergency Services Telecommunications Authority
<b>CAFS</b>	Compressed Air Foam System	<b>FDI</b>	Fire Danger Index
<b>CALD</b>	Culturally and Linguistically Diverse	<b>GHERG</b>	Geotechnical and Hydrogeological Engineering Research Group
<b>CBEM</b>	Community-Based Emergency Management	<b>HAZMAT</b>	Hazardous Materials
<b>CFA</b>	Country Fire Authority	<b>HPB</b>	Health Protection Branch
<b>CGEIG</b>	Central Gippsland Essential Industries Group	<b>IBAC</b>	Independent Broad-based Anti-corruption Commission
<b>CHO</b>	Chief Health Officer	<b>IC</b>	Incident Controller
<b>CO</b>	Carbon Monoxide	<b>ICC</b>	Incident Control Centre
<b>COAG</b>	Council of Australian Governments	<b>ICT</b>	Information and Communications Technology
<b>CSIRO</b>	Commonwealth Scientific and Industrial Research Organisation	<b>IDC</b>	Victorian Government Inter-Departmental Committee
<b>DCC</b>	District Command Centre (CFA)	<b>IGEM</b>	Inspector-General for Emergency Management
<b>DEDJTR</b>	Department of Economic Development, Jobs, Transport and Resources	<b>IMRG</b>	Integrated Mines Research Group
<b>DELWP</b>	Department of Environment, Land, Water and Planning	<b>IMT</b>	Incident Management Team
<b>DET</b>	Department of Education and Training	<b>IT</b>	Information Technology
<b>DHHS</b>	Department of Health and Human Services	<b>JSOP</b>	Joint Standard Operating Procedure
<b>DJR</b>	Department of Justice and Regulation	<b>LGV</b>	Local Government Victoria
<b>DPC</b>	Department of Premier and Cabinet	<b>LVRRS</b>	Latrobe Valley Regional Rehabilitation Strategy
<b>DTF</b>	Department of Treasury and Finance	<b>MEMEG</b>	Municipal Emergency Management Enhancement Group
<b>EBIC</b>	Enterprise Bargaining Implementation Committee	<b>MEMP</b>	Municipal Emergency Management Plan
<b>EMC</b>	Emergency Management Commissioner	<b>MEMPC</b>	Municipal Emergency Management Planning Committee
<b>EM-COP</b>	Emergency Management Common Operating Picture	<b>MFB</b>	Metropolitan Fire Brigade
<b>EMJPIC</b>	Emergency Management Joint Public Information Committee		

<b>MFEU</b>	Mine Fire and Emergency Unit (DEDJTR)
<b>MFSP&amp;COP</b>	Mine Fire Service Policy and Code of Practice
<b>MOU</b>	Memorandum of Understanding
<b>MPHW</b>	Municipal Public Health and Wellbeing
<b>MR(SD)</b>	Mineral Resources (Sustainable Development)
<b>NEPC</b>	National Environment Protection Council
<b>NEPM</b>	National Environment Protection Measure
<b>NICS</b>	Next-Generation Incident Command System
<b>OHS</b>	Occupational Health and Safety
<b>OM</b>	Operations Manager
<b>OO</b>	Operations Officer
<b>OSOM</b>	One Source One Message
<b>PCB</b>	Project Control Board
<b>PHN</b>	Primary Health Network
<b>RAMP</b>	Risk Assessment and Management Plan
<b>RCT</b>	Regional Control Team
<b>REMPC</b>	Regional Emergency Management Planning Committee
<b>REMT</b>	Regional Emergency Management Team
<b>SCRC</b>	State Crisis and Resilience Council
<b>SCT</b>	State Control Team
<b>SEMT</b>	State Emergency Management Team
<b>SEPP</b>	State Environment Protection Policy
<b>SOP</b>	Standard Operating Procedure
<b>TRB</b>	Technical Review Board
<b>VICSES</b>	Victoria State Emergency Service

# Executive summary

On 9 February 2014, a fire began in the Hazelwood coal mine as a result of embers spotting from nearby bushfires. The fire burned for 45 days before being declared safe and it became the largest and longest burning mine fire to occur in Victoria's Latrobe Valley.

Due to the significant impact of the event on local communities and the environment, the Hazelwood Mine Fire Inquiry (the 2014 Inquiry) was conducted in 2014 to investigate the circumstances of the fire. In its 2014 report, the Board of Inquiry made a total of 18 recommendations and identified 57 commitments for planned improvement (known as affirmations) relating to the Victorian Government and the Hazelwood mine operator, GDF Suez (now ENGIE).

The Victorian Government accepted the 2014 Inquiry recommendations directed to it, responding through the 2014 *Hazelwood Mine Fire Inquiry Report: Victorian Government Implementation and Monitoring Plan*. The Victorian Government appointed Mr Neil Comrie AO APM as the Hazelwood Coal Mine Fire Implementation Monitor. The Inspector-General for Emergency Management (IGEM) was requested to monitor implementation of affirmations that fell within the scope of his role.

In October 2015, *Hazelwood Mine Fire Inquiry Implementation Monitor Annual Report (including the Annual Report of the Inspector-General for Emergency Management)* was released.

As a result of concerns relating to community health and mine rehabilitation, the Victorian Government reopened the Hazelwood Mine Fire Inquiry in 2015 (the 2015–16 Inquiry) with expanded Terms of Reference. The 2015–16 Inquiry produced a report in four volumes, each addressing one of the expanded Terms of Reference.

The 2015–16 Inquiry was conducted to examine and report on:

- minimising fire risks at Anglesea coal mine for the 2015–16 summer season (Volume I – Anglesea Mine)
- whether there has been an increase in deaths following the 2014 Hazelwood mine fire (Volume II – Investigations into 2009–2014 Deaths)
- measures to improve the health of the Latrobe Valley (Volume III – Health Improvement)
- rehabilitation options for Latrobe Valley coal mines (Volume IV – Mine Rehabilitation).

In light of the 2015–16 Inquiry, the Victorian Government released the *Hazelwood Mine Fire Inquiry: Victorian Government Implementation Plan* (Victorian Government Implementation Plan) in June 2016, which replaces the 2014 plan. The Victorian Government Implementation Plan sets out the 246 actions that are being undertaken by the government to fulfil its commitment to implement the recommendations and affirmations of both the 2014 and 2015–16 Inquiry reports.

IGEM is now responsible for monitoring and reporting on the implementation progress of all recommendations and affirmations from both the 2014 and 2015–16 Inquiry reports. IGEM is also monitoring implementation of recommendations and affirmations that are the responsibility of non-government health agencies and the Latrobe Valley mine operators.

Overall, IGEM considers that significant progress has been achieved following the Hazelwood mine fire to improve emergency planning and coordination, health outcomes and mine rehabilitation in the Latrobe Valley.

The Victorian Government, non-government health agencies and the mine operators have made a number of improvements across a range of themes:

## Communications and Community Engagement

The Department of Health and Human Services (DHHS) policies and procedures for the procurement and management of contracts for independent expert advice were independently reviewed and an implementation plan for the findings and recommendations is being developed.

DHHS has also created a Communications Health and Emergency Management Team to provide strategic direction and oversight for all its public health and emergency management communications.

A smoke and health community engagement strategy has been developed to improve the way in which DHHS engages and communicates with the public on the potential health impacts of smoke. The strategy is supported by an implementation plan that outlines the target groups, methods of engagement and timeframes until November 2017.

The Environment Protection Authority Victoria (EPA) continues to work with the Latrobe Valley community to increase understanding of EPA scientific information and provide opportunities for local community participation in environmental monitoring. This is being achieved through programs such as Citizen Science and the co-design of an expanded air monitoring network.

IGEM notes that independent social research found that the Morwell and wider Latrobe Valley community considers EPA to be a trusted source of information. Over a twelve-month period, there was a significant increase in satisfaction among residents with EPA's efforts to improve the local environment following the mine fire.

EPA has also developed and refined its emergency management communications and integrated the new procedure into EPA's Emergency Management Framework.

Emergency Management Victoria (EMV) is enhancing the provision of information and warnings to the public through an upgrade of the VicEmergency website and the Emergency Management Common Operating Picture (EM-COP) becoming operational.



The VicEmergency app is scheduled for release in November 2016.

IGEM notes that a draft State Communications Strategy was to be circulated to the Emergency Management Joint Public Information Committee (EMJPIC) for consultation in July 2016, however IGEM received no evidence from EMV that this occurred and has yet to receive a draft copy of the document.

### Health in the Latrobe Valley

To improve the delivery and coordination of health services, the Victorian Government has created a Health Innovation Zone in the Latrobe Valley which will be led by a new Latrobe Valley Health Assembly. The assembly will address issues such as chronic disease management, mental health, early detection and high-risk screening, health behaviours, healthy workplaces, healthy environments, the health of children and young people, the effect of social disadvantage on health, and Aboriginal health in the Latrobe Valley.

A Health Innovation Taskforce (the taskforce), with representatives from DHHS, the principal health agencies (Latrobe City Council, Latrobe Community Health Service, Latrobe Regional Hospital, the Gippsland Primary Health Network) and community representatives is supporting the creation of the health assembly.

The work of the taskforce includes, but is not limited to, the development of a governance structure, a constitution or partnering agreement and operating model for the health assembly. IGEM has seen evidence of the significant progress being made by the taskforce and expects that the appointment of the health assembly will occur in October 2016, as scheduled.

Monash University has been engaged by DHHS to conduct a long term health study looking into the effects of particulate matter in smoke on people's health over time. The first annual report was released in November 2015. The study has been independently reviewed to ensure the health study scope and structure is appropriate.

In response to community concerns, a project examining exposure to ash in roof cavities is being undertaken. DHHS has engaged an independent expert to conduct testing and analysis and community engagement is progressing, with testing expected in early 2017.

### Incident Air Quality and Wellbeing

A number of key policies, procedures and standards have been developed, as part of the State Smoke Working Group State Smoke Framework, to guide the deployment of air monitoring equipment, data collection and analysis and communication of air quality information to key decision makers and the community.

EPA has made significant improvements in its integration into the government's emergency management arrangements and its capability development to deliver rapid air quality monitoring for emergency events. EPA's air monitoring accountabilities are now included in Part 7 of the *Emergency Management Manual of Victoria (EMMV)*.

National compliance standards for PM2.5 particulates were established in May 2016 and formally adopted by the Victorian Government in the State Environment Protection Policy for Ambient Air Quality in July 2016.

Work is underway to develop an integrated predictive services framework which will inform decision-making about hazards, including bushfires, smoke, toxic plumes and floods, by predicting the impacts of an event. These predictions aid decision makers to plan community warnings and response actions prior to communities being impacted by hazards such as smoke.

### Latrobe Valley Coal Mine Regulation

IGEM considers that significant improvements have been made in relation to the regulation of Latrobe Valley coal mines. Amendments to the *Mineral Resources (Sustainable Development) Act 1990* have commenced which require that when a work plan variation is submitted, that it must comply with the risk-based work plan requirements which include consideration and management of geotechnical, rehabilitation and fire risks, especially in terms of prevention, mitigation and suppression of fire risks.

The Department of Economic Development, Jobs, Transport and Resources (DEDJTR) has established the Mine Fire and Emergency Unit to lead its regulatory, compliance and education activities related to mine fire safety and other emergency events related to coal mine fire management.

DEDJTR is currently involved in a number of longer term actions to reform the Latrobe Valley coal mines' regulatory framework that will require the operators of the Latrobe Valley coal mines to manage risks to the environment and public safety.

IGEM notes that, as of the cut off date for receipt of evidence, work was still in progress to establish a Victorian Earth Resources Regulator Form, due in July 2016.

### Latrobe Valley Coal Mine Rehabilitation Bonds

Rehabilitation bonds are intended to ensure financial security should the licensee be unable to meet their rehabilitation obligations. In the 2015–16 Inquiry, the Board of Inquiry found that current rehabilitation bonds for each Latrobe Valley coal mine are insufficient to cover the costs of rehabilitation.

A proposal to implement further rehabilitation bonds to 50 per cent of self-assessed liabilities by 30 June 2016 was agreed between the Victorian Government and the coal mine operators. Consultation is currently underway for the staged implementation of further rehabilitation bonds. Overall, IGEN considers the process to be progressing satisfactorily.

### Latrobe Valley Coal Mine Rehabilitation Strategy

The Latrobe Valley Regional Rehabilitation Strategy is being led by DEDJTR, with support from DELWP, and in consultation with the mine operators, the community, key stakeholders and technical experts.

Two major projects will help to guide future rehabilitation of the coal mines in the Latrobe Valley:

- the Batter Stability Project
- the LVRRS.

The Batter Stability Project was launched in April 2016 and is based on field work research at the Yallourn coal mine to improve the understanding of the impact of engineering, geology and hydrogeological processes on brown coal mine stability. DEDJTR has formally engaged EnergyAustralia and Federation University to progress the project.

The results of the Batter Stability Project will inform the LVRRS, which is planned for completion over five stages. The scope and methodology for the project is currently being developed in consultation with the mine operators to ensure integration with their research program.

Due to the complexity and long term nature of coal mine rehabilitation, the implementation of many of the actions relating to this theme are in their infancy, with several not expected for completion until 2019.

### Emergency Management Planning, Response and Recovery

Primarily through the continuing work of the Coal Mine Emergency Management Taskforce, a number of actions have been completed that are facilitating the integration of the Latrobe Valley coal mines into Victoria's emergency management arrangements.

The document *Latrobe Valley Coal Mines Major Emergency – Strategic Concept of Operations and Industry Integration* formalises the integration of Latrobe Valley coal mine personnel into regional and incident management teams.

Local emergency management plans were also updated to incorporate the integration of industry in emergency planning and response.

Training for response to mine fires is progressing with the Brown Coal Mine Firefighting Package to be piloted in CFA District 27 in late September 2016.

IGEM notes that initial funding has been approved for an MFB project to progress the purchase of personal monitors, to be worn by all firefighters, however, an estimated completion date has not been provided for this action which is now overdue.

The government continues to strengthen the State's emergency management planning framework by enactment of the *Emergency Management Amendment (Critical Infrastructure Resilience) Act 2014* in July 2015 and release of the Exposure Draft of the Emergency Management Legislation Amendment (Planning) Bill 2016 for public comment in May 2016.

Local Government Victoria (LGV), within DELWP, is building capability and capacity of local governments to meet their emergency management responsibilities through increased coordination and collaboration. LGV is also conducting a long-term project to review the capability and capacity required for local government to fulfil their roles and develop an action plan to address any capability or capacity gaps.

### Non-government health agencies

The Board of Inquiry made two recommendations and affirmed commitments made by statutory authorities, state-level non-government health agencies, the key principal stakeholder agencies and individual members of expert panels relevant to improving health in the Latrobe Valley in the short, medium and long-term.

In July 2016, DHHS established a time-limited taskforce to facilitate the appointment of the independent health assembly, which will promote, support and oversee the development of the Latrobe Valley Health Innovation Zone.

IGEM considers that the principal health agencies, through their achievements as members of the Latrobe Valley Health Taskforce, have demonstrated their strong support for the establishment of the Latrobe Valley Health Assembly, which, in turn, will promote, support and oversee the development of the Latrobe Valley Health Innovation Zone. IGEN notes also that the four principal health agencies will be members of the Latrobe Valley Health Assembly when it is formed.

### Coal mine operators

In July 2016, the Latrobe Valley coal mine operators established the Integrated Mines Research Group (IMRG), comprising representatives from the three Latrobe Valley mine operators – ENGIE Hazelwood, EnergyAustralia Yallourn and AGL Loy Yang. The meetings provide a forum for the mine operators and key stakeholders to discuss research topics and develop an integrated research plan that identifies common research areas and priorities for the next 10 years.

The Board of Inquiry recommended that the Mining Regulator develops milestones within the mine operators' progressive rehabilitation plans. DEDJTR will develop progressive rehabilitation milestones that require each Latrobe Valley coal mine operator to carry out specific rehabilitation works within set timeframes to ensure that final rehabilitation is achieved within the timeframe detailed in the work plan for each coal mine.

### ENGIE – 2014 Inquiry

ENGIE developed a fire risk implementation plan, which is scheduled for completion by 31 December 2016 and will finalise Recommendation 15. ENGIE's revised Mine Fire Service Policy and Code of Practice has been incorporated into a draft work plan variation, which when finalised, will be submitted to DEDJTR for assessment and approval by 31 December 2016, thus completing Recommendation 16. Completion of these recommendations has been necessarily extended due to regulatory reform.

The following tables depict the status of each recommendation and affirmation from the Board of Inquiry Reports.

### Hazelwood Mine Fire Inquiry Report 2014

**Table i:** Status of Recommendations, Affirmations and Actions from the Hazelwood Mine Fire Inquiry Report 2014

HAZELWOOD MINE FIRE INQUIRY REPORT 2014			
RECOMMENDATION 1			STATUS
The State empower and require the Auditor-General or another appropriate agency to:			Ongoing
<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>			
No.	Action	Lead agency	Action status
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	DJR	Complete
5	Publicly released the IGEM's annual reports in the Victorian Parliament within a reasonable time of receipt by the Minister for Emergency Services	DJR	Ongoing

RECOMMENDATION 2				STATUS
The State establish, for any future incident, integrated incident management teams with GDF Suez and other Victorian essential industry providers to:				Ongoing
<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>				
No.	Action	Lead agency	Action status	
205	Convene an industry forum in the Latrobe Valley, with quarterly attendance	CFA	Complete	
206	Update local emergency management plans to incorporate industry into emergency management planning and response. <sup>1</sup>	EMV	Complete	
207	Develop the Latrobe Valley Coal Mines Major Emergency – Strategic Concept of Operations and Industry Integration	EMV	Complete	
208	Hold Exercise “Latrobe 15” to implement and test the pilot integrated management structure, fully integrating industry into the REMT and IMTs	EMV	Complete	
209	Finalise the Latrobe Valley Coal Mines Major Emergency – Strategic Concept of Operations and Industry Integration	EMV	Complete	
210	Train Emergency Commanders and identified staff in AIMS Level 2 accreditation <sup>2</sup> and enable designated ENGIE personnel to attend regional ICC during incidents that have potential to impact the mine.	EMV	Complete	
211	Finalise the Coal Mine Emergency Taskforce Status Report detailing the status and initiatives undertaken by the Taskforce members	EMV	Complete	
212	Hold Coal Mine Taskforce Exercise to further implement and test the pilot integrated management structure, fully integrating industry into the REMT and IMTs.	EMV	Ongoing	
213	District 27 District Command Centre is operational	CFA	Ongoing	
214	Deliver the Final Report of the Latrobe Valley Coal Mine Taskforce	EMV	Ongoing	
215	Attend bi-monthly CGEIG Standardisation Committee meetings	EMV & CFA	Ongoing	
216	Update EMV Joint Standing Operating Procedure for Incident Management Team Operations to incorporate industry integration into IMT operations	EMV	Ongoing	
217	Assist in the re-write of the AIMS doctrine to accommodate the full integration of industry into the AIMS structure and process	EMV	Ongoing	

<sup>1</sup> 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.

<sup>2</sup> Training was used by personnel during mine declared SEVERE & EXTREME fire danger days in 2015-16. See initiatives from the Latrobe Valley Coal Mine Emergency Taskforce status report December 2015. <https://d1o5fm19p8kknj.cloudfront.net/wp-content/uploads/20141201055015/Coal-Mine-Emergency-Taskforce-Status-report-31-December-2015-V6-DraftCAedit-CLapp-and-PS-acc.pdf>

RECOMMENDATION 3			STATUS
The State enact legislation, to:			Ongoing
<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>			
No.	Action	Lead agency	Action status
222	Release the draft Emergency Management Legislative Amendment (Planning) Bill 2016 for public consultation	EMV	Complete
225	Full implementation of the Emergency Management Legislative Amendment (Planning) Bill 2016	EMV	Ongoing
RECOMMENDATION 4			STATUS
The State:			Ongoing
<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>			
No.	Action	Lead agency	Action status
148	Develop a Latrobe Valley Mine Dust – Industry Sector Strategy	EPA	Complete
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	DEDJTR	Complete
150	Endorse schedules to the DEDJTR and EPA Statement of Agreement	DEDJTR & EPA	Complete
151	Establish a Mine Fire and Emergency Unit	DEDJTR	Complete
153	Undertake twice yearly workshops on the MOU between DEDJTR and WorkSafe	DEDJTR & WorkSafe	Ongoing
154	Engage technical specialists to assist WorkSafe in the assessment of coal mine fire risk	WorkSafe	Ongoing
157	Sign an MOU (DEDJTR and CFA) that describes roles and responsibilities around fires and fire risk at earth resource sites	DEDJTR & CFA	Ongoing

RECOMMENDATION 5			STATUS
The State equip itself to undertake rapid air quality monitoring in any location in Victoria, to:			Ongoing
<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>			
No.	Action	Lead agency	Action status
114	Endorse the Rapid Deployment of Air Quality Monitoring for Community Health Guideline	EPA	Complete
115	Endorse the JSOP 03.18 for Rapid Deployment of Air Quality Monitoring for Community Health	EPA	Complete
116	Deliver rapid response monitoring capacity for PM2.5 and CO, including transitional data and information management processes for decision making during an event	EPA	Complete
117	Refine the response model, decision support tools and deployment procedures for 2016/17 summer fire season by incorporating lessons learned	EPA	Ongoing
118	Two mobile stations built and operational for deployment to complex events of extended duration and significant community impact	EPA	Ongoing
119	Train relevant staff in EPA regional offices in air quality equipment deployment during emergency events	EPA	Ongoing
120	Pre-deploy smoke monitors to identified high-risk sites across regional Victoria	EPA	Ongoing
121	Establish EPA and VICSES partnership and train VICSES staff in deployment of smoke monitors	EPA	Ongoing
122	Deliver a fully functional integrated air quality monitoring and information systems	EPA	Ongoing
RECOMMENDATION 6			STATUS
The State take the lead in advocating for a national compliance standard for PM2.5.			Complete
No.	Action	Lead agency	Action status
140	Advocate for NEPC decision on particulate standards for NEPM AAQ	EPA	Complete
141	Amend the SEPP AAQ to formally adopt the national PM2.5 standard, once approved	EPA & DELWP	Complete
RECOMMENDATION 7			STATUS
The State review and revise the community carbon monoxide response protocol and the firefighter carbon monoxide response protocol, to:			Complete
<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>			

No.	Action	Lead agency	Action status
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>	DHHS	Complete
136	Endorse the JSOP 03.20 for Managing Significant Community Exposure to Carbon Monoxide from Smoke	DHHS	Complete

RECOMMENDATION 8	STATUS
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The State review and revise the Bushfire Smoke Protocol and the PM2.5 Health Protection Protocol, to:

- ensure both protocols are consistent with each other; and
- ensure both protocols include assessment methods and trigger points for specific responses.

No.	Action	Lead agency	Action status
127	Engage appropriate experts to undertake a review of internationally recognised graduated smoke frameworks and the epidemiological basis for these frameworks	DHHS	Complete
137	Endorse the Community Smoke, Air Quality and Health Protocol	DHHS	Complete
138	Endorse the Community Smoke, Air Quality and Health Standard	DHHS	Complete
139	Endorse the JSOP 03.19 for Managing Significant Community Exposures to Fine Particles from Smoke	DHHS & EMV	Complete

RECOMMENDATION 9	STATUS
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The State develop and widely disseminate an integrated State Smoke Guide, to:

- incorporate the proposed State Smoke Plan for the management of public health impacts from large scale, extended smoke events;
- include updated Bushfire Smoke, carbon monoxide and PM2.5 protocols; and
- provide practical advice and support materials to employers, communities and individuals on how to minimise the harmful effects of smoke.

No.	Action	Lead agency	Action status
34	Review the Better Health Channel and health.vic site	DHHS	Complete
36	Appoint a Senior Science Policy Adviser to assist in implementing the State Smoke Framework	DHHS	Complete
37	Develop draft 'smoke and your health' communication materials for the 2015–16 summer season	DHHS	Complete
38	Develop a 'smoke and your health' engagement strategy for 2015–16	DHHS	Complete
39	Undertake community focus testing of the draft 'smoke and your health' communication materials for the 2015–16 summer season	DHHS	Complete
40	Finalise the 'smoke and your health' communication materials for the 2015–16 summer season	DHHS	Complete
41	Distribute 'smoke and your health' communications materials for 2015–16 summer season	DHHS	Complete

42	Evaluate 'smoke and your health' communications materials for 2015–16 summer season	DHHS	Complete
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	DHHS	Complete
44	Evaluate the 'smoke and your health' community engagement strategy	DHHS	Complete
45	Update the 'smoke and your health' community engagement strategy to reflect learnings from engagement with stakeholders and the evaluation	DHHS	Complete
123	Endorse State Smoke Framework, Version 2.0	DHHS & EMV	Complete
124	Revise the fire warning templates to include smoke and health messaging	DHHS & EMV	Complete
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	CFA	Ongoing
129	Establish sector governance arrangements for the Predictive Services Framework, including Project Control Board comprising representation from EMV, DELWP, CFA and MFB	DELWP	Complete
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	DELWP	Ongoing
131	Design an ICT system architecture (design) for the Predictive Services ICT Platform	DELWP	Ongoing
132	Build an ICT platform for hazard prediction (including smoke) models	DELWP	Ongoing
133	Design data management requirements for the Predictive Services Framework	DELWP	Ongoing
134	Incorporate Predictive Services smoke intelligence module, to incorporate social media, field sensors and satellite image data to calibrate and validate smoke predictions	DELWP	Ongoing
RECOMMENDATION 10			STATUS
The State should continue the long-term health study, and:			Ongoing
<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>			
No.	Action	Lead agency	Action status
96	Provide mortality and allied data to the Long Term Health Study lead contractor	DHHS	Complete
97	Publicly release the second annual Monash University Report on the Long Term Health Study	DHHS	Complete
98	Publicly release the second annual Monash University Report on the Long Term Health Study	DHHS	Ongoing
99	Publicly release the third annual Monash University Report on the Long Term Health Study	DHHS	Ongoing



RECOMMENDATION 11			STATUS
The State review and revise its communication strategy, to:			Ongoing
<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>			
No.	Action	Lead agency	Action status
6	Circulate a draft State Communications Strategy to EMJPIC members for consultation	EMV	Ongoing (Overdue)
7	Test the draft State Communications Strategy at the Latrobe Valley Coal Mine Taskforce August 2016 Exercise	EMV	Ongoing
8	Incorporate private operators of essential infrastructure in the State Communications Strategy	EMV	Ongoing
9	Submit the State Communications Strategy to SCRC for consideration and approval	EMV	Ongoing
10	Develop operational guidelines/procedure to support the State Communications Strategy	EMV	Ongoing
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	EMV	Ongoing
RECOMMENDATION 12			STATUS
The State improve OHS in emergency response to include lessons highlighted by the Hazelwood mine fire.			Ongoing
No.	Action	Lead agency	Action status
17	Engage a dedicated EMV community engagement officer based in the Latrobe Valley	EMV	Ongoing
18	Develop a plan for the Latrobe Valley Community Engagement and Planning Project	EMV	Ongoing
19	Deliver the Latrobe Valley Community Engagement and Planning Project	EMV	Ongoing
RECOMMENDATION 13			STATUS
GDF Suez revise its Emergency Response Plan, to:			Complete <sup>^</sup>
<ul style="list-style-type: none"> <li>require an increased state of readiness on days of Total Fire Ban;</li> <li>require pre-establishment of an Emergency Command Centre;</li> <li>require pre-positioning of an accredited Incident Controller as Emergency Commander; and require any persons nominated as Emergency Commander to have incident controller accreditation and proficiency in the use of the Australasian Inter-service Incident Management System.</li> </ul>			
RECOMMENDATION 14			STATUS
GDF Suez establish enhanced back-up power supply arrangements that do not depend wholly on mains power, to:			Complete <sup>^</sup>
<ul style="list-style-type: none"> <li>ensure that the Emergency Command Centre can continue to operate if mains power is lost; and</li> <li>ensure that the reticulated fire services water system can operate with minimal disruption if mains power is lost.</li> </ul>			

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report

RECOMMENDATION 15			STATUS
<p>GDF Suez:</p> <ul style="list-style-type: none"> <li>conduct, assisted by an independent consultant, a risk assessment of the likelihood and consequences of fire in the worked out areas of the Hazelwood mine, and an assessment of the most effective fire protection for the exposed coal surfaces;</li> <li>prepare an implementation plan that ensures the most effective and reasonably practicable controls are in place to eliminate or reduce the risk of fire; and</li> <li>implement the plan.</li> </ul>			Ongoing
No.	Action	Lead agency	Action status
R15.1	Conduct, assisted by an independent consultant, a risk assessment of the likelihood and consequences of fire in the worked out areas of the mine, including an assessment of the most effective fire protection means for exposed coal surfaces	ENGIE	Complete <sup>^</sup>
R15.2	Fire Risk Implementation Plan prepared	ENGIE	Complete
R15.3	Plan implemented	ENGIE	Ongoing
RECOMMENDATION 16			STATUS
<p>GDF Suez:</p> <ul style="list-style-type: none"> <li>review its 'Mine Fire Service Policy and Code of Practice' so that it reflects industry best practice and ensures that, by taking a risk management approach, it is suitable for fire prevention, mitigation and suppression in all parts of the Hazelwood mine; and</li> <li>incorporate the revised 'Mine Fire Service Policy and Code of Practice' into the approved work plan for the Hazelwood mine.</li> </ul>			Ongoing
No.	Action	Lead agency	Action status
R16.1	GDF Suez reviews its 'Mine Fire Service Policy and Code of Practice' so that it reflects industry best practice and ensure that, by taking a risk management approach, it is suitable for fire prevention, mitigation and suppression in all parts of the Hazelwood mine	ENGIE	Complete
R16.2	GDF Suez to apply to DEDJTR for its revised Mine Fire Service Policy and Code of Practice to be incorporated into the Hazelwood Mine Work Plan	ENGIE	Ongoing
RECOMMENDATION 17			STATUS
GDF Suez adopt and apply the firefighter carbon monoxide response protocol.			Complete <sup>^</sup>
RECOMMENDATION 18			STATUS
GDF Suez improve its crisis management communication strategy for the Hazelwood mine in line with international best practice.			Complete <sup>^</sup>

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report

AFFIRMATION 1			STATUS
The State develop a Strategic Action Plan to improve and strengthen Victoria's emergency management capability.			Complete <sup>^</sup>
AFFIRMATION 2			STATUS
The State establish Emergency Management Victoria as the new overarching body for emergency management in Victoria.			Complete <sup>^</sup>
AFFIRMATION 3			STATUS
The State establish an Emergency Management Commissioner to ensure that control arrangements are in place, and coordinate the response roles of relevant agencies' resources.			Complete <sup>^</sup>
AFFIRMATION 4			STATUS
The State establish Inspector General Emergency Management as the assurance authority for Victoria's emergency management arrangements.			Complete <sup>^</sup>
AFFIRMATION 5			STATUS
The State establish a Volunteer Consultative Forum for the Government to consult with volunteers and ensure their views are heard.			Complete <sup>^</sup>
AFFIRMATION 6			STATUS
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.			Ongoing
No.	Action	Lead agency	Action status
12	EM-COP to be operational	EMV	Complete
13	Upgrade the VicEmergency website to support all-communities all-emergencies use over 2015–16 summer season	EMV	Complete
14	Launch the VicEmergency app	EMV	Ongoing
15	Roll all existing emergency management information systems into EM-COP, to be available for use by all emergency management personnel	EMV	Ongoing
16	Align call centre arrangements for all government departments and agencies for emergency management messaging	EMV	Ongoing
AFFIRMATION 7			STATUS
The State strengthen industry engagement with the community. No specific actions have been assigned to address this affirmation in the Victorian Government Implementation Plan, however IGEM notes that it is contingent on a number of engagement activities (see Actions 208, 209 and 211).			Ongoing

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report

AFFIRMATION 8			STATUS
The State improve OHS in emergency response to include lessons highlighted by the Hazelwood mine fire.			Ongoing
No.	Action	Lead agency	Action status
222	Release the draft Emergency Management Legislative Amendment (Planning) Bill 2016 for public consultation	EMV	Complete
225	Full implementation of the Emergency Management Legislative Amendment (Planning) Bill 2016	EMV	Ongoing
AFFIRMATION 9			STATUS
The State improve Government engagement with the coal mine sector regarding emergency management plans.			Ongoing
No specific actions have been assigned to address this affirmation in the Victorian Government Implementation Plan, however IGEM notes that it is contingent on a number of engagement activities (see Actions 205, 206 and 213).			
AFFIRMATION 10			STATUS
The State improve integration of industry in the response to an emergency.			Ongoing
No.	Action	Lead agency	Action status
205	Convene an industry forum in the Latrobe Valley, with quarterly attendance	CFA	Complete
206	Update local emergency management plans to incorporate industry into emergency management planning and response.	EMV	Complete
207	Develop the Latrobe Valley Coal Mines Major Emergency – Strategic Concept of Operations and Industry Integration	EMV	Complete
208	Hold Exercise “Latrobe 15” to implement and test the pilot integrated management structure, fully integrating industry into the REMT and IMTs	EMV	Complete
209	Finalise the Latrobe Valley Coal Mines Major Emergency – Strategic Concept of Operations and Industry Integration	EMV	Complete
210	Train Emergency Commanders and identified staff in AIIMS Level 2 accreditation[2] and enable designated ENGIE personnel to attend regional ICC during incidents that have potential to impact the mine.	EMV	Complete
211	Finalise the Coal Mine Emergency Taskforce Status Report detailing the status and initiatives undertaken by the Taskforce members	EMV	Complete
212	Hold Coal Mine Taskforce Exercise to further implement and test the pilot integrated management structure, fully integrating industry into the REMT and IMTs.	EMV	Ongoing
214	Deliver the Final Report of the Latrobe Valley Coal Mine Taskforce	EMV	Ongoing
215	Attend bi-monthly CGEIG Standardisation Committee meetings	EMV & CFA	Ongoing
216	Update EMV Joint Standing Operating Procedure for Incident Management Team Operations to incorporate industry integration into IMT operations	EMV	Ongoing
217	Assist in the re-write of the AIIMS doctrine to accommodate the full integration of industry into the AIIMS structure and process	EMV	Ongoing

AFFIRMATION 11			STATUS
The State improve training for career and volunteer firefighters to include lessons highlighted by the Hazelwood mine fire.			Ongoing
No.	Action	Lead agency	Action status
226	Retrofit two heavy tankers with specialist CAFS capability for deployment in Churchill and Traralgon South (within District 27)	CFA	Complete
230	Develop a pilot Brown Coal Mine Firefighting Training Package, which incorporates Standard for Managing Exposure to Significant Carbon Monoxide Emissions and associated JSOPs	CFA	Complete
231	Development of a Detection Team (Scientific Officers and HAZMAT) Training Package	CFA & MFB	Complete
234	Release tender for two purpose-built specialist CAFS trucks	CFA	Ongoing
235	Convert pilot Brown Coal Mine Firefighting Training Package into a blended learning program (e-learning and face to face)	CFA	Ongoing
236	Develop and deliver training to IMTs with a focus on Incident Controllers	CFA & MFB	Ongoing
237	Deliver Detection Team Training (Scientific Officers and HAZMAT)	CFA & MFB	Complete
238	Deliver Brown Coal Mine Firefighting Training Package	CFA & MFB	Ongoing
AFFIRMATION 12			STATUS
The State improve OHS in emergency response to include lessons highlighted by the Hazelwood mine fire.			Ongoing
No.	Action	Lead agency	Action status
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:	DHHS	Complete
136	Endorse the JSOP 03.20 for Managing Significant Community Exposure to Carbon Monoxide from Smoke	DHHS	Complete
227	Undertake a health monitoring trial with LifeAid at emergency site in Portland and Kaladbro	CFA	Complete
228	Locate CFA Health monitoring teams located at nine locations across Victoria (eight regionally, and one at headquarters)	CFA	Complete
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)	CFA	Complete
230	Develop a pilot Brown Coal Mine Firefighting Training Package, which incorporates Standard for Managing Exposure to Significant Carbon Monoxide Emissions and associated JSOPs	CFA	Complete
232	Contract on-call capability with health services and fire services	CFA & MFB	Complete
233	Provide personal monitoring equipment to MFB firefighters	MFB	Ongoing (Overdue)

AFFIRMATION 13				STATUS
The State develop an integrated emergency resource planning framework for the Latrobe Valley.				Complete
No.	Action	Lead agency	Action status	
221	Develop guidelines to support the management of ongoing response requirements in relation to Class 1 emergencies impacting on the Latrobe Valley Coal Mines	EMV	Complete	
224	Consider emergency resource planning in CFA's District 27 boundaries at the industry forum	CFA	Complete	
AFFIRMATION 14				STATUS
The State review emergency management communications arrangements across Government commissioned by the State Crisis and Resilience Council, including consideration of:				Complete <sup>^</sup>
(i) the roles and functions of emergency communications committees;				
(ii) enhancing specialist crisis communications capability within Government;				
(iii) the use of established local networks as a way to communicate during emergencies;				
(iv) additional emergency communications training for Government employees; and				
(v) developing a coordinated approach to the use of social media by Government during emergencies.				
AFFIRMATION 15				STATUS
The State conduct a National Review of Warnings and Information.				Complete <sup>^</sup>
AFFIRMATION 16				STATUS
The State review Environment Protection Authority (EPA) emergency protocols, incorporating lessons from the Hazelwood mine fire.				Complete
No.	Action	Lead agency	Action status	
30	Complete a review of DHHS structures for public health and emergency management related communications teams	DHHS	Complete	
33	Establish a Communications Health and Emergency Management Team	DHHS	Complete	
35	Develop new processes and protocols (including standard messaging templates) for Better Health Channel and health.vic site based on the review	DHHS	Complete	
142	Revise the EPA's emergency management accountabilities	EPA	Complete	
143	Conduct exercises to test EPA protocols	EPA	Complete	
144	Establish the Environment Protection Incident Management System, using the AIIMS structure	EPA	Complete	
145	Refine the relevant EPA protocols, incorporating lessons from exercises	EPA	Complete	
146	Train staff in emergency management and response protocols for 2015–16 summer fire season	EPA	Complete	

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report

AFFIRMATION 17			STATUS
The State clarify future expectations of incident air monitoring and scenarios, and determine the appropriate inventory of equipment.			Ongoing
No.	Action	Lead agency	Action status
114	Endorse the Rapid Deployment of Air Quality Monitoring for Community Health Guideline	EPA	Complete
115	Endorse the JSOP 03.18 for Rapid Deployment of Air Quality Monitoring for Community Health	EPA	Complete
116	Deliver rapid response monitoring capacity for PM2.5 and CO, including transitional data and information management processes for decision making during an event	EPA	Complete
117	Refine the response model, decision support tools and deployment procedures for 2016/17 summer fire season by incorporating lessons learned	EPA	Ongoing
118	Two mobile stations built and operational for deployment to complex events of extended duration and significant community impact	EPA	Ongoing
119	Train relevant staff in EPA regional offices in air quality equipment deployment during emergency events	EPA	Ongoing
120	Pre-deploy smoke monitors to identified high-risk sites across regional Victoria	EPA	Ongoing
121	Establish EPA and VICSES partnership and train VICSES staff in deployment of smoke monitors	EPA	Ongoing
122	Deliver a fully functional integrated air quality monitoring and information systems	EPA	Ongoing
AFFIRMATION 18			STATUS
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.			Ongoing
No.	Action	Lead agency	Action status
147	Release a report on information and knowledge generated from the Hazelwood Mine Fire meta-analysis	EPA	Ongoing

AFFIRMATION 19			STATUS
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.			Complete
No.	Action	Lead agency	Action status
127	Engage appropriate experts to undertake a review of internationally recognised graduated smoke frameworks and the epidemiological basis for these frameworks	DHHS	Complete
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:	DHHS	Complete
136	Endorse the JSOP 03.20 for Managing Significant Community Exposure to Carbon Monoxide from Smoke	DHHS	Complete
137	Endorse the Community Smoke, Air Quality and Health Protocol	DHHS	Complete
138	Endorse the Community Smoke, Air Quality and Health Standard	DHHS	Complete
139	Endorse the JSOP 03.19 for Managing Significant Community Exposures to Fine Particles from Smoke	DHHS & EMV	Complete
AFFIRMATION 20			STATUS
EPA review its communications response and implement a structured community engagement process with the Morwell and surrounding communities.			Ongoing
No.	Action	Lead agency	Action status
20	Deliver the EPA Emergency Response Communications Protocol	EPA	Complete
21	Evaluate the pilot Citizen Science Program	EPA	Complete
22	Identify local community networks and their environment information sources by undertaking a social network analysis	EPA	Complete
23	Evaluate the pilot communication and engagement approach	EPA	Complete
25	Evaluate existing activities of the Citizen Science Program and adapt them as necessary to remain relevant to the local community	EPA	Ongoing
27	Deliver new participation opportunities as part of the Citizen Science Program for the Latrobe Valley community	EPA	Ongoing
AFFIRMATION 21			STATUS
EPA will be monitoring PM2.5 at all its fixed automatic air quality monitoring locations by the end of July 2014.			Complete <sup>^</sup>
AFFIRMATION 22			STATUS
The State will have an automatic air quality monitoring station in the south of Morwell for the next 12 months [to March 2015].			Complete <sup>^</sup>

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report



AFFIRMATION 23			STATUS
EPA review its communications response and implement a structured community engagement process with the Morwell and surrounding communities.			Complete
No.	Action	Lead agency	Action status
140	Advocate for NEPC decision on particulate standards for NEPM AAQ	EPA	Complete
141	Amend the SEPP AAQ to formally adopt the national PM2.5 standard, once approved	DELWP and EPA	Complete
AFFIRMATION 24			STATUS
The State develop a State Smoke Plan covering the management of potential public health impacts from large scale, extended smoke events.			Ongoing
No.	Action	Lead agency	Action status
34	Review the Better Health Channel and health.vic site	DHHS	Complete
36	Appoint a Senior Science Policy Adviser to assist in implementing the State Smoke Framework	DHHS	Complete
37	Develop draft 'smoke and your health' communication materials for the 2015–16 summer season	DHHS	Complete
38	Develop a 'smoke and your health' engagement strategy for 2015–16	DHHS	Complete
39	Undertake community focus testing of the draft 'smoke and your health' communication materials for the 2015–16 summer season	DHHS	Complete
40	Finalise the 'smoke and your health' communication materials for the 2015–16 summer season	DHHS	Complete
41	Distribute 'smoke and your health' communications materials for 2015–16 summer season	DHHS	Complete
42	Evaluate 'smoke and your health' communications materials for 2015–16 summer season	DHHS	Complete
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	DHHS	Complete
44	Evaluate the 'smoke and your health' community engagement strategy	DHHS	Complete
45	Update the 'smoke and your health' community engagement strategy to reflect learnings from engagement with stakeholders and the evaluation	DHHS	Complete
123	Endorse State Smoke Framework, Version 2.0	DHHS & EMV	Complete
124	Revise the fire warning templates to include smoke and health messaging	DHHS & EMV	Complete
127	Engage appropriate experts to undertake a review of internationally recognised graduated smoke frameworks and the epidemiological basis for these frameworks	DHHS	Complete
129	Establish sector governance arrangements for the Predictive Services Framework, including Project Control Board comprising representation from EMV, DELWP, CFA and MFB	DELWP	Complete

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	DELWP	Ongoing
131	Design an ICT system architecture (design) for the Predictive Services ICT Platform	DELWP	Ongoing
132	Build an ICT platform for hazard prediction (including smoke) models	DELWP	Ongoing
133	Design data management requirements for the Predictive Services Framework	DELWP	Ongoing
134	Incorporate Predictive Services smoke intelligence module, to incorporate social media, field sensors and satellite image data to calibrate and validate smoke predictions	DELWP	Ongoing
AFFIRMATION 25			STATUS
The State undertake projects to understand health impacts and predict the movement of smoke from planned burning and bushfires.			Ongoing
No.	Action	Lead agency	Action status
123	Endorse State Smoke Framework, Version 2.0	DHHS & EMV	Complete
124	Revise the fire warning templates to include smoke and health messaging	DHHS & EMV	Complete
127	Engage appropriate experts to undertake a review of internationally recognised graduated smoke frameworks and the epidemiological basis for these frameworks	DHHS	Complete
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	CFA	Ongoing
129	Establish sector governance arrangements for the Predictive Services Framework, including Project Control Board comprising representation from EMV, DELWP, CFA and MFB	DELWP	Complete
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	DELWP	Ongoing
131	Design an ICT system architecture (design) for the Predictive Services ICT Platform	DELWP	Ongoing
132	Build an ICT platform for hazard prediction (including smoke) models	DELWP	Ongoing
133	Design data management requirements for the Predictive Services Framework	DELWP	Ongoing
134	Incorporate Predictive Services smoke intelligence module, to incorporate social media, field sensors and satellite image data to calibrate and validate smoke predictions	DELWP	Ongoing

AFFIRMATION 26				STATUS
The State improve local engagement on health issues.				Complete
No.	Action	Lead agency	Action status	
46	Appoint a dedicated community engagement officer, based in the DHHS Traralgon office	DHHS	Complete	
AFFIRMATION 27				STATUS
The State improve communication around psycho-social support to communities affected by emergencies.				Complete <sup>^</sup>
AFFIRMATION 28				STATUS
The State commission a long-term study into the long-term health effects of the smoke from the Hazelwood mine fire.				Ongoing
No.	Action	Lead agency	Action status	
96	Provide mortality and allied data to the Long Term Health Study lead contractor	DHHS	Complete	
97	Publicly release the first annual Monash University Report on the Long Term Health Study	DHHS	Complete	
98	Publicly release the second annual Monash University Report on the Long Term Health Study	DHHS	Ongoing	
99	Publicly release the third annual Monash University Report on the Long Term Health Study	DHHS	Ongoing	
AFFIRMATION 29				STATUS
The State review the Personal Hardship Assistance Program and Implementation Guidelines for consistency and clarity of purpose.				Complete <sup>^</sup>
AFFIRMATION 30				STATUS
The State implement new technology for recording emergency assistance payments.				Ongoing
No.	Action	Lead agency	Action status	
246	Introduce new technology to track payments	DHHS	Ongoing	
AFFIRMATION 31				STATUS
Local Government Victoria coordinate emergency management officers across local councils.				Ongoing
No.	Action	Lead agency	Action status	
240	Hold planning days with all 11 collaborative council clusters to assist with strategic planning	DELWP	Complete	
241	Conduct an annual forum for all council emergency management staff in Bendigo	DELWP	Complete	
242	Define the roles and responsibilities of local government in emergency management	DELWP	Ongoing	

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report

243	Review the current roles and responsibilities of local government in emergency management for alignment with the defined roles and responsibilities	DELWP	Ongoing
244	Review the capability and capacity required for local government to fulfil their emergency management roles and responsibilities	DELWP	Ongoing
245	Develop an action plan to address any local government emergency management capability and capacity gaps	DELWP	Ongoing
AFFIRMATION 32			STATUS
The State improve relief and recovery information available to Culturally and Linguistically Diverse communities.			Complete <sup>^</sup>
AFFIRMATION 33			STATUS
The State review relief and recovery communications and community engagement initiatives.			Complete <sup>^</sup>
AFFIRMATION 34			STATUS
The State prepare Regional Growth Plans.			Complete <sup>^</sup>
AFFIRMATION 35			STATUS
The State implement a risk-based approach for work plans.			Complete
The 2015 Annual report indicated this affirmation was ongoing but would be fulfilled by the 2015 actions R4.2, 4.8 and R4.11. As these are now complete, IGEM considers this affirmation has been completed.			
AFFIRMATION 36			STATUS
The State implement the Victorian Critical Infrastructure Resilience Strategy.			Complete
No.	Action	Lead agency	Action status
218	Publish the Critical Infrastructure Resilience Strategy	EMV	Complete
219	Enact the Emergency Management (Critical Infrastructure Resilience) Act 2014	EMV	Complete
220	Declare 'vital' critical infrastructure in the Latrobe Valley	EMV	Complete
223	Begin the Critical Infrastructure Resilience Improvement Cycle	DEDJTR & EMV	Complete
AFFIRMATION 37			STATUS
The State enhance emergency risk mitigation planning.			Ongoing
No.	Action	Lead agency	Action status
222	Release the draft Emergency Management Legislative Amendment (Planning) Bill 2016 for public consultation	EMV	Complete
225	Full implementation of the Emergency Management Legislative Amendment (Planning) Bill 2016	EMV	Ongoing
AFFIRMATION 38			STATUS
The State review the Latrobe City Municipal Emergency Management Plan.			Complete

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report

No.	Action	Lead agency	Action status
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.	DELWP	Complete
AFFIRMATION 39			STATUS
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.			Ongoing
No.	Action	Lead agency	Action status
152	Establish a Victorian Earth Resources Regulator Forum, with membership including WorkSafe and EPA	DEDJTR	Ongoing (Overdue)
AFFIRMATION 40			STATUS
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.			Complete <sup>^</sup>
No.	Action	Lead agency	Action status
3	Assist the Minister for Emergency Services to request that the IGEM begins monitoring implementation of all 2014 Inquiry Report recommendations and affirmations, by the Government and GDF Suez, with annual reports on progress.	DJR	Complete
GDF SUEZ AFFIRMATION 1			STATUS
GDF Suez nominate a group of staff to be trained in the Phoenix Rapidfire modelling tool prior to the 2014/2015 fire season.			Complete <sup>^</sup>
GDF SUEZ AFFIRMATION 2			STATUS
GDF Suez offer enhanced training prior to the 2014/2015 fire season and on an ongoing basis, to personnel who are intended to perform a role under the emergency command structure and relevant emergency service agencies.			Complete <sup>^</sup>
GDF SUEZ AFFIRMATION 3			STATUS
GDF Suez establish an emergency command structure at the mine to deal with Extreme Fire Danger Days.			Complete <sup>^</sup>
GDF SUEZ AFFIRMATION 4			STATUS
GDF Suez notify Country Fire Authority (CFA) of the identity and contact details of those personnel holding these roles.			Complete <sup>^</sup>
GDF SUEZ AFFIRMATION 5			STATUS
On Extreme Fire Danger Days, GDF Suez ensure more personnel are rostered on and additional contractors are available for dedicated fire protection duties.			Complete <sup>^</sup>
GDF SUEZ AFFIRMATION 6			STATUS
GDF Suez upgrade signage within the mine to make orientation easier for non-mine personnel.			Complete <sup>^</sup>

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report

GDF SUEZ AFFIRMATION 7			STATUS
GDF Suez negotiate with SP AusNet regarding a feasibility study to upgrade the MHO substation from temporary to permanent standard.			Complete^
GDF SUEZ AFFIRMATION 8			STATUS
GDF Suez initiate a programme for reducing vegetation in the worked out areas of the northern batters to reduce fire risk commencing in the areas closest to Morwell.			Complete^
GDF SUEZ AFFIRMATION 9			STATUS
GDF Suez maintain and continue to use the additional pipe system located in the northern batters which was installed during the 2014 fire and install additional pipework as identified.			Complete^
GDF SUEZ AFFIRMATION 10			STATUS
GDF Suez conduct a review of the current pipework and condition in the areas of the mine other than the eastern section of the northern batters.			Complete^
GDF SUEZ AFFIRMATION 11			STATUS
On Extreme Fire Danger Days GDF Suez instigate wetting down of non-operational areas.			Complete^
GDF SUEZ AFFIRMATION 12			STATUS
GDF Suez nominate a representative to attend the meetings of the Municipal Fire Prevention Committee convened by Latrobe City Council.			Complete^
GDF SUEZ AFFIRMATION 13			STATUS
GDF Suez nominate designated people to be in attendance at the CFA Incident Control Centre during an emergency which threatens the mine.			Complete^
GDF SUEZ AFFIRMATION 14			STATUS
GDF Suez review its own communications protocol to ensure that during the response to a fire which is capable of impacting on the community, it is able to communicate messages to the community via any protocol adopted following the review by all agencies.			Complete
No.	Action	Lead agency	Action status
GDF A15.1	Giving proper regard to OH&S Regulations, and in consultation with WorkSafe, GDF Suez Safety Assessment and Safety Management Systems for mine fire revised	ENGIE	Complete
GDF SUEZ AFFIRMATION 15			STATUS
GDF Suez work with Victorian WorkCover Authority (VWA) to review its Safety Assessment and Safety Management System in light of rr. 5.3.21 and 5.3.23 of the Occupational Health and Safety Regulations 2007 (Vic).			Complete

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report

GDF SUEZ AFFIRMATION 16	STATUS
GDF Suez develop a Carbon Monoxide management protocol for firefighter and mine employee safety prior to the 2014/2015 fire season, in consultation with VWA and CFA.	Complete <sup>^</sup>
GDF SUEZ AFFIRMATION 17	STATUS
GDF Suez undertake the rehabilitation set out in Exhibit 88 – Statement of James Faithful, annexure 5 and discuss the appropriate timing of each sequence of rehabilitation with the Department of State Development, Business and Innovation.	Complete

## Hazelwood Mine Fire Inquiry Report 2015/2016, Volume II – Investigations into 2009–2014 deaths

**Table ii:** Status of Recommendations, Affirmations and Actions from the Hazelwood Mine Fire Inquiry Report 2015–16, Volume II

HAZELWOOD MINE FIRE INQUIRY REPORT 2015–16, VOLUME II				
RECOMMENDATION 1				STATUS
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.				Complete
No.	Action	Lead agency	Action status	
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)	EMV	Complete	
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	EMV	Complete	
RECOMMENDATION 2				STATUS
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 <i>Hazelwood Mine Fire Inquiry Report Victorian Government Implementation and Monitoring Plan</i> , October 2014. No specific actions have been assigned to address this recommendation in the Victorian Government Implementation Plan, however IGEM notes that it is contingent on a range of actions assigned to the Latrobe Valley Health Assembly (See Section 5.3)				Ongoing
RECOMMENDATION 3				STATUS
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 <i>Public Health and Wellbeing Act 2008 (Vic)</i> .				Complete
No.	Action	Lead agency	Action status	
30	Complete a review of DHHS structures for public health and emergency management related communications teams	DHHS	Complete	
33	Establish a Communications Health and Emergency Management Team	DHHS	Complete	
35	Develop new processes and protocols (including standard messaging templates) for Better Health Channel and health.vic site based on the review	DHHS	Complete	

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report

RECOMMENDATION 4				STATUS
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.				Ongoing
No.	Action	Lead agency	Action status	
28	Deliver refresher contract management training for DHHS procurement staff	DHHS	Complete	
29	Engage an independent consultant to undertake a review of DHHS procurement and contract management policies and procedures for obtaining independent expert advice	DHHS	Complete	
31	Develop a plan to implement the findings and recommendations of the independent expert report on DHHS procurement and contract management policies and procedures	DHHS	Ongoing	
32	Deliver the plan to implement the findings and recommendations of the independent expert report on DHHS procurement and contract management policies and procedures	DHHS	Ongoing	
RECOMMENDATION 5				STATUS
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.				Ongoing
No.	Action	Lead agency	Action status	
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	DPC and DJR	Complete	
5	Publicly released the IGEM's annual reports in the Victorian Parliament within a reasonable time of receipt by the Minister for Emergency Services	DJR	Ongoing	
AFFIRMATION 1				STATUS
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.				Complete
No.	Action	Lead agency	Action status	
2	Reimburse Voices of the Valley for fee paid to Victorian Registry of Births, Deaths and Marriages for death records data	DPC	Complete	



**Hazelwood Mine Fire Inquiry Report 2015/2016, Volume III – Health Improvement****Table iii:** Status of Recommendations, Affirmations and Actions from the Hazelwood Mine Fire Inquiry Report 2015–16, Volume III

HAZELWOOD MINE FIRE INQUIRY REPORT 2015–16, VOLUME III				
RECOMMENDATION 1				STATUS
The State empower the Hazelwood Mine Fire Implementation Monitor or another appropriate agency to:				Ongoing
<ul style="list-style-type: none"> <li>• Oversee the implementation of these recommendations.</li> <li>• Report publicly on progress every year for the next eight years.</li> <li>• Identify in each report any additional actions the State should take to ensure the intent of this report is achieved.</li> </ul>				
No.	Action	Lead agency	Action status	
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	DPC & DJR	Complete	
5	Publicly released the IGEM's annual reports in the Victorian Parliament within a reasonable time of receipt by the Minister for Emergency Services	DJR	Ongoing	
RECOMMENDATION 2				STATUS
The State 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.				Complete
No.	Action	Lead agency	Action status	
48	Designate the Latrobe Valley as the Latrobe Valley Health Zone	DHHS	Complete	
RECOMMENDATION 3				STATUS
The State establish the Latrobe Valley Health Assembly and executive Board to promote, support and oversee the development of the Latrobe Valley Health Zone.				Ongoing
The Latrobe Valley Health Assembly should ensure that:				
<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>				

No.	Action	Lead agency	Action status
51	Assist the Latrobe Valley Health Taskforce to recruit an initial local team to support the work of the taskforce and Latrobe Valley Health Assembly	DHHS	Ongoing
52	Develop an engagement strategy to help the Latrobe Valley Health Taskforce to identify and attract broad community and business and industry representatives to consider membership of the Latrobe Valley Health Assembly	DHHS	Ongoing
53	Begin an expression of interest process to establish the membership of the Latrobe Valley Health Assembly	DHHS	Ongoing
54	Support the Latrobe Valley 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 Valley Health Assembly, including forums and groups reporting to the Assembly</li> <li>a constitution, partnering agreement or MOU (as appropriate) for the Latrobe Valley Health Assembly</li> <li>preparation of information to assist the Latrobe Valley Health Assembly to identify outcomes and processes for monitoring and reporting</li> </ul>	DHHS	Ongoing
55	Facilitate the appointment of the Latrobe Valley Health Assembly, and an independent Chair of the Latrobe Valley Health Assembly	DHHS	Ongoing
56	Facilitate consideration by the Latrobe Valley Health Assembly of all draft documents prepared by the Latrobe Valley Health Taskforce for amendment and adoption	DHHS	Ongoing
58	Work with the Latrobe Valley 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	DHHS	Ongoing
59	Participate as a member of the Latrobe Valley Health Assembly to identify priorities	DHHS	Ongoing
60	Work with the Latrobe Valley Health Assembly to conduct annual monitoring of the impact of innovation	DHHS	Ongoing
RECOMMENDATION 4			STATUS
The State 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.			Ongoing
No specific actions have been assigned to address this recommendation in the Victorian Government Implementation Plan, however IGEM notes that it is contingent on the establishment of the Latrobe Valley Health Assembly (see Action 55).			

RECOMMENDATION 5			STATUS
The State support and fund the development and delivery of health improvement strategies in the Latrobe Valley Health Zone.			Ongoing
The State should:			
<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>			
No.	Action	Lead agency	Action status
50	Work with the Latrobe Valley Health Taskforce to map current area partnerships	DHHS	Complete
57	Develop the roles and responsibilities of the Health Advocate, in consultation with the Latrobe Valley Health Assembly	DHHS	Ongoing
60	Work with the Latrobe Valley Health Assembly to conduct annual monitoring of the impact of innovation	DHHS	Ongoing
65	Provide information and evidence regarding previous place-based prevention interventions to inform the Latrobe Valley Health Taskforce and the Latrobe Valley Health Assembly's work	DHHS	Ongoing
66	Support the Latrobe Valley Health Taskforce and the Latrobe Valley Health Assembly to partner with Latrobe City Council in the development of the Latrobe MPHWP Plan 2017-21	DHHS	Ongoing
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	DHHS	Ongoing
68	Allocate funding to support locally determined actions to improve health and wellbeing in agreed priority areas and settings	DHHS	Ongoing
69	Review current population and opportunistic screening rates, practices and services in the Latrobe Valley	DHHS	Ongoing
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	DHHS	Ongoing
71	Implement the smoking cessation initiative, in partnership with the Latrobe Valley Health Assembly, the community and other stakeholders.	DHHS	Ongoing
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	DHHS	Ongoing

73	Based on the outcomes of the review of opportunistic screening rates, practices and services, support the Latrobe Valley Health Assembly to develop a strategy and implementation plan to improve access to opportunistic screening and early intervention services for identified priority areas	DHHS	Ongoing
74	Support the Latrobe Valley Health Assembly to commence a trial of integrated screening and assessment approaches for chronic disease	DHHS	Ongoing
75	Promote, and increase the use of, existing primary care systems to assist healthcare providers to identify clients for screening	DHHS	Ongoing
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	DHHS	Ongoing
77	Embed the smoking cessation initiative, in partnership with key service providers	DHHS	Ongoing
78	Facilitate the establishment of a Chronic Disease Forum, involving both local and statewide providers and experts, to work with the Latrobe Valley Health Assembly to design and develop care pathways to improve coordination for people with chronic disease	DHHS	Ongoing
79	Invite primary health partner agencies to investigate options for co-location of respiratory nurses within general practices in the Latrobe Valley	DHHS	Ongoing
80	Provide an additional 1,000 hours of respiratory nursing service at Latrobe Community Health Service (compared to 2015–16 base level)	DHHS	Ongoing
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)	DHHS	Ongoing
82	Provide an additional 1,500 hours of respiratory nursing service (compared to 2015–16 base level)	DHHS	Ongoing
83	Provide an additional 3,400 hours of allied health and care coordination services (compared to 2015–16 base level)	DHHS	Ongoing
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 Valley Health Assembly to enhance the mental health of the Latrobe Valley community	DHHS	Ongoing
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	DHHS	Ongoing
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	DHHS	Ongoing
87	Expand local mental health support in line with agreed community priorities	DHHS	Ongoing
88	Provide funding for the development and delivery of programs to increase awareness of mental health issues	DHHS	Ongoing

89	Develop and implement a marketing campaign to promote telehealth as an option for accessing health services	DHHS	Ongoing
90	Enable telehealth capacity at more points of primary and acute healthcare	DHHS	Ongoing
91	Facilitate the development of telehealth education and training packages targeted to health service providers	DHHS	Ongoing
92	Facilitate the delivery of telehealth education and training packages to health service providers in the Latrobe Valley	DHHS	Ongoing

RECOMMENDATION 6	STATUS
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The State review the scope and structure of the Hazelwood Mine Fire Health Study.

The State should:

- 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.
- 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.
- 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.
- 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.

Ongoing

No.	Action	Lead agency	Action status
100	Engage an independent contractor to review the scope and structure of the Long Term Health Study	DHHS	Complete
101	Agree on a project plan for the review of the scope and structure of the Long Term Health Study	DHHS	Complete
102	Agree of the consultation and stakeholder engagement strategy for the review of the scope and structure of the Long Term Health Study	DHHS	Complete
103	Publicly release contractor report on the review of the scope and structure of the Long Term Health Study	DHHS	Complete
104	Response to report on the review of the scope and structure of the Long Term Health Study released	DHHS	Ongoing

RECOMMENDATION 7	STATUS
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The State assist in establishing an independent community controlled health organisation for the Latrobe Valley Aboriginal community and cofund a new culturally appropriate health and community facility which will help with the engagement of Aboriginal young people.

Ongoing

No.	Action	Lead agency	Action status
93	Work with the Latrobe Local Aboriginal Community Partnership to scope the potential for a gathering place	DHHS	Ongoing
94	Work with the Latrobe Local Aboriginal Community Partnership to scope the potential for a gathering place	DHHS	Ongoing
95	Support implementation of initiatives to address priorities identified with the local Latrobe Aboriginal community	DHHS	Ongoing

RECOMMENDATION 8			STATUS
<p>The State engage with the Commonwealth Government at the highest ministerial level so that the Commonwealth Department of Health:</p> <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>			Ongoing
No.	Action	Lead agency	Action status
61	Develop a proposal for a COAG integrated chronic disease trial in Victoria, with Gippsland as the preferred priority location	DHHS	Complete
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	DHHS	Complete
63	Present the Gippsland proposal for integrated chronic disease trial to Commonwealth officials	DHHS	Complete
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	DHHS	Ongoing
RECOMMENDATION 9			STATUS
<p>The State ensure that ash contained in roof cavities in Morwell is analysed and acted on.</p> <p>The State should:</p> <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>			Ongoing
No.	Action	Lead agency	Action status
105	Develop a project proposal for sampling ash residue in roof cavities in Morwell	DHHS	Complete
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	DHHS	Complete
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)	DHHS	Complete
108	<p>Engage an independent expert (with project management and health risk assessment expertise) to:</p> <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>	DHHS	Complete

109	Establish communication tools including a dedicated web page for project updates and other tools recommended by the key stakeholders in the initial engagement	DHHS	Complete
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>	DHHS	Ongoing
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	DHHS	Ongoing
112	Publicly release independent expert report	DHHS	Ongoing
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	DHHS	Ongoing
RECOMMENDATION 10			STATUS
The State create, as an interim measure for 12 months, a Latrobe Valley Health Innovation Taskforce to assist in progressing recommendations 1–4.			Ongoing
No.	Action	Lead agency	Action status
49	Establish a time-limited Latrobe Valley Health Taskforce to support the creation of the Latrobe Valley Health Assembly	DHHS	Complete
51	Assist the Latrobe Valley Health Taskforce to recruit an initial local team to support the work of the taskforce and Latrobe Valley Health Assembly	DHHS	Ongoing
RECOMMENDATION 11			STATUS
Each of the four principal health agencies in the Latrobe Valley commit to, support and promote the Latrobe Valley Health Innovation Zone. In particular they should support health innovations and service integration, including the pooling of resources.			Ongoing
RECOMMENDATION 12			STATUS
Each of the four principal health agencies in the Latrobe Valley commit to, support and promote the Latrobe Valley Health Innovation Zone. These bodies should prioritise the Latrobe Valley Health Innovation Zone for investments in program delivery and health innovation projects, recognising that the lessons learned will have broader application.			Ongoing
AFFIRMATION 1			STATUS
The Board affirms the commitment of the principal stakeholder organisations for health in the Latrobe Valley to making improvements in the way that they engage with the Latrobe Valley community.			Ongoing
AFFIRMATION 2			STATUS
The Board affirms the commitment of Latrobe Regional Hospital to continue to develop as a regional hospital for the people of the Latrobe Valley and the wider Gippsland area. The Board considers that the State should give serious consideration to ensuring that future investment in this facility is at least equitable with other regional areas in Victoria.			Ongoing

AFFIRMATION 3	STATUS
The Board affirms the commitment of Ms Kellie O'Callaghan, Chair of the Board of Latrobe Regional Hospital, to progress a community screening day, in partnership with the community and other major health services. This day could be approached as the 'launch' of a new outreach screening program to support chronic disease prevention.	Complete
AFFIRMATION 4	STATUS
The Board affirms the intention of Dr Alistair Wright, general physician from Latrobe Regional Hospital and Dr Daniel Steinfort, respiratory physician from the Royal Melbourne Hospital, to work together to understand the risk profile of the Latrobe Valley relevant to lung cancer, and the implications of this for a possible lung cancer screening program.	Ongoing
AFFIRMATION 5	STATUS
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.	Complete
AFFIRMATION 6	STATUS
The Board affirms the intention of Monash Health and Latrobe Regional Hospital to consider the development of an advanced physician training program for general physicians in the short term.	Ongoing
AFFIRMATION 7	STATUS
The Board affirms the commitment of the Gippsland Primary Health Network to develop 'care pathways' to assist general practitioners in the management of complex conditions.	Ongoing
AFFIRMATION 8	STATUS
The Board affirms the commitment of state-level statutory and non-government health agencies to assist Latrobe Valley organisations and the broader community to improve health through policies, plans, funding, infrastructure, programs, campaigns, training, research and evaluation, recognising that for action to be effective it needs to be community-led as much as possible.	Ongoing
AFFIRMATION 9	STATUS
The Board affirms the commitment by the Children and Youth Area Partnership to include an early intervention focus to protect vulnerable children and support access to education for children in out-of-home care, having regard to the fact that children in the Latrobe Valley often start school developmentally behind their peers when measured according to the Australian Early Development Index.	Ongoing
AFFIRMATION 10	STATUS
The Board affirms the commitment of the Latrobe City Council to develop a tracks, trails and paths strategy to create supportive environments for physical activity and community engagement.	Complete
AFFIRMATION 11	STATUS
The Board affirms the commitment of members of a Health improvement Forum expert panel on community engagement and communication to work together to develop a community-led shared vision for the health, wellbeing and prosperity of the Latrobe Valley. The panel comprised representatives from EW Tipping Foundation, Gippsland Multicultural Service, GDF Suez Australian Energy, Latrobe City Council, Latrobe Valley Express, Morwell Community Recovery Committee, Morwell Neighbourhood House, VicHealth and Voices of the Valley.	Complete
AFFIRMATION 12	STATUS
The Board affirms work being undertaken by the Community Wellbeing Study (part of the Hazelwood Mine Fire Health Study) to enhance agencies' ability to effectively engage with the Latrobe Valley community.	Ongoing



**Hazelwood Mine Fire Inquiry Report 2015/2016, Volume IV – Mine Rehabilitation****Table iv:** Status of Recommendations, Affirmations and Actions from the Hazelwood Mine Fire Inquiry Report 2015–16, Volume IV

HAZELWOOD MINE FIRE INQUIRY REPORT 2015–16, VOLUME IV			
RECOMMENDATION 1			STATUS
<p>The State empower the Hazelwood Mine Fire Implementation Monitor, in a legislated role independent from the Victorian public service, to:</p> <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>			Ongoing
No.	Action	Lead agency	Action status
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	DPC & DJR	Complete
5	Publicly released the IGEM's annual reports in the Victorian Parliament within a reasonable time of receipt by the Minister for Emergency Services	DJR	Ongoing
RECOMMENDATION 2			STATUS
<p>The State 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.</p>			Ongoing
No.	Action	Lead agency	Action status
156	Employ or engage suitable expertise in mine closure and rehabilitation liability assessments	DEDJTR	Ongoing
RECOMMENDATION 3			STATUS
<p>The State provide appropriate and ongoing resources to the Technical Review Board, particularly for the purpose of providing strategic advice on mine stability and rehabilitation.</p> <p>No specific actions have been assigned to address this recommendation in the Victorian Government Implementation Plan, however IGEM notes that it is related to the ongoing appointment of the Technical Review Board (see Action 156).</p>			Ongoing
RECOMMENDATION 4			STATUS
<p>The State 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.</p>			Ongoing
No.	Action	Lead agency	Action status
158	Develop progressive rehabilitation milestones, with support from the TRB or other experts	DEDJTR	Ongoing
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	DEDJTR	Ongoing

RECOMMENDATION 5			STATUS
The State, 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.			Ongoing
No.	Action	Lead agency	Action status
167	Specify the manner and form for rehabilitation liability assessments for the Latrobe Valley Coal Mines	DEDJTR	Ongoing
RECOMMENDATION 6			STATUS
The State, 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 <i>Mineral Resources (Sustainable Development) Act 1990</i> (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.			Ongoing
No.	Action	Lead agency	Action status
168	Identify skills and expertise for the conduct of rehabilitation liability assessment audits	DEDJTR	Ongoing
169	Amend the accreditation criteria as necessary for auditors appointed under section 53S of the EP Act	EPA	Ongoing
170	Assess current pool of appointed auditors for the appropriate skills and expertise	DEDJTR & EPA	Ongoing
RECOMMENDATION 7			STATUS
The State require that the 2016–17 rehabilitation liability assessments provided by mine operators are conducted in accordance with the requirements developed under Recommendation 5.			Ongoing
No.	Action	Lead agency	Action status
171	Finalise rehabilitation liability assessments	DEDJTR	Ongoing
RECOMMENDATION 8			STATUS
The State, by 30 June 2017, require each of the Latrobe Valley mine operators to engage an auditor, under s. 79A(3) of the <i>Mineral Resources (Sustainable Development) Act 1990</i> (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.			Ongoing
No.	Action	Lead agency	Action status
171	Finalise rehabilitation liability assessments	DEDJTR	Ongoing

RECOMMENDATION 9			STATUS
<p>The State, 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 <i>Mineral Resources (Sustainable Development) Act 1990</i> (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> </ul> <p>The interim increase should be undertaken in accordance with s.80(4) of the Mineral Resources Act.</p> <ul style="list-style-type: none"> <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>			Complete
No.	Action	Lead agency	Action status
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	DEDJTR	Complete
RECOMMENDATION 10			STATUS
<p>The State, 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.</p>			Ongoing
No.	Action	Lead agency	Action status
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	DEDJTR	Ongoing
RECOMMENDATION 11			STATUS
<p>The State 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.</p>			Ongoing
No.	Action	Lead agency	Action status
166	Complete bond policy review	DEDJTR	Ongoing
RECOMMENDATION 12			STATUS
<p>The State 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.</p>			Ongoing
No.	Action	Lead agency	Action status
173	<p>Determine an effective mechanism to manage:</p> <ul style="list-style-type: none"> <li>the costs of ongoing monitoring, maintenance and management of the earth resources industry sites.</li> <li>risks of closure on the community's social and economic welfare.</li> </ul>	DEDJTR	Ongoing

RECOMMENDATION 13			STATUS
The State, 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.			Ongoing
No.	Action	Lead agency	Action status
185	Review current mine rehabilitation strategies, in consultation with DELWP and EPA, to identify water requirements for mine closure and restoration strategies.	DEDJTR	Ongoing
RECOMMENDATION 14			STATUS
<p>The State, 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 <i>Mineral Resources (Sustainable Development) Act 1990</i> (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>			Ongoing
No.	Action	Lead agency	Action status
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	DEDJTR	Ongoing
179	Establish MOU between DEDJTR and DELWP to implement the project as a schedule to the existing partnership agreement	DEDJTR	Complete
180	Prepare an overarching stakeholder engagement strategy for the project (and refine in response to experience)	DEDJTR	Ongoing
181	Appoint independent peer reviewers	DEDJTR	Ongoing
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	DEDJTR	Ongoing
183	Establish Latrobe Valley Mine Rehabilitation Advisory Committee	DEDJTR	Ongoing
184	Review Stage 1 Project outputs and confirm Stage 2 work plan, including technical peer review	DEDJTR	Ongoing
186	Establish the Latrobe Valley Mine Rehabilitation Commissioner as a statutory appointment under the MR(SD) Act	DEDJTR	Ongoing
187	Review of existing Latrobe Valley coal mine and power station water entitlements and water licensing (groundwater and surface waters)	DELWP	Ongoing
188	Report on existing water use, water availability, aquatic ecosystems and water quality to provide baseline data and inform the works program	DELWP	Ongoing

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	DEDJTR	Ongoing
190	Conduct annual progress review and produce a report	DEDJTR	Ongoing
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	DELWP	Ongoing
192	Review Stage 2 Project outputs and confirm Stage 3 work plan, including technical peer review	DEDJTR	Ongoing
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.	DEDJTR	Ongoing
194	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>	DEDJTR	Ongoing
195	Deliver a regional water study on the viability of pit lake filling options and impacts, including: <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</li> <li>• groundwater monitoring.</li> </ul>	DELWP	Ongoing
196	Review Stage 3 Project outputs and confirm Stage 4 work plan, including technical peer review	DEDJTR	Ongoing
197	Conduct annual progress review and produce a report	DEDJTR	Ongoing
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	DELWP	Ongoing
200	Release draft assessment of potential impacts at a regional scale for consultation	DEDJTR (with DELWP support)	Ongoing
201	Release draft integrated regional scale mine rehabilitation Strategy for consultation	DEDJTR	Ongoing
202	Assess potential impacts at a regional scale	DEDJTR (with DELWP support)	Ongoing
203	Deliver Integrated regional scale mine rehabilitation strategy	DEDJTR	Ongoing

RECOMMENDATION 15			STATUS
<p>The State 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>			Ongoing
No.	Action	Lead agency	Action status
179	Establish MOU between DEDJTR and DELWP to implement the project as a schedule to the existing partnership agreement	DEDJTR	Complete
180	Prepare an overarching stakeholder engagement strategy for the project (and refine in response to experience)	DEDJTR	Ongoing
181	Appoint independent peer reviewers	DEDJTR	Ongoing
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	DEDJTR	Ongoing
183	Establish Latrobe Valley Mine Rehabilitation Advisory Committee	DEDJTR	Ongoing
184	Review Stage 1 Project outputs and confirm Stage 2 work plan, including technical peer review	DEDJTR	Ongoing
187	Review of existing Latrobe Valley coal mine and power station water entitlements and water licensing (groundwater and surface waters)	DELWP	Ongoing
188	Report on existing water use, water availability, aquatic ecosystems and water quality to provide baseline data and inform the works program	DELWP	Ongoing
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	DEDJTR	Ongoing
190	Conduct annual progress review and produce a report	DEDJTR	Ongoing
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	DELWP	Ongoing
192	Review Stage 2 Project outputs and confirm Stage 3 work plan, including technical peer review	DEDJTR	Ongoing
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.	DEDJTR	Ongoing
194	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>	DELWP	Ongoing

195	Deliver a regional water study on the viability of pit lake filling options and impacts, including: <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>	DELWP	Ongoing
196	Review Stage 3 Project outputs and confirm Stage 4 work plan, including technical peer review	DEDJTR	Ongoing
197	Conduct annual progress review and produce a report	DEDJTR	Ongoing
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	DELWP	Ongoing
200	Release draft assessment of potential impacts at a regional scale for consultation	DEDJTR (with DELWP support)	Ongoing
201	Release draft integrated regional scale mine rehabilitation Strategy for consultation	DEDJTR	Ongoing
202	Assess potential impacts at a regional scale	DEDJTR (with DELWP support)	Ongoing
203	Deliver Integrated regional scale mine rehabilitation strategy	DEDJTR	Ongoing
RECOMMENDATION 16			STATUS
The State 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.			N/A <sup>3</sup>
RECOMMENDATION 17			STATUS
The State 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: <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>			Ongoing

<sup>3</sup> This action is beyond the scope of the Victorian Government Implementation Plan and will be implemented after October 2019.

No.	Action	Lead agency	Action status
160	Review the regulatory framework for the Latrobe Valley Coal Mines and develop options for policy, administrative and legislative reform	DEDJTR	Ongoing
162	Implement policy, administrative and legislative reforms for the Latrobe Valley Coal Mines' regulatory framework	DEDJTR	Ongoing
179	Establish MOU between DEDJTR and DELWP to implement the project as a schedule to the existing partnership agreement	DEDJTR	Complete
180	Prepare an overarching stakeholder engagement strategy for the project (and refine in response to experience)	DEDJTR	Ongoing
181	Appoint independent peer reviewers	DEDJTR	Ongoing
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	DEDJTR	Ongoing
183	Establish Latrobe Valley Mine Rehabilitation Advisory Committee	DEDJTR	Ongoing
184	Review Stage 1 Project outputs and confirm Stage 2 work plan, including technical peer review	DEDJTR	Ongoing
187	Review of existing Latrobe Valley coal mine and power station water entitlements and water licensing (groundwater and surface waters)	DELWP	Ongoing
188	Report on existing water use, water availability, aquatic ecosystems and water quality to provide baseline data and inform the works program	DELWP	Ongoing
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	DEDJTR	Ongoing
190	Conduct annual progress review and produce a report	DEDJTR	Ongoing
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	DELWP	Ongoing
192	Review Stage 2 Project outputs and confirm Stage 3 work plan, including technical peer review	DEDJTR	Ongoing
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.	DEDJTR	Ongoing
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>	DEDJTR	Ongoing



195	Deliver a regional water study on the viability of pit lake filling options and impacts, including: <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>	DELWP	Ongoing
196	Review Stage 3 Project outputs and confirm Stage 4 work plan, including technical peer review	DEDJTR	Ongoing
197	Conduct annual progress review and produce a report	DEDJTR	Ongoing
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	DEDJTR	Ongoing

RECOMMENDATION 18			STATUS
The mine operators, by 31 December 2016, develop an integrated research plan that identifies common research areas and priorities for the next 10 years, to be reviewed every three years. The plan should be developed in consultation with the Mining Regulator and relevant agencies, research bodies and experts. The list of research topics identified in Part 6.11 can be used as a starting point for discussion. The Commissioner and Statutory Authority should promote and coordinate this research (see Recommendations 14 and 15).			Ongoing
No.	Action	Lead agency	Action status
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	DEDJTR	Ongoing
179	Establish MOU between DEDJTR and DELWP to implement the project as a schedule to the existing partnership agreement	DEDJTR	Complete
180	Prepare an overarching stakeholder engagement strategy for the project (and refine in response to experience)	DEDJTR	Ongoing
181	Appoint independent peer reviewers	DEDJTR	Ongoing
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	DEDJTR	Ongoing
183	Establish Latrobe Valley Mine Rehabilitation Advisory Committee	DEDJTR	Ongoing
184	Review Stage 1 Project outputs and confirm Stage 2 work plan, including technical peer review	DEDJTR	Ongoing
190	Conduct annual progress review and produce a report	DEDJTR	Ongoing
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	DEDJTR	Ongoing

RECOMMENDATION 19			STATUS
The mine operators increase the rate of progressive rehabilitation by achieving milestones within the mines' progressive rehabilitation plans, as set by the Mining Regulator under Recommendation 4.			Ongoing
AFFIRMATION 1			STATUS
The Board affirms the commitments of EnergyAustralia, GDF Suez and AGL Loy Yang to increase coordination and collaboration between themselves and the regulatory authorities.			Ongoing
AFFIRMATION 2			STATUS
<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>			Ongoing
No.	Action	Lead agency	Action status
151	Establish a Mine Fire and Emergency Unit	DEDJTR	Complete
152	Establish a Victorian Earth Resources Regulator Forum, with membership including WorkSafe and EPA	DEDJTR	Ongoing (Overdue)
155	Deliver DEDJTR ERR 2015–16 Action Plan	DEDJTR	Ongoing
AFFIRMATION 3			STATUS
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.			Ongoing
No.	Action	Lead agency	Action status
174	Execute contracts with EnergyAustralia and Federation University for the Batter Stability Project	DEDJTR	Complete
175	Appoint Project Manager within DEDJTR to review progress reports and report to the DEDJTR Project Control Board	DEDJTR	Complete
176	Public launch of the Batter Stability Project	DEDJTR	Complete
177	Participate in the Technical Advisory Group administered by Federation University as required	DEDJTR	Ongoing
178	Provide funding upon completion of milestones as per schedules to the contracts with EnergyAustralia and Federation University	DEDJTR	Ongoing

# 1. Introduction

On 9 February 2014 a fire began in the Hazelwood coal mine as a result of embers spotting from nearby bushfires. The fire burned for 45 days before being declared safe and it became the largest and longest burning mine fire to occur in Victoria's Latrobe Valley.

The fire had a significant impact on the health of local communities, the economy, the environment and the resources required to contain the fire.



Morwell Centenary Rose Garden

The Victorian Government responded with the announcement of the Hazelwood Mine Fire Inquiry (the 2014 Inquiry) in March 2014, followed soon after by the Governor of Victoria's appointment of the Hazelwood Mine Fire Board of Inquiry (Board of Inquiry) to investigate the circumstances of the mine fire.

In its 2014 report, the Board of Inquiry made a total of 18 recommendations – 12 directed to the Victorian Government and six to the mine operator, owner and licensee, GDF Suez (now ENGIE).

The Board of Inquiry also identified a number of commitments – or planned improvements to emergency management arrangements for similar, future events – made by the State and GDF Suez in their Inquiry submissions. These commitments were later declared as affirmations – 40 of which were directed to the government and 17 to GDF Suez.

The Victorian Government accepted the 2014 Inquiry recommendations directed to it, responding through its *Hazelwood Mine Fire Inquiry Report: Victorian Government Implementation and Monitoring Plan* (Implementation and Monitoring Plan 2014).

The Victorian Government reopened the Hazelwood Mine Fire Inquiry in May 2015 with expanded Terms of Reference.

The 2015–16 Inquiry was conducted to examine and report on:

- minimising fire risks at Anglesea coal mine for the 2015–2016 summer season
- whether there has been an increase in deaths following the 2014 Hazelwood mine fire
- measures to improve the health of the Latrobe Valley
- rehabilitation options for Latrobe Valley coal mines.

The 2015–16 Inquiry produced a report in four volumes, each addressing one of the expanded Terms of Reference.

In June 2016, the Victorian Government released an updated implementation plan, the *Hazelwood Mine Fire Inquiry: Victorian Government Implementation Plan* (Victorian Government Implementation Plan), with actions to address the recommendations and affirmations arising out of both the 2014 and 2015–16 Inquiry reports.

The *Hazelwood Mine Fire Inquiry – Annual Report 2016* provides an update on:

- the Victorian Government's progress with implementation of actions from both the 2014 and 2015–16 Inquiry reports in line with the Victorian Government Implementation Plan.
- the progress of non-government organisations and the Latrobe Valley coal mines with implementation of recommendations and affirmations from the 2014 and 2015–16 Inquiry reports.

## 2. Background

### 2.1 Hazelwood Mine Fire

The Hazelwood mine fire had unique properties that differentiated it from bushfires.

Coal mine fires typically burn slowly over an extended period of time (normally several weeks) due to the presence of deep-seated, compacted fuel, unlike bushfires which burn quickly and unpredictably.

Firefighters are also presented with challenges unique to coal mine fires as coal can burn beneath the ground and toxic gases can be present in the pit below ground level.

The fire burned for 45 days, required significant resources to bring it under control and impacted on local communities within the Latrobe Valley, particularly in the town of Morwell. Due to the severity and wide-reaching impacts of the fire, the Hazelwood mine fire constituted two emergencies: a major complex fire emergency and a serious public health emergency.

### 2.2 Hazelwood Mine Fire Inquiry 2014

On 11 March 2014, the Victorian Government announced the establishment of the 2014 Inquiry.

This was followed by the Governor in Council appointment of the Board of Inquiry on 21 March 2014, comprising the Hon Bernard Teague AO, Professor Emeritus John Catford and Ms Sonia Petering. The Board of Inquiry was requested to investigate the circumstances of the fire including origin, prevention, preparedness and response to the fire as well as the impacts on the health and wellbeing of affected communities.

The 2014 Inquiry included community consultation, public hearings and submissions, and submissions from the Victorian Government and mine operator, GDF Suez.

In its *Hazelwood Mine Fire Inquiry Report 2014* (State Government of Victoria 2014a), the Board of Inquiry made 18 recommendations as well as affirmations of actions already underway by GDF Suez and the Victorian Government. The 2014 report was tabled in parliament on 2 September 2014.

### 2.3 Victorian Government Implementation and Monitoring Plan 2014

In October 2014, the Victorian Government released the Implementation and Monitoring Plan 2014 (State Government of Victoria 2014b).

The plan set out how the recommendations and affirmations of government actions were to be implemented and monitored and identified a lead department or agency for each action.

## 2.4 Hazelwood Mine Fire Inquiry 2015–16

The Victorian Government reopened the Hazelwood Mine Fire Inquiry in May 2015 with expanded Terms of Reference to inquire into and report on:

- options available to decrease the risk of fire arising from or impacting the Anglesea Mine for the 2015–16 fire season
- any increases in the rates of death in the Latrobe Valley as a result of the Hazelwood mine fire, comparing data from 2009–2014
- measures available to improve the health of the Latrobe Valley communities in relation to any health impacts identified by the Board as being associated with the Hazelwood coal mine fire
- mine rehabilitation options for the three Latrobe Valley coal mines
- whether the rehabilitation liability assessments are adequate and whether the current rehabilitation bond system is effective.

The Board of Inquiry reported its findings in four volumes:

- *Volume I – Anglesea Mine* (State Government of Victoria 2015b) was tabled in parliament on 2 September 2015 and made one recommendation and nine affirmations directed at Alcoa, the operator of the Anglesea mine<sup>4</sup>.
- *Volume II – Investigations into 2009–2014 Deaths* (State Government of Victoria 2015c) was tabled in parliament on 9 December 2015 and made five recommendations and one affirmation directed to the Victorian Government.
- *Volume III – Health Improvement* (State Government of Victoria 2016a) was tabled in parliament on 10 February 2016 and made 12 recommendations (10 directed to the Victorian Government and two directed to health organisations) and 12 affirmations to a range of organisations and persons working in the health sector.
- *Volume IV – Mine Rehabilitation* (State Government of Victoria 2016b) was tabled in parliament on 14 April 2016, and assigns 17 recommendations to the Victorian Government and two to the mine operators – ENGIE (previously GDF Suez) Hazelwood, EnergyAustralia Yallourn and AGL Loy Yang. Three affirmations of action were confirmed, two directed at the Victorian Government and one at the mine operators.

## 2.5 Victorian Government Implementation Plan 2016

In June 2016 the Victorian Government released the Victorian Government Implementation Plan (State Government of Victoria 2016c), which combines the ongoing State actions from the 2014 Inquiry with those arising from the 2015–16 Inquiry.

The plan sets out how the recommendations and affirmations of government actions are to be implemented and monitored, and is structured under the following themes:

- Governance and Accountability
- Communications and Community Engagement
- Health in the Latrobe Valley
- Incident Air Quality and Wellbeing
- Latrobe Valley Coal Mine Regulation
- Latrobe Valley Coal Mine Rehabilitation Bonds
- Latrobe Valley Regional Rehabilitation Strategy (LVRRS)
- Emergency Management Planning, Response and Recovery

Under each theme is a number of government actions, a lead organisation with responsibility for implementation of that action, and a due date for completion.

Organisations with responsibility for implementing these recommendations and affirmations include:

- Country Fire Authority (CFA)
- Department of Economic Development, Jobs, Transport and Resources (DEDJTR)
- Department of Environment, Land, Water and Planning (DELWP)
- Department of Health and Human Services (DHHS)
- Department of Justice and Regulation (DJR)
- Department of Premier and Cabinet (DPC)
- Emergency Management Victoria (EMV)
- Environment Protection Authority Victoria (EPA)
- Metropolitan Fire Brigade (MFB)
- WorkSafe Victoria (Worksafe)

<sup>4</sup> The 2015–16 Hazelwood Mine Fire Inquiry Terms of Reference requires the Board of Inquiry to report on options that could be undertaken by Alcoa, as mine operator of the Anglesea mine (which was closed in August 2015), to decrease the risk of fire arising from or impacting the Anglesea mine for the 2015–16 summer season. As such, IGEM was not requested to report on the implementation progress of the recommendation and affirmations from Volume I (Anglesea Mine) from the Hazelwood Mine.

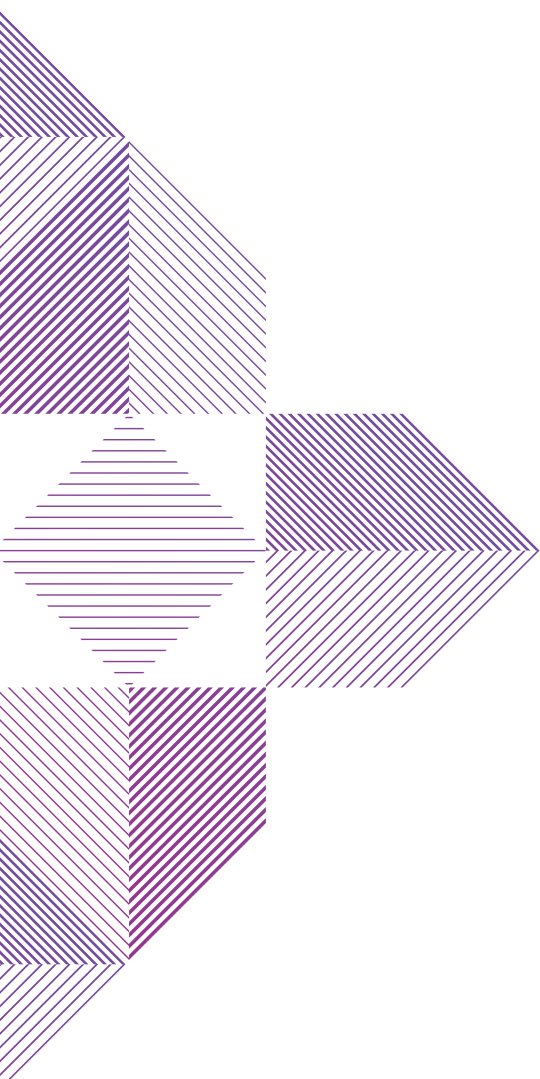
### 3. Implementation monitoring

The Inspector-General for Emergency Management (IGEM) is responsible for monitoring and reporting on the progress of implementation of all recommendations and affirmations from both the 2014 and 2015–16 Inquiry reports.

The implementation monitoring arrangements are detailed in the Victorian Government Implementation Plan, and include the provision of an annual report to government until 2019.

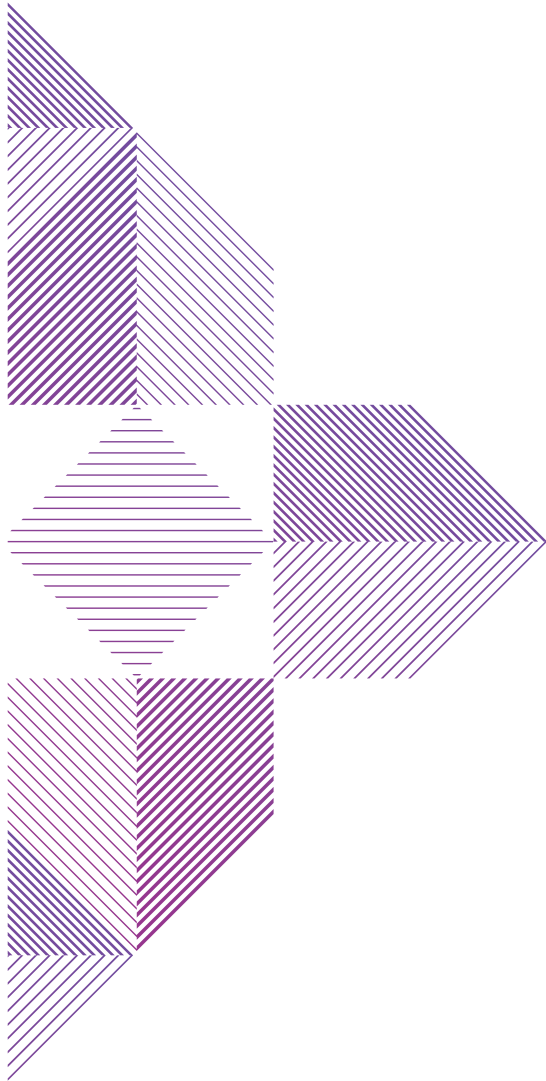
The conduct of this implementation monitoring is within the normal scope of the Inspector-General's responsibilities under the *Emergency Management Act 2013* to:

- provide assurance to government and the community in respect to emergency management arrangements in Victoria
- foster continuous improvement of emergency management in Victoria.



## 4. Approach

In preparing this annual report, IGEM has maintained a monitoring and reporting process consistent with that undertaken for *Hazelwood Mine Fire Inquiry Annual Report 2015*.





## Key stakeholders

Organisations with responsibility for implementing recommendations and affirmations include:

- CFA
- DEDJTR
- DELWP
- DHHS
- DJR
- DPC
- EMV
- EPA
- MFB
- WorkSafe
- Four principal health agencies
  - Latrobe Regional Hospital
  - Latrobe Community Health Service
  - Latrobe City Council
  - Gippsland Primary Health Network
- State-level non-government health agencies
- Latrobe Valley mine operators (ENGIE Hazelwood, AGL Loy Yang, EnergyAustralia Yallourn).

IGEM held preliminary meetings with stakeholder representatives in March 2016, and again throughout June 2016 after the release of the 2016 Victorian Government Implementation Plan.

IGEM also met with representatives of the non-government health agencies and mine operators to clarify the role and approach of IGEM to gathering evidence, monitoring and reporting on progress.

## Data collection and analysis

IGEM is monitoring the implementation of Victorian Government recommendations and affirmations by assessing progress against the implementation actions set out in 'Appendix 1: Table of Victorian Government Deliverables' in the Victorian Government Implementation Plan.

In July 2016, IGEM formally requested implementation updates supported by documentary evidence of progress, such as policies, procedures, manuals, guides and meeting minutes. IGEM assessed the updates to determine their status, and met with nominated representatives of departments and agencies to clarify information or request additional documentation.

IGEM requested progress updates and supporting evidence from non-government health agencies and mine operators for the recommendations and affirmations for which they are responsible.

Progress in relation to actions is reported for the period up to 12 August 2016.

Recommendation and affirmation numbers for those arising from the 2015–16 Inquiry reports are annotated with the Inquiry report volume number as the numbering is non-consecutive. Table 1 describes the implementation status that IGEM has assigned to each of the recommendations and affirmations.

**Table 1:** Implementation status

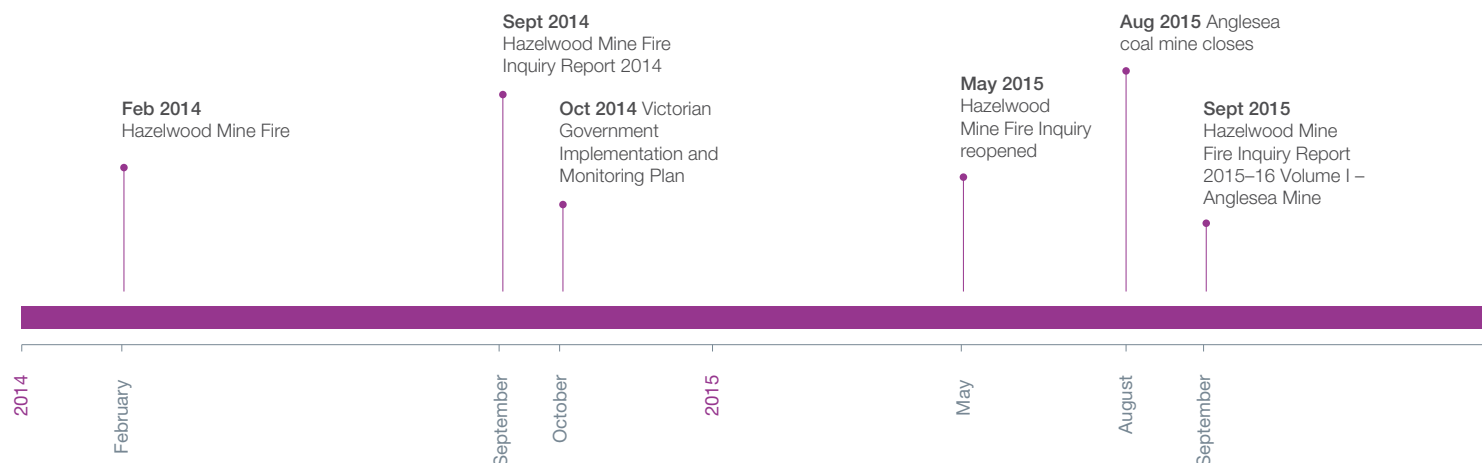
STATUS	DESCRIPTION
Complete	Recommendation or affirmation has been implemented as planned.
Ongoing	Recommendation or affirmation is in progress and is to be revisited in the 2017 Annual Report.

## Other monitoring

IGEM met with stakeholders individually, made site visits and was invited to attend as an observer at a number of meetings and forums, including:

- **Coal Mine Emergency Management Taskforce:** The taskforce was established to review preparedness and support capability and interoperability between the coal mine operators as well as overseeing progress of Inquiry recommendations and affirmations.
- **Hazelwood Mine Fire Inquiry Response Inter-Departmental Committee (IDC):** The IDC is coordinating the whole of Victorian government implementation of the plan and liaises with IGEM on matters related to the implementation of the Inquiries reports' recommendations and affirmations. The IDC's membership consists of senior representatives of government departments and agencies with implementation responsibilities. DPC chairs the IDC with membership from CFA, DEDJTR, DELWP, DHHS, DTF, EMV, EPA, MFB and WorkSafe.
- **Latrobe Valley Health Innovation Taskforce:** The taskforce, with representatives from DHHS, the four principal non-government health agencies and community representatives is supporting the creation of the Latrobe Valley Health Assembly.
- **State Smoke Working Group:** The multi-agency group is responsible for the implementation of recommendations and affirmations relating to the management of smoke events, including incident air quality monitoring, standards for decision-making, and communication. Membership comprises representation from DHHS, EMV, CFA, MFB, EPA, AV, and DELWP.
- **Integrated Mines Research Group:** Representatives from each of the mine operators meet fortnightly as part of the Integrated Mines Research Group to discuss and develop the research plan, as per Recommendation 18 of the Mine Rehabilitation Inquiry Report.
- **Latrobe 15 Exercise:** On 8 and 9 October 2015, a joint exercise was conducted between 15 Victorian government departments, agencies and Latrobe Valley businesses to test emergency response procedures developed in response to the 2014 Inquiry. In particular the exercise tested the clarity of roles and responsibilities, capability, and readiness within the Latrobe Valley.
- **Site visits:** IGEM was invited to attend site visits of the Hazelwood and Loy Yang mines.

**Figure 1:** Key dates related to the Hazelwood Mine Fire Inquiry



## Reporting

IGEM consulted with lead departments and agencies prior to the finalisation of the report.

IGEM will report to the Minister for Emergency Services annually until 2019, on the progress of implementation of all recommendations and affirmations of the Inquiry report. The minister will make the Hazelwood Mine Fire Inquiry Annual Reports publicly available.

## Acknowledgements

IGEM acknowledges the high level of cooperation and support received from Victorian Government departments and agencies, the coal mine operators and non-government entities in preparing this report.

**Nov 2015** Hazelwood Mine Fire Inquiry  
Implementation Monitor (including IGEM)  
Annual Report 2016

**Dec 2015** Hazelwood Mine  
Fire Inquiry Report 2015–16  
Volume II – Investigations  
into 2009–2014 Deaths

**Feb 2016** Hazelwood  
Mine Fire Inquiry Report  
2015–16 Volume III –  
Health Improvement

**Apr 2016** Hazelwood Mine Fire Inquiry Report  
2015–16 Volume IV – Mine Rehabilitation

**Jun 2016** Hazelwood  
Mine Fire Inquiry:  
Victorian Government  
Implementation Plan

November

December

2016

February

April

June

## 5. Progress update – Victorian Government actions

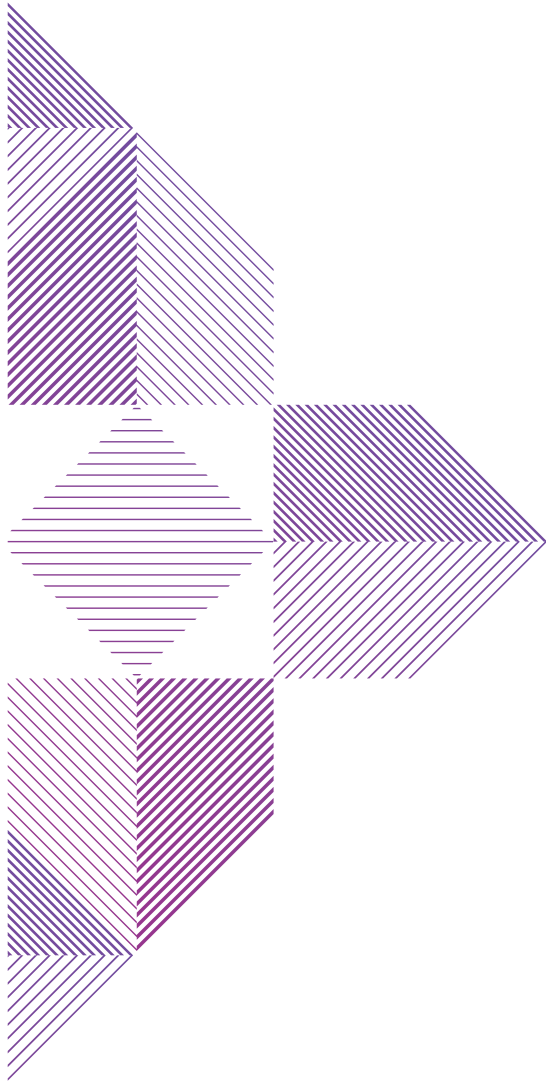
The 2016 Victorian Government Implementation Plan sets out the 246 actions that are being taken by the government to fulfil its commitment to implement the recommendations and affirmations of the Inquiry reports.

The actions are grouped numerically under the following themes:

- Governance and Accountability
- Communications and Community Engagement
- Health in the Latrobe Valley
- Incident Air Quality and Wellbeing
- Latrobe Valley Coal Mine Regulation
- Latrobe Valley Coal Mine Rehabilitation Bonds
- Latrobe Valley Coal Mine Rehabilitation Strategy
- Emergency Management Planning, Response and Recovery.

In the following sections, 5.1 – 5.8, IGEM reports implementation progress of each of the government actions in accordance with those themes.

Implementation progress by non-government health agencies and coal mine operators is reported in sections 6, 7 and 8.



## 5.1 Governance and Accountability

This section reports on the government's governance structure to coordinate and oversee the implementation of the Inquiry reports recommendations and affirmations and the processes in place to monitor and publicly report on progress.

**Table 2:** Status of 'Governance and Accountability' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
GOVERNANCE AND ACCOUNTABILITY					
1	Convene meetings of the IDC on a quarterly basis, and more often if required, until December 2019	N/A	Quarterly until December 2019	Ongoing	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 1	December 2015	Complete	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	February 2016	Complete	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	June 2016	Complete	DPC and DJR
		Health Improvement Report: Recommendation 1			
		Mine Rehabilitation Report: Recommendation 1			
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	Annually until 2019	Ongoing	DJR
		Death Investigation Report: Recommendation 5			
		Health Improvement Report: Recommendation 1			
		Mine Rehabilitation Report: Recommendation 1			

### 1. Convene meetings of the IDC on a quarterly basis, and more often if required, until December 2019

The Inter-Departmental Committee (IDC) oversees and coordinates actions to implement the recommendations and affirmations in the Inquiry reports as outlined in the Victorian Government Implementation Plan.

The IDC is chaired by DPC and membership consists of senior representatives from government departments and agencies with implementation responsibilities including CFA, DEDJTR, DELWP, DHHS, DTF, EMV, EPA, MFB and WorkSafe.

The IDC has three working groups, the Health and Wellbeing Working Group, the Rehabilitation Working Group and the State Smoke Working Group which meet as required to address cross departmental and agency actions to implement the Victorian Government Implementation Plan. The IDC reports to the State Crisis and Resilience Council (SCRC) and a designated committee of Cabinet. The IDC liaises with IGEM on matters related to the implementation of the Inquiry reports' recommendations and affirmations.

IGEM representatives attend IDC meetings, from time to time, as observers and note the progress of the IDC in coordinating the implementation of recommendations and affirmations from the Inquiries.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 2. Reimburse Voices of the Valley for fee paid to Victorian Registry of Births, Deaths and Marriages for death records data

The Board of Inquiry affirmed the Victorian Government's commitment to reimburse Voices of the Valley in the Investigations into 2009–2014 Deaths Inquiry Report. In December 2015, DPC reimbursed Voices of the Valley for the death records data fee paid to Victorian Registry of Births, Deaths and Marriages.

#### FINDING

IGEM considers that this action has been implemented as planned.

### 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

The then Minister for Emergency Services (the minister) wrote to the IGEM in January 2016 to request that he monitor the implementation of the government's response to the 2014 Inquiry Report.

Following the resignation of the former Implementation Monitor in February 2016, the minister requested that IGEM also monitor implementation of recommendations and affirmations directed to GDF Suez (now ENGIE) in the 2014 Inquiry report.

#### FINDING

IGEM considers that this action has been implemented as planned.

### 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

In July 2016, the minister wrote to IGEM requesting that implementation of all recommendations and affirmations from the 2015–16 Inquiry reports be monitored by IGEM, in addition to those from the 2014 Inquiry.

#### FINDING

IGEM considers that this action has been implemented as planned.

### 5. Publicly release the IGEM's annual reports in the Victorian Parliament within a reasonable time of receipt by the Minister for Emergency Services

The minister requested that IGEM monitor the implementation of all recommendations and affirmations from both the 2014 and 2015–16 Inquiries and report on progress. IGEM has been requested to deliver the Annual Report to the minister by 31 October 2016 and annually thereafter until 2019.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

## 5.2 Communications and Community Engagement

Effective communications and community engagement are key elements of emergency management.

The Inquiries have made a number of recommendations and affirmations to enhance the way the Victorian community receives timely, tailored and relevant public information and warnings on emergency events so they can make informed decisions about their safety.

This section details the government's response to recommendations and affirmations in the 2014 and the 2015–16 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 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.

The following sub-themes, with associated actions, are listed under the 'Communications and Community Engagement' theme in the Victorian Government Implementation Plan:

- Communications during emergencies
- White Paper actions
- Community engagement
- EPA emergency communications
- EPA engagement with the Latrobe Valley community
- Health communications and public health investigations.

The progress summary that follows provides an overview of progress being made in relation to communications and community engagement.

### Progress summary

The Victorian Government Implementation Plan lists 40 actions under the 'Communications and Community Engagement' theme, of which 23 have now been completed.

Overall, the lead agencies DHHS, EPA and EMV have reported significant progress.

DHHS policies and procedures for the procurement and management of contracts for independent expert advice were independently reviewed and an implementation plan for the findings and recommendations is being developed. DHHS has also created a Communications Health and Emergency Management Team to provide strategic direction and oversight for all its public health and emergency management communications and updated emergency and public health content on the Better Health Channel and health.vic website.

New communications material for smoke and health was distributed during the 2015–16 summer season and, in consultation with the community, independently evaluated for effectiveness. The evaluation will inform the development of new material for the 2016–17 summer season.

A smoke and health community engagement strategy has been developed to improve the way in which DHHS engages and communicates with the public on the potential health impacts of smoke. The strategy is supported by an implementation plan that outlines the target groups, methods of engagement and timeframes until November 2017.

EPA has developed and refined its emergency management communications and integrated the new procedure into EPA's Emergency Management Framework.

EPA continues to work with the Latrobe Valley community to increase understanding of EPA scientific information and provide opportunities for local community participation in environmental monitoring. This is being achieved through programs such as Citizen Science and the co-design of an expanded air monitoring network.

IGEM notes that independent social research found that the Morwell and wider Latrobe Valley community considers EPA as a trusted source of information. Over a twelve month period, there was a significant increase in satisfaction among residents with EPA's efforts to improve the local environment following the mine fire.

EMV is enhancing the provision of information and warnings to the public through an upgrade of the VicEmergency website and the Emergency Management Common Operating Picture (EM-COP) becoming operational. The VicEmergency app is scheduled for release in November 2016 and integration of existing emergency management systems within EM-COP is also scheduled for completion in October 2016.

The State Communications Strategy is intended to guide and support communications staff in applying an integrated whole of government communications approach. IGEM notes that a draft State Communications Strategy was to be circulated to the Emergency Management Joint Public Information Committee (EMJPIC) for consultation in July 2016, however IGEM received no evidence from EMV that this occurred and has yet to receive a draft copy of the document.

## 5.2.1 Communications during emergencies

**Table 3:** Status of 'Communications during emergencies' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
COMMUNICATIONS DURING EMERGENCIES					
6	Circulate a draft State Communications Strategy to EMJPIC members for consultation	2014 Inquiry Report: Recommendation 11	July 2016	Ongoing (Overdue)	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	Ongoing	EMV
8	Incorporate private operators of essential infrastructure in the State Communications Strategy	2014 Inquiry Report: Recommendation 11	September 2016	Ongoing	EMV
9	Submit the State Communications Strategy to SCRC for consideration and approval	2014 Inquiry Report: Recommendation 11	September 2016	Ongoing	EMV
10	Develop operational guidelines/ procedure to support the State Communications Strategy	2014 Inquiry Report: Recommendation 11	October 2016	Ongoing	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	Ongoing	EMV



## 6. Circulate a draft State Communications Strategy to EMJPIC members for consultation

Chaired by EMV, EMJPIC comprises representatives from all emergency response agencies. EMJPIC is responsible for ensuring that public information is coordinated and distributed in a timely and accurate manner to inform and advise the community during a major emergency.

In August 2016, EMV circulated a draft Emergency Management Communications Roadmap and Latrobe Valley Coal Mine Taskforce Exercise communications document to the EMJPIC Executive and EMJPIC members.

The roadmap provided the opportunity for members to understand and comment on the strategic direction of emergency management communications. EMV advised that the roadmap feeds into development of the State Communications Strategy, which was in draft and due to be finalised after the Latrobe 16 exercise on 25-26 August 2016. EMV and a communications strategy expert were developing the strategy further, prior to testing the concepts and objectives at the Latrobe 16 exercise.

IGEM has not been provided with a copy of the draft State Communications Strategy.

### FINDING

This action is overdue and IGEM will revisit in the next Annual Report.

## 7. Test the draft State Communications Strategy at the Latrobe Valley Coal Mine Taskforce August 2016 Exercise

The Latrobe 16 exercise was scheduled for 25-26 August 2016 and EMV advised that the exercise was to include discussion and testing of concepts included in the State Communications Strategy.

### FINDING

IGEM will revisit this action in the next Annual Report.

## 8. Incorporate private operators of essential infrastructure in the State Communications Strategy

EMV advised that the State Communications Strategy will define the process to achieve integration of industry and technical experts in communications. IGEM has not been provided with a copy of the draft strategy and is unable to comment further.

### FINDING

IGEM will revisit this action in the next Annual Report.

## 9. Submit the State Communications Strategy to SCRC for consideration and approval

EMV has advised that the strategy is scheduled for submission at the SCRC meeting in September 2016.

### FINDING

IGEM will revisit this action in the next Annual Report.

## 10. Develop operational guidelines/procedure to support the State Communications Strategy

EMV has advised that the development of guidelines and procedures is contingent upon the completion of an approved strategy.

### FINDING

This action is contingent on Action 6 and IGEM will revisit in the next Annual Report

## 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

EMV has advised that this action is contingent on completion of the strategy and development of guidelines and procedures (as per Actions 9 and 10).

### FINDING

This action is contingent on Action 6 and IGEM will revisit in the next Annual Report

### 5.2.2 White Paper actions

This section addresses Affirmation 6 of the 2014 Inquiry report, which relates to implementation of actions proposed

in the *Victorian Emergency Management Reform White Paper December 2012*, to improve community awareness and education, and make information more readily available during emergencies.

**Table 4:** Status of 'White Paper' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
WHITE PAPER ACTIONS					
12	EM-COP to be operational	2014 Inquiry Report: Affirmation 6	November 2015	Complete	EMV
13	Upgrade the VicEmergency website to support all-communities all-emergencies use over 2015–16 summer season	2014 Inquiry Report: Affirmation 6	December 2015	Complete	EMV
14	Launch the VicEmergency app	2014 Inquiry Report: Affirmation 6	October 2016	Ongoing	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	Ongoing	EMV
16	Align call centre arrangements for all government departments and agencies for emergency management messaging	2014 Inquiry Report: Affirmation 6	December 2017	Ongoing	EMV

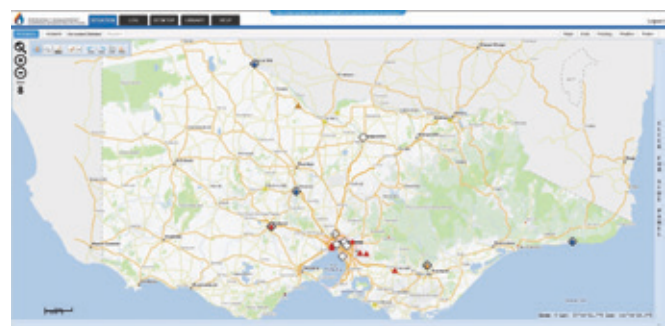
#### 12. EM-COP to be operational

The Victorian Government, through EMV, has developed EM-COP. The EM-COP platform is based on the Next-Generation Incident Command System (NICS) developed by the Massachusetts Institute of Technology Lincoln Laboratory in the United States of America.

The platform is a web-based information gathering, planning, dissemination and collaboration tool that runs on devices such as desktop computers, laptops, tablets and smartphones.

It provides emergency managers and stakeholders with the means to gather, organise, create and share emergency management information.

Functions of the core platform include various maps and data layers to display information such as weather, vehicle movements, regional boundaries and incident perimeters. The platform in its current form has been used during various trials and is currently live and accessible to emergency management personnel.



Screen shot from Emergency Management – Common Operating Picture (EM-COP) (Courtesy EMV)

Through EM-COP, emergency management personnel across the state have the ability to access, contribute to, and develop the common operating picture, regardless of whether they are located at an Incident Control Centre (ICC), a local municipal building, in the field or at any location with an internet connection.

The platform shares information across all tiers of emergency management and more broadly, with a component to enable warnings to be disseminated to the community, replacing the One Source One Message (OSOM) warnings tool, also being finalised.

Between July 2014 and June 2015, EMV completed a pilot of EM-COP. The pilot included hosting on high reliability servers, development of the concept of operations and business rules and field trials at incident, regional and state levels. EM-COP was trialled with more than 400 representatives of Victorian emergency management agencies.

In November 2015, the first stage of EM-COP became an operational all-emergencies platform. Additional functionality is progressively being added (see Action 15).

## FINDING

IGEM considers this action has been implemented as planned.

## 13. Upgrade the VicEmergency website to support all-communities all-emergencies use over 2015–16 summer season

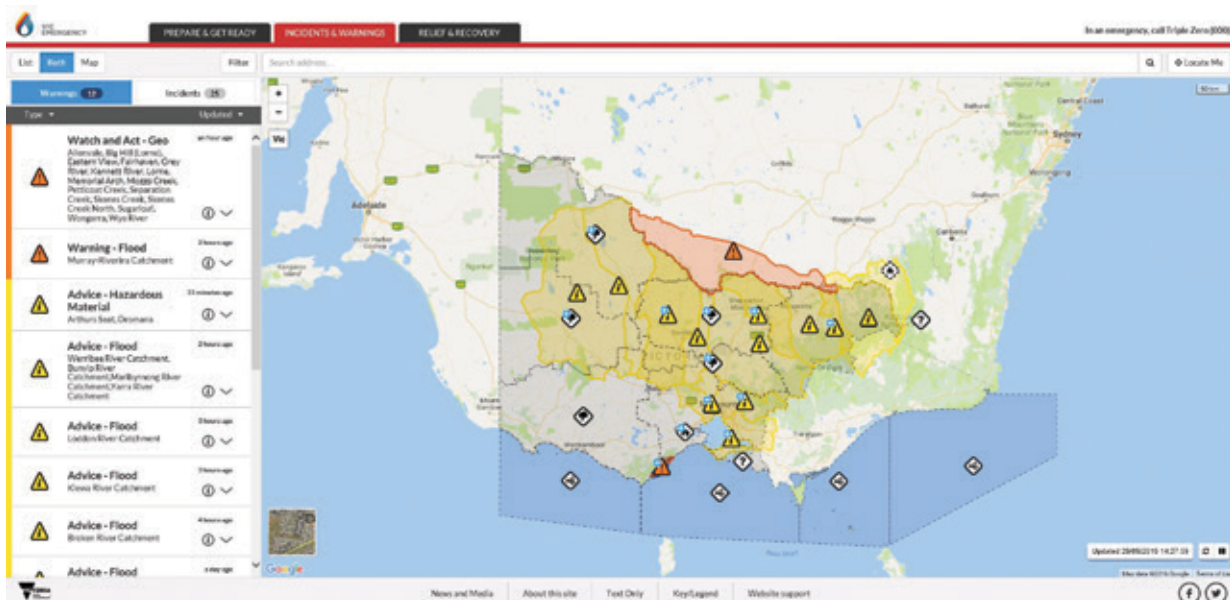
The VicEmergency website ([emergency.vic.gov.au](http://emergency.vic.gov.au)) provides Victorians and visitors with access to emergency information, warnings and advice on a single website. It also provides information to assist individuals, businesses and communities to prepare for, respond to, and recover from all emergencies.

Information, warnings and advice are provided on a real time Google Maps display. The website enables people to follow the status of emergencies and access emergency news, weather, maps and up-to-date information about incidents. The VicEmergency website was upgraded in September, October and December 2015.

The VicEmergency website was utilised as the all communities, all-emergencies platform for warnings and advice over the 2015–16 summer season. All visits to the incident and warnings pages of individual websites of government departments and agencies were redirected to VicEmergency.

## FINDING

IGEM considers that this action has been implemented as planned.



VicEmergency website, [www.emergency.vic.gov.au](http://www.emergency.vic.gov.au)

#### 14. Launch the VicEmergency app

EMV has engaged a developer to build the new app, which is planned for public release in November 2016.

A communication campaign will promote and inform the community and emergency management stakeholders about the new VicEmergency app, which will replace the Fire Ready app.

The new VicEmergency app will align with the VicEmergency website to provide a central location for community access to timely information and warnings for fires, hazardous materials incidents, storms, floods, heat health warnings, earthquakes, tsunamis, power outages, coastal warnings, traffic hazards and shark sightings.

The app brings together emergency information and warnings from the CFA, MFB, VICSES, DELWP, Life Saving Victoria and the NSW Rural Fire Service. The app provides information relating to before, during and after an emergency.

##### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 15. Roll all existing emergency management information systems into EM-COP, to be available for use by all emergency management personnel.

As reported under Action 12, the core EM-COP platform is live and accessible to emergency management personnel. EMV has been incorporating a number of other emergency management information systems into EM-COP, including:

- Emergency Management Knowledge Library – the sector's knowledge library containing doctrine, work instructions, standard operating procedures (SOPs) and key information for the emergency management sector
- Emergency Management Portal – a central repository of links to applications, websites, sources of information pertaining to current operations, contact lists, rosters and similar material for emergency management personnel
- Incident Management Toolbox – a collection of guidance material for Incident Management Team (IMT) personnel to assist in undertaking their functional roles in the management of an incident

- eMap State Overview – one component of the statewide mapping system, designed to show current incident activity in Victoria
- OSOM warnings platform – the current system used by emergency management agencies and IMTs to activate community sirens and issue public messaging including, but not limited to emergency warnings and community updates.

EMV has scheduled the roll-out of the enhanced EM-COP to the sector for September 2016, prior to the 2016-17 summer period.

##### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 16. Align call centre arrangements for all government departments and agencies for emergency management messaging

IGEM has not been provided with an update as this action is not due for completion until December 2017.

##### FINDING

IGEM will revisit this action in the next Annual Report.

## 5.2.3 Community engagement

**Table 5:** Status of 'Community engagement' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
COMMUNITY ENGAGEMENT					
17	Engage a dedicated EMV community engagement officer based in the Latrobe Valley	2014 Inquiry Report: Recommendation 12	August 2016	Ongoing	EMV
18	Develop a plan for the Latrobe Valley Community Engagement and Planning Project	2014 Inquiry Report: Recommendation 12	February 2017	Ongoing	EMV
19	Deliver the Latrobe Valley Community Engagement and Planning Project	2014 Inquiry Report: Recommendation 12	June 2017	Ongoing	EMV

The Latrobe Valley Community Engagement and Planning project aims to assist the community to become more connected and build resilience before, during and after emergencies.

The project is based on the Community-Based Emergency Management (CBEM) model developed by EMV, in collaboration with the Harrietville community, to support building of resilience following the 2013 bushfires.

EMV states that the *CBEM Overview* provides key information for communities and organisations to enable them to understand and participate in the further development and use of a community based approach. It acts as a guide for the community to build on combined strengths, by working together to identify local priorities and develop mutual goals and solutions. This includes building relationships and using locally tailored processes for communities, emergency management agencies, government, business, industries and non-government organisations to participate in decision making processes.

### 17. Engage a dedicated EMV community engagement officer based in the Latrobe Valley

EMV is recruiting a Senior Community Engagement Officer to work in Morwell and the Latrobe Valley. This role will assist the community and support organisations to complete the project plan and Latrobe Valley Community Engagement and Planning Project using the CBEM approach.

#### FINDING

IGEM considers that this action is proceeding satisfactorily and will revisit in the next Annual Report.

### 18. Develop a project plan for the Latrobe Valley Community Engagement and Planning Project

EMV has commenced developing a draft project plan for the Latrobe Valley Community Engagement and Planning Project. Stakeholders including Morwell and Districts Community Recovery Committee, Morwell Neighbourhood House, Latrobe City Council and Hazelwood Coal Mine Taskforce have provided input to the project.

The engagement of a dedicated EMV Engagement Officer (Action 17) will support the completion of this action and the broader Latrobe Valley Community Engagement and Planning Project (Action 19).

#### FINDING

IGEM considers that this action is proceeding satisfactorily and will revisit in the next Annual Report.

### 19. Deliver the Latrobe Valley Community Engagement and Planning Project

As part of the Latrobe Valley Community Engagement and Planning Project, EMV engaged with key community representatives and their networks to identify community connections, opportunities and priorities to progress the CBEM approach in Morwell and the Latrobe Valley. This includes the stakeholders previously identified under Action 18.

#### FINDING

IGEM considers that this action is proceeding satisfactorily and will revisit in the next Annual Report.

## 5.2.4 EPA Emergency Communications

**Table 6:** Status of 'EPA Emergency Communications' action

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
EPA EMERGENCY COMMUNICATIONS					
20	Deliver the EPA Emergency Response Communications Protocol	2014 Inquiry Report: Affirmation 20	December 2015	Complete	EPA

### 20. Deliver the EPA Emergency Response Communications Protocol

EPA formally documented its emergency communication role and responsibilities in the EPA Incident Engagement and Communication Protocol (the protocol). The protocol was further refined to align with the approach and content of EPA's new Environment Protection Incident Management System (ePIMS) and to ensure that it could be integrated into EPA's Emergency Management Framework.

The protocol has been reframed as a Standard Operating Procedure (SOP) for emergency management communications. The SOP describes EPA's communication arrangements, responsibilities and processes during an emergency.

The SOP's principles, roles and responsibilities were integrated into EPA's 2015-2016 Summer Readiness Plan to ensure that EPA staff understood their obligations for the summer season.

Training for EPA staff on summer readiness, including the communication responsibilities, was provided throughout December 2015.

The SOP was reviewed by EPA's Emergency Management Planning and Advisory Committee in December 2015 and endorsed by its Chair in February 2016.

Ongoing review and improvement has continued as a 'business as usual' function for EPA's emergency and incident management operations.

#### FINDING

IGEM considers this action has been implemented as planned.

## 5.2.5 EPA Engagement with the Latrobe Valley Community

EPA's *Reconnecting with the Latrobe Valley Plan* aimed to increase the accessibility of EPA's scientific information and provide opportunities for local community involvement in EPA activities. The overall objective was to rebuild community confidence and trust in EPA and their work in the local environment.

**Table 7:** Status of 'EPA Engagement with the Latrobe Valley Community' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
EPA ENGAGEMENT WITH THE LATROBE VALLEY COMMUNITY					
21	Evaluate the pilot Citizen Science Program	2014 Inquiry Report: Affirmation 20	August 2015	Complete	EPA
22	Identify local community networks and their environment information sources by undertaking a social network analysis	2014 Inquiry Report: Affirmation 20	October 2015	Complete	EPA
23	Evaluate the pilot communication and engagement approach	2014 Inquiry Report: Affirmation 20	December 2015	Complete	EPA
24	Complete a community co-design process for a new air monitoring network (including smoke sensor sub-network)	N/A	December 2016	Ongoing	EPA
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	Ongoing	EPA
26	Complete the reconfiguration of the current ambient air monitoring network (including the smoke sensor sub-network)	N/A	June 2018	Ongoing	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	Ongoing	EPA



## 21. Evaluate the pilot Citizen Science Program

A key element of EPA's community engagement approach was the introduction of a pilot citizen science program. Citizen Science involves the participation of community volunteers working with EPA to build their skills and understanding of environmental monitoring methods, scientific data and the state of the local environment.

The pilot program was co-designed with the local community through a reference group, which also guided the delivery of the program.

EPA engaged a local Latrobe Valley Citizen Science Coordinator: 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.

In August 2015, EPA engaged an independent consultant to evaluate the pilot citizen science program in order to understand how the Latrobe Valley community has interacted with EPA since the mine fire began and what their experience of that interaction has been, particularly with respect to the program.

The evaluation found that the program had made a 'good start' in building understanding and trust with the local community. Although the sample group was small, all respondents reported a greater understanding of monitoring techniques and three-quarters agreed they had a better understanding of EPA's monitoring data.

The evaluation report recommended that EPA pursue a longer term strategy for citizen science in the Latrobe Valley community and across the state. EPA has developed a statewide Citizen Science Framework and Action Plan using lessons learnt from the program in the Latrobe Valley. The framework received executive endorsement in late 2015.

### FINDING

IGEM considers this action has been implemented as planned

## 22. Identify local community networks and their environment information sources by undertaking a social network analysis

An independent, social network analysis conducted in October 2015 aimed to provide an understanding of how members of the Morwell (and wider Latrobe Valley) community participate in networks, seek out environmental information and whether EPA was viewed as a trusted source of information.

The analysis found that the Morwell, and wider Latrobe Valley, community network is highly connected, centres around a number of key groups or agencies and that EPA is a trusted source of information (second to Latrobe City Council).

The analysis also identified specific opportunities for EPA to strengthen its community connections, which will assist in ensuring that community engagement is more targeted and effective in future.

This work also represents EPA's contribution to the 2014 Hazelwood Mine Fire Inquiry Report Recommendations 11 and 12, which focus on developing an all agencies statewide approach to communication and engagement.

### FINDING

IGEM considers this action has been implemented as planned.

## 23. Evaluate the pilot communication and engagement approach

In August 2014, EPA conducted social research to establish a baseline to understand community awareness and confidence in the local environment and in EPA. The research involved a sample survey of residents of Morwell, Churchill and Traralgon, and included a series of questions specifically about the 2014 Hazelwood mine fire and EPA's response.

A second round of social research was conducted in October 2015 to measure whether the pilot communication and engagement approach had improved local community perception toward the local environment, EPA and its performance.

Overall, the results found that the majority of residents surveyed (84 per cent) across all areas of Morwell and surrounding areas rated their local environment as excellent, very good or good. In terms of overall community perceptions of EPA, there was a significant increase in the satisfaction rating among residents in relation to EPA helping to improve the local environment since the mine fire.

The research also identified that some Morwell residents who live closest to the site of the mine fire didn't believe that EPA's activities, including air quality monitoring, had helped improve their situation.

Further investigation revealed that these residents related their lack of satisfaction to the impact of dust from the mine site. It is expected that the *Industry Sector Strategy – Latrobe Valley Mine Dust* recently developed by EPA and Earth Resources Regulation (ERR) will help address this issue (see Action 147).



EPA reports that the combined findings of the citizen science program evaluation, social network analysis and social research indicate that EPA's actions through recovery have achieved progress in rebuilding the confidence and trust of Latrobe Valley residents through its communication and engagement activities.

EPA acknowledges some residents remain concerned or dissatisfied, and recognises that continuing to rebuild community confidence will require a long term commitment and sustained effort by the organisation.

#### FINDING

IGEM considers this action has been implemented as planned.

#### 24. Complete a community co-design process for a new air monitoring network (including smoke sensor sub-network)

Public submissions to the 2015–16 Inquiry showed public uncertainty about the appropriate level of air monitoring in the Latrobe Valley and highlighted the need for increased air monitoring to meet community concerns.

In response, EPA is expanding its air monitoring capabilities and public reporting for the Latrobe Valley. This will be through a co-design process that engages the community in a collaborative process to develop a more targeted air monitoring network.

EPA prepared a communications and engagement plan to identify key project stakeholders and guide establishment of a consultative panel. In May 2016, EPA engaged a co-design consultant to outline a community engagement collaborative process for the co-design.

In June 2016, the consultant met with community groups, including Voices of the Valley and Morwell Neighbourhood House and presented to agency representatives at the Health and Wellbeing Working Group and at a Coal Mine Emergency Management Taskforce meeting.

EPA is now engaging with the consultant on the development of a preliminary Latrobe Valley Community Air Monitoring Network co-design model. The community co-design process is expected to be completed in December 2016.

#### FINDING

IGEM considers that this action is proceeding satisfactorily and will revisit in the next Annual Report.

#### 25. Evaluate existing activities of the Citizen Science Program and adapt them as necessary to remain relevant to the local community

The pilot citizen science program was evaluated in August 2015 as described under Action 21.

The evaluation indicated that the program had made 'a good start' in building understanding and trust with the local participants and should build on the aspects highlighted as most valuable by participants – the 'hands on approach' to training and the provision of supporting resources such as monitoring equipment. The evaluation report also recommended that EPA investigate partnerships with other existing programs to avoid duplication.

EPA has reported on activities such as:

- a smoke spotters' trial that allows the community to assess smoke risk
- a trial of personal air monitors
- a proposed water monitoring campaign on Waterhole Creek in Morwell, in collaboration with West Gippsland Catchment Management Authority and local Waterwatch volunteers

EPA has advised that it will continue the evaluation of existing citizen science activities to establish which options are viable as ongoing monitoring activities, and to identify new activities and potential environmental monitoring equipment.

#### FINDING

IGEM considers that this action is proceeding satisfactorily and will revisit in the next Annual Report.

**26. Complete the reconfiguration of the current ambient air monitoring network (including the smoke sensor sub-network)**

Reconfiguration of the air monitoring network will be informed and guided by the outcomes of the co-design process (see Action 24), and will not commence until 2017.

**FINDING**

This action is contingent on the Action 24 and IGEM will revisit in the next Annual Report.

**27. Deliver new participation opportunities as part of the Citizen Science Program for the Latrobe Valley community**

New opportunities for participation in the citizen science projects will be informed and guided by the outcomes of the regular evaluation of the current program. New activities and monitoring techniques will be identified for further investigation. Some of these were described under Action 25. The program for delivery of new opportunities for participation will not commence until 2017.

**FINDING**

IGEM will revisit this action in the next Annual Report.

## 5.2.6 Health Communications and Public Health Investigations

**Table 8:** Status of 'Health Communications and Public Health Investigations' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
HEALTH COMMUNICATIONS AND PUBLIC HEALTH INVESTIGATIONS					
28	Deliver refresher contract management training for DHHS procurement staff	Death Investigation Report: Recommendation 4	November 2015	Complete	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	January 2016	Complete	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	January 2016	Complete	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	Ongoing	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	Ongoing	DHHS
33	Establish a Communications Health and Emergency Management Team	Death Investigation Report: Recommendation 3 2014 Inquiry Report: Affirmation 16	January 2016	Complete	DHHS
34	Review the Better Health Channel and health.vic site	2014 Inquiry Report: Recommendation 9 2014 Inquiry Report: Affirmation 24	January 2016	Complete	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	February 2016	Complete	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	November 2015	Complete	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	November 2015	Complete	DHHS
38	Develop a 'smoke and your health' engagement strategy for 2015–16	2014 Inquiry Report: Recommendation 9 2014 Inquiry Report: Affirmation 24	November 2015	Complete	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	November 2015	Complete	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	January 2016	Complete	DHHS
41	Distribute 'smoke and your health' communications materials for 2015–16 summer season	2014 Inquiry Report: Recommendation 9 2014 Inquiry Report: Affirmation 24	January 2016	Complete	DHHS
42	Evaluate 'smoke and your health' communications materials for 2015–16 summer season	2014 Inquiry Report: Recommendation 9 2014 Inquiry Report: Affirmation 24	January 2016	Complete	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	Complete	DHHS
44	Evaluate the 'smoke and your health' community engagement strategy	2014 Inquiry Report: Recommendation 9  2014 Inquiry Report: Affirmation 24	October 2016	Complete	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	Complete	DHHS

The DHHS approach to engaging independent experts and the management of those contracts came under scrutiny by the 2015–16 Inquiry. In its report, the Board of Inquiry criticised the department's contract management in relation to four commissioned studies.

The Death Investigation Inquiry Report made the following recommendation:

*Recommendation 4*

*The State should mandate a rigorous process for 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 substantive changes to their advice and whether any changes have been adopted.*

## **28. Deliver refresher contract management training for DHHS procurement staff**

In November 2015, DHHS through its Finance Education and Standards Team, conducted the 2015 Finance and Procurement Update/Refresher training for 1,167 departmental staff, including staff from within Regulation, Health Protection and Emergency Management Divisions. The training focused on financial accountabilities, the role of the Independent Broad-based Anti-corruption Commission (IBAC), conflict of interest, open and fair competition to suppliers, value for money and alignment with the Victorian Public Service Code of Conduct.

The expected outcomes for staff were:

- understanding of the essentials of good finance/procurement decisions
- understanding of the importance of financial responsibility at all levels of the department
- review of the benefits of purchasing at the local level and how/when to access support.

DHHS also provided finance and procurement training for all staff from June to August 2016. The courses included: Purchase and pay (using EC4P and Procurement card); Authorise expenditure; Procurement and contracts; General finance and refresher training on Open Access and annual finance update. The Open Access Centre provides staff with one-on-one finance training and procurement support, and immediate access to finance and procurement education.

### **FINDING**

IGEM considers this action has been implemented as planned.

## **29. Engage an independent consultant to undertake a review of DHHS procurement and contract management policies and procedures for obtaining independent expert advice**

On 22 January 2016, DHHS appointed an independent consultant to review the department's current policy, procedures, staff approaches and understanding, and training in relation to the procurement of independent expert advice and the management of those contracts.

The review considered:

- current arrangements in the Health Protection Branch (HPB) and Office of the Chief Health Officer (CHO) for procuring and managing contracted outcomes (including staff knowledge and understanding of matters relevant to carrying out these functions)
- ways to strengthen the operating arrangements of the HPB and Office of the CHO in relation to procurement and contracting activities (including maintenance of a culture most conducive to best practice contract management)
- systemic learnings arising from the exercise that may assist the department more broadly (in particular, what, if any, improvements are required to the department's current systems, processes and training to support procurement activities for the engagement of independent expert advice)
- how potential conflicts of interest are best managed in engaging expert advice
- whether there are specific issues that need to be addressed in emergency management situations.

In March 2016, the independent consultant produced the report, *Department of Health and Human Services approach to Procurement: Responding to the Hazelwood Inquiry*. The report directs 10 recommendations to DHHS relating to:

- establishing best practice culture for engaging independent experts for investigations
- developing guidance materials about engaging independent experts
- establishing streamlined procurement processes and augmenting procurement capability
- providing regular procurement and contract management training.

The report also recommended that, after 12 months, the department conduct a review of implementation of adopted recommendations. This will confirm that the measures adopted are best fitted to the needs of DHHS so that any further adjustments can be made.

#### FINDING

IGEM considers this action has been implemented as planned.

### 30. Complete a review of DHHS structures for public health and emergency management related communications teams

In January 2016, DHHS completed a review to identify the departmental structures for communications teams working on health-related incidents and emergencies. The review identified three areas of DHHS which release public health and emergency management information and advice to the community – the public health communications team, the emergency management communications team and the communications and media team.

#### FINDING

IGEM considers this action has been implemented as planned.

### 31. Develop a plan to implement the findings and recommendations of the independent expert report on DHHS procurement and contract management policies and procedures

In June 2016, the DHHS Executive Board noted the findings and recommendations of the consultant's report, *Department of Health and Human Services approach to Procurement: Responding to the Hazelwood Inquiry* (see Action 29), approved the implementation of the report's 10 recommendations, and delegated responsibility for implementing the recommendations.

DHHS developed a draft management plan for implementing the recommendations of the report. The development of the actions will involve advice from a range of stakeholders including the Emergency Management Branch, HPB and the Office of the CHO, and Procurement and Contract Management Team. Corporate Services will conduct a 12-month evaluation of the effectiveness of the actions taken to implement the recommendations within the department.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 32. Deliver the plan to implement the findings and recommendations of the independent expert report on DHHS procurement and contract management policies and procedures

This action has not yet commenced.

#### FINDING

This action is contingent on Action 31 and IGEM will revisit in the next Annual Report.

### 33. Establish a Communications Health and Emergency Management Team

Based on the review of the department's structures for public health and emergency management related communications teams (see Action 30), DHHS established the Communications, Health and Emergency Management Team within the Communications and Media Branch, on 18 January 2016.

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 its three communications teams. This allows for greater 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.

#### FINDING

IGEM considers this action has been implemented as planned.

### 34. Review the Better Health Channel and health.vic site

In early 2016, a working group comprising staff from the Office of the CHO, the Communications Health and Emergency Management Team, and the Sector and Community Engagement Branch audited content published on the department's consumer health and medical information website, the Better Health Channel ([betterhealth.vic.gov.au](http://betterhealth.vic.gov.au)), and the sector website ([health.vic.gov.au](http://health.vic.gov.au)).

The audit identified and reviewed all existing emergency and public health content, which was then updated for style, tone, depth and accuracy. The audit also identified gaps in emergency and public health content, which were prioritised for development.

#### FINDING

IGEM considers this action has been implemented as planned.

### 35. Develop new processes and protocols (including standard messaging templates) for Better Health Channel and health.vic site based on the review

Following the review of the Better Health Channel and *health.vic* website (see Action 34), DHHS implemented new processes and protocols for the creation and publication of emergency and public health content. This included developing approved general information and fact sheets (standard messaging) to facilitate immediate responses to emergencies. These general information messages and fact sheets may then be updated as more information about an incident or emergency becomes available, facilitating the delivery of expeditious and appropriate messaging to the community.

#### FINDING

IGEM considers this action has been implemented as planned.

### 36. Appoint a Senior Science Policy Adviser to assist in implementing the State Smoke Framework

In November 2015, a Senior Science Policy Adviser (advertised as a Senior Health Scientist) 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 and is preparing material for the 2016–17 summer season.

This material included posters, videos and factsheets<sup>5</sup>, which were developed following community consultation and are available electronically. Where appropriate, posters and factsheets have been translated for culturally and linguistically diverse (CALD) communities.

#### FINDING

IGEM considers this action has been implemented as planned.

### 37. Develop draft 'smoke and your health' communication materials for the 2015–16 summer season

In October 2015, DHHS published the factsheet *Bushfire smoke and your health*, to provide the community with information on bushfire smoke, how it can affect an individual's health, and action they can take to reduce risk to their health. The factsheet was published on the *health.vic* website ([health.vic.gov.au](http://health.vic.gov.au)).

In preparation for the 2015–16 summer season, DHHS developed new communication materials in November 2015, with a focus on posters to provide an immediate and engaging impact to the reader. DHHS drafted two posters, entitled 'smoke from fires using landmarks to judge air quality' and 'bushfire smoke and your health.'

The new communication materials were presented to the State Smoke Working Group at the 4 November 2015 meeting and distributed to the members for comment/feedback.

#### FINDING

IGEM considers this action has been implemented as planned.

<sup>5</sup> <https://www2.health.vic.gov.au/Api/downloadmedia/%7BD069C9E2-692E-42F0-A7D6-0806844DAD3F%7D>.

### 38. Develop a 'smoke and your health' engagement strategy for 2015–16

During the 2015–16 summer season, DHHS developed the '*Smoke and your health communication and engagement strategy 2015–16*'. The strategy outlines how information is communicated to Victorians to assist in preparing for, experiencing and recovering from a smoke event.

The strategy supports the objectives of the State Smoke Framework and was to be used by DHHS and EMV as a tool to inform Public Information Officers during an incident that generates smoke. The strategy also supports the EMJPIC by providing guidance for member agencies in their stakeholder communication activities during a smoke event.

The strategy was designed and implemented in collaboration with Latrobe City Council, Latrobe Community Health Service, Latrobe Regional Hospital, Gippsland Primary Health Network (PHN), Gippsland Multicultural Services, CFA District 27, DELWP and EPA.

The *Smoke and your health engagement strategy 2015–16* outlines:

- communication tools and tactics available for Victorian Government departments and agencies
- activities that are undertaken to help prepare Victorians for a smoke event
- approved key messages about smoke and health
- a strategic approach to managing communication about smoke and health
- the approach to evaluation of the strategy.

The strategy was last updated in March 2016.

#### FINDING

IGEM considers this action has been implemented as planned.

### 39. Undertake community focus testing of the draft 'smoke and your health' communication materials for the 2015–16 summer season

In November 2015, DHHS engaged an independent consultant, Di Marzio Research, to undertake community focus testing of the effectiveness of the draft 'smoke and your health' communication materials and provide feedback on the communication platforms and channels to convey the messages.

The consultant conducted focus group testing and online community testing of the Bushfire smoke and your health initial factsheet, Smoke from fires using landmarks to judge air quality draft poster, Bushfire smoke and your health draft poster. Eight focus groups were held across three areas including Latrobe Valley, Ballarat and Donvale, and online community testing with 45 Victorians comprising a mix of participants living in metropolitan Melbourne, the Melbourne urban fringe, regional and rural locations.

The consultant submitted the report on *Smoke and Health Communications* to DHHS on 10 December 2015.

Overall, the research participants responded well to the communications materials tested, citing clarity of language and terminology used and providing helpful or directional information that targets 'at-risk' segments without excluding the rest of the community.

#### FINDING

IGEM considers this action has been implemented as planned.

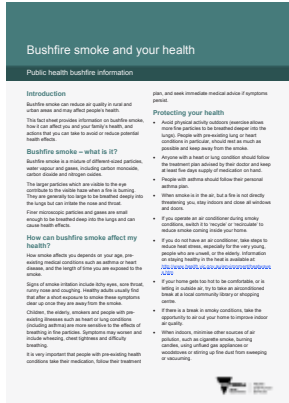
### 40. Finalise the 'smoke and your health' communication materials for the 2015–16 summer season

The consultant's report, *Smoke and Health Communication*, identified directions for maximising communication effectiveness. Responding to the report recommendations, DHHS finalised and produced the smoke and your health communication materials for the 2015–16 summer season. The materials consisted of a factsheet, posters and a video.

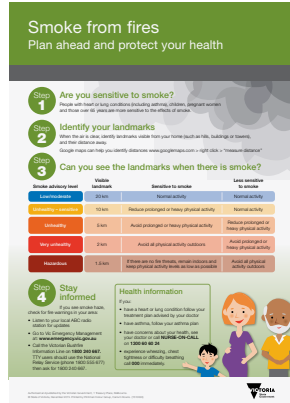


**Figure 2:** DHHS 'Smoke and your health' communication materials

## Bushfire smoke and your health factsheet



## Smoke from Fires, Plan ahead and protect your health poster (Smoke visibility poster)



The factsheet and posters were translated and made available on the Health Translations website, with additional links from the Better Health Channel ([www.betterhealth.vic.gov.au/health/healthyliving/bushfire-smoke](http://www.betterhealth.vic.gov.au/health/healthyliving/bushfire-smoke)). They were also made available on the health.vic website (<https://www2.health.vic.gov.au/emergencies/emergency-type/natural-disasters/bushfire-factsheets>).

## FINDING

IGEM considers this action has been implemented as planned.

## 41. Distribute 'smoke and your health' communications materials for 2015–16 summer season

The 'smoke and your health' communication materials were published on the Better Health Channel, the Health Translations website and the health.vic website (<https://www2.health.vic.gov.au/emergencies/emergency-type/natural-disasters/bushfire-factsheets>). DHHS distributed the materials to the community during early 2016 and also published them through social media.

## Smoky Outside, Stay Inside poster



## Smoky Outside, Protect your health poster



In February 2016, DHHS conducted an information workshop on 'Smoke and your health' with local agencies including Latrobe City Council, Latrobe Regional Hospital, Latrobe Community Health Service, Gippsland PHN, Gippsland Multicultural Services, Ramahyuck District Aboriginal Corporation, the CFA South East Region and EPA.

The local agencies assisted DHHS in promoting the materials through their websites, social media accounts (for example, Facebook and Twitter), community newsletters, email distribution lists, providing hard copies and displaying the posters on public notice boards, and making their own internal workforce aware of the communication materials.

DHHS also circulated emails and letters including posters and other promotional materials on 'smoke and your health' to:

- family services
- early learning centres
- maternal child health centres
- full day care centres
- primary and secondary schools
- community groups
- medical settings such as General Practitioner clinics, pharmacies and health centres.

The department also conducted face-to-face presentations of 'smoke and your health' information at local community forums for the CFA, local Environmental Health Officers and the Gippsland Multicultural Service.

## Bushfire smoke and your health video



**Available at** <https://www.betterhealth.vic.gov.au/health/videos/bushfire-smoke-and-your-health>

**FINDING**

IGEM considers this action has been implemented as planned.

#### **42. Evaluate 'smoke and your health' communications materials for 2015–16 summer season**

In May 2016, DHHS re-engaged the consultant, Di Marzio Research (see Action 39) to evaluate the effectiveness of 'smoke and your health' communication materials and provide feedback on the communication platforms and channels used to convey the messages during the 2015–16 summer fire season and planned burns season.

The consultant conducted focus group testing in three regions (two rural and one metro), an online survey of 600 Victorians and an analysis of secondary data including assessment of social media posts by DHHS and messaging on the Better Health Channel.

The consultant provided its *Smoke and Health Communications Evaluation Report* to DHHS on 5 July 2016.

**FINDING**

IGEM considers this action has been implemented as planned.

#### **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**

During May and June 2016, DHHS developed the State Smoke Framework Community Engagement Strategy to improve engagement and communication with the public on the potential health impacts of smoke.

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.

The strategy was presented to the State Smoke Working Group for comment and then finalised in July 2016.

**FINDING**

IGEM considers this action has been implemented as planned.

#### **44. Evaluate the 'smoke and your health' community engagement strategy**

The communication resources, channels and messaging used in the 2015–16 campaign were evaluated in June 2016. The evaluation included eight focus groups (48 participants representing different age groups and regional, rural and urban fringe communities), an online survey of 600 participants, and collection and analysis of digital data.

The evaluation found that:

- The communications materials tested highly in terms of being easy to understand, helpful, relevant and informative, however most people had not seen it before
- The biggest communications challenge is around distribution and reach of the messages
- There is a need to advise people about the negative effects smoke could have on their health in order to bring about behaviour change
- Most people would seek information about smoke and their health by searching Google, therefore search engine optimisation is critical to the reach and effectiveness of DHHS communications
- In social media content, there is an opportunity to make better use of icons, images and video to make information more digestible.

To improve reach and engagement on social media, the evaluation report recommends:

- posting more frequently, particularly in spring and summer
- using more hashtags and tagging relevant organisations/groups
- using more graphics, statistics and videos, and embedding videos in Facebook rather than including a link
- creating a targeted page or group
- boosting posts through a paid campaign and geo-targeting posts.

## FINDING

IGEM considers this action has been implemented as planned.

### 45. Update the 'smoke and your health' community engagement strategy to reflect learnings from engagement with stakeholders and the evaluation

DHHS has developed the *Smoke and your health communication strategy 2016–2018*, which was approved by the CHO on 22 August 2016. The strategy builds on the 2015–16 strategy and applies learning from research, the 2015–16 campaign evaluation and a literature review, among other sources, to develop, refine and disseminate information about smoke and health to the Victorian community.

The strategy sets out a multi-faceted communications effort, in order to maximise the community's exposure to smoke and health messages, and materials.

## FINDING

IGEM considers this action has been implemented as planned.

## 5.3 Health in the Latrobe Valley

In the 2014 Inquiry, the Board of Inquiry found that there was a need to substantially improve the health of the Latrobe Valley community.

The Health Improvement Inquiry Report focused on examining the factors surrounding health improvement in the Latrobe Valley, making 12 recommendations and affirming 12 of both the government and non-government entities' actions.

The Board of Inquiry made findings in relation to:

- chronic disease management
- mental health
- early detection and high-risk screening
- health behaviours
- healthy workplaces
- healthy environments
- the health of children and young people

- the effect of social disadvantage on health
- Aboriginal health in the Latrobe Valley.

The Victorian Government Implementation Plan sets out actions to address the findings of the 2014 Inquiry as well as recommendations and affirmations from the Health Improvement Inquiry report.

IGEM is also monitoring and reporting on progress of the recommendations and affirmations in the Health Improvement Inquiry report that are being implemented by non-government health agencies (see Section 6).

The following themes, with associated actions, are listed under the 'Health in the Latrobe Valley' theme in the Victorian Government Implementation Plan:

- Governance
- Engagement with the Commonwealth
- Prevention
- Early detection and high risk screening
- Expanding services for people with multiple chronic conditions
- Mental health
- Expanding options to access specialist services
- Aboriginal health
- Long term health study
- Ash in roof cavities.

## Progress summary

The Victorian Government Implementation Plan lists 68 actions under the 'Health in the Latrobe Valley' theme, of which 19 have now been completed.

Overall, significant progress has been reported by DHHS, the responsible agency for the delivery of actions under the Health in the Latrobe Valley theme. A substantial proportion of the actions listed are long term projects and many are in their infancy, with evidence of scoping work being completed.

DHHS is establishing the Latrobe Valley as a Health Innovation Zone and has engaged with the Commonwealth in proposing an integrated chronic disease trial in Gippsland.

A dedicated community engagement officer has been appointed and the Latrobe Valley Health Assembly (the health assembly) is being established to drive health innovation in the Latrobe Valley through coordination of place-based initiatives designed with, and for, the local community.

A Health Innovation Taskforce (the taskforce), with representatives from DHHS, the principal health agencies (Latrobe City Council, Latrobe Community Health Service, Latrobe Regional Hospital, the Gippsland Primary Health Network) and community representatives is supporting the creation of the health assembly.

The work of the taskforce includes, but is not limited to, the development of a governance structure, a constitution or partnering agreement and operating model for the health assembly. IGEM has seen evidence of the significant progress being made by the taskforce and expects that the appointment of the health assembly will occur in October 2016, as scheduled.

IGEM recognises the significant contribution being made by the Latrobe Valley non-government health organisations and health professionals in their support of the taskforce and their commitment to many initiatives that will contribute to the improvement of health in the Latrobe Valley.

Partnerships between DHHS, council, state and local health organisations are being strengthened to improve coordinated approaches tailored to the Latrobe Valley community and identify projects for priority funding. Health improvement

initiatives in the project scoping stage include prevention and early detection programs, such as a smoking cessation initiative and screening services for high risk groups. These projects aim to increase access to specialist health services as well as increasing their capacity.

Programs scheduled to commence in 2017, will address health issues prominent in the Latrobe Valley such as holistic management of chronic conditions, mental health and culturally appropriate Aboriginal health innovation.

In response to community concerns, a project examining exposure to ash in roof cavities is being undertaken. DHHS has engaged an independent expert to conduct testing and analysis and community engagement is progressing, with testing expected in early 2017.

Monash University has been engaged by DHHS to conduct a long term health study looking into the effects of particulate matter in smoke on people's health over time. The first annual report was released in November 2015. The study has been independently reviewed to ensure the health study scope and structure is appropriate.

### 5.3.1 Governance

**Table 9:** Status of 'Governance' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
GOVERNANCE					
46	Appoint a dedicated community engagement officer, based in the DHHS Traralgon office	2014 Inquiry Report: Affirmation 26	December 2015	Complete	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	May 2016	Complete	DHHS
48	Designate the Latrobe Valley as a Health Innovation Zone	Health Improvement Report: Recommendation 2	July 2016	Complete	DHHS
49	Establish a time-limited Latrobe Valley Health Taskforce to support the creation of the Latrobe Valley Health Assembly	Health Improvement Report: Recommendation 10	July 2016	Complete	DHHS

50	Work with the Latrobe Valley Health Taskforce to map current area partnerships	Health Improvement Report: Recommendation 5	July 2016	Complete	DHHS
51	Assist the Latrobe Valley Health Taskforce to recruit an initial local team to support the work of the taskforce and Latrobe Valley Health Assembly	Health Improvement Report: Recommendation 3 and 10	August 2016	Ongoing	DHHS
52	Develop an engagement strategy to help the Latrobe Valley Health Taskforce to identify and attract broad community and business and industry representatives to consider membership of the Latrobe Valley Health Assembly	Health Improvement Report: Recommendation 3	August 2016	Ongoing	DHHS
53	Begin an expression of interest process to establish the membership of the Latrobe Valley Health Assembly	Health Improvement Report: Recommendation 3	August 2016	Ongoing	DHHS
54	Support the Latrobe Valley 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 Valley Health Assembly, including forums and groups reporting to the Assembly</li> <li>a constitution, partnering agreement or MOU (as appropriate) for the Latrobe Valley Health Assembly</li> <li>preparation of information to assist the Latrobe Valley Health Assembly to identify outcomes and processes for monitoring and reporting</li> </ul>	Health Improvement Report: Recommendation 3	October 2016	Ongoing	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	Ongoing	DHHS
56	Facilitate consideration by the Latrobe Valley Health Assembly of all draft documents prepared by the Latrobe Valley Health Taskforce for amendment and adoption	Health Improvement Report: Recommendation 3	November 2016	Ongoing	DHHS

57	Develop the roles and responsibilities of the Health Advocate, in consultation with the Latrobe Valley Health Assembly	Health Improvement Report: Recommendation 5	December 2016	Ongoing	DHHS
58	Work with the Latrobe Valley 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 Innovation Zone can be monitored	Health Improvement Report: Recommendation 3	December 2016	Ongoing	DHHS
59	Participate as a member of the Latrobe Valley Health Assembly to identify priorities	Health Improvement Report: Recommendation 3	Ongoing (transition to business as usual by December 2017)	Ongoing	DHHS
60	Work with the Latrobe Valley 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)	Ongoing	DHHS

#### 46. Appoint a dedicated community engagement officer, based in the DHHS Traralgon office

In December 2015, DHHS employed a community engagement officer (advertised as Senior Project Officer in Public Health) for the Latrobe Valley, based in the Traralgon office. The officer has commenced work on a community engagement strategy, and the role is dedicated to improving community engagement in the Latrobe Valley, particularly in the town of Morwell.

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 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

The Health and Wellbeing Working Group of the IDC was established in May 2016 and it meets quarterly, or as needed, in the Latrobe Valley.

The Working Group is chaired by DHHS, with support from DPC, and has representation from DELWP, Department of Education and Training (DET), EMV, EPA and others as required. The second meeting was held on 21 June 2016 and the Terms of Reference for the group were finalised at the third meeting on 19 July 2016.

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.

##### FINDING

IGEM considers that this action has been implemented as planned.



#### 48. Designate the Latrobe Valley as a Health Innovation Zone

The Victorian Premier and the Minister for Health announced plans to designate the Latrobe Valley as a Health Innovation Zone on 15 April 2016. The Health Innovation Zone is intended to focus on improving health outcomes for Latrobe Valley residents, by driving innovation in the development and delivery of health services and health improvement programs, supported by the health assembly.

The DHHS webpage notes that the Latrobe Valley is a designated Health Zone and that the health assembly will identify health priorities and innovations in health services as part of the program of work to bring the Health Innovation Zone into being.

IGEM notes the lack of a formal designation of the Latrobe Valley Health Innovation Zone.

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 49. Establish a time-limited Latrobe Valley Health Taskforce to support the creation of the Latrobe Valley Health Assembly

In July 2016, the Health and Wellbeing Working Group established a time-limited taskforce to facilitate the appointment of the independent health assembly. In August 2016, the taskforce finalised the Terms of Reference to support the creation of the health assembly.

The taskforce has an independent Chair with representatives from DHHS, the four state-level, non-government health agencies, community members and local business representatives.

The taskforce held its first meeting on 15 July 2016, subsequently meeting monthly, and is:

- recruiting an initial local team to support the work of the taskforce and health assembly (Action 51)
- developing an engagement strategy to guide the establishment of the health assembly (Action 52)
- supporting the establishment of the membership of the health assembly (Action 53)
- developing the health assembly operating model and supporting documentation (including proposed Terms of Reference) in partnership with the community (Action 54).

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 50. Work with the Latrobe Valley Health Taskforce to map current area partnerships

DHHS has provided the taskforce with information that lists current health and social improvement organisations participating in area partnerships in the Latrobe Valley and a mapping of linkages between groups.

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 51. Assist the Latrobe Valley Health Taskforce to recruit an initial local team to support the work of the taskforce and Latrobe Valley Health Assembly

At the taskforce meeting on 10 August 2016, attended by IGEM, draft position descriptions were distributed for review by members. The positions will provide administrative support and foster increased community engagement in support of the taskforce and, when established, the health assembly.

##### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 52. Develop an engagement strategy to help the Latrobe Valley Health Taskforce to identify and attract broad community and business and industry representatives to consider membership of the Latrobe Valley Health Assembly

DHHS is developing an engagement strategy to support the taskforce in identifying and attracting community, business and industry representatives for membership of the health assembly.

##### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 53. Begin an expression of interest process to establish the membership of the Latrobe Valley Health Assembly

The Latrobe Valley Health Taskforce together with DHHS has commenced the expression of interest process to establish the Latrobe Valley Health Assembly. This includes mapping of local and regional groups active in health and wellbeing promotion.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 54. Support the Latrobe Valley Health Taskforce to develop and finalise terms of reference and associated operating model in active partnership with the Latrobe community and incorporating development of:

- the governance structure of the Latrobe Valley Health Assembly, including forums and groups reporting to the Assembly
- a constitution, partnering agreement or MOU (as appropriate) for the Latrobe Valley Health Assembly
- preparation of information to assist the Latrobe Valley Health Assembly to identify outcomes and processes for monitoring and reporting

DHHS established the taskforce with the appointment of an independent chair and members from the Latrobe Community Health Service, Latrobe Regional Hospital, Gippsland Primary Health Network, Latrobe City Council, local communities, including the Aboriginal community, a local pharmacy business, Berry Street and DHHS.

In July 2016, the draft Terms of Reference were created for the health assembly with the intention they will be refined in consultation with the Latrobe Valley community. The approved Terms of Reference will include details of the governance structure that is yet to be finalised.

DHHS has had initial meetings with the chair of the health assembly to discuss the development of governance for the assembly. IGEM has seen evidence of legal advice provided to DHHS regarding the establishment of health assembly governance structures.

DHHS has advised that it is preparing a Cabinet briefing on proposed arrangements for the health assembly in early October 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 55. Facilitate the appointment of the Latrobe Valley Health Assembly, and an independent Chair of the Latrobe Valley Health Assembly

In June 2016, the Minister for Health announced the appointment of an independent chair of the taskforce who will then become the inaugural chair of the health assembly, once established. As reported under Action 54, the chair is meeting with DHHS and the taskforce to progress the establishment of the health assembly.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 56. Facilitate consideration by the Latrobe Valley Health Assembly of all draft documents prepared by the Latrobe Valley Health Taskforce for amendment and adoption

#### FINDING

This action is contingent on Actions 53, 54 and 55 and IGEM will revisit in the next Annual Report.

### 57. Develop the roles and responsibilities of the Health Advocate, in consultation with the Latrobe Valley Health Assembly

#### FINDING

This action is contingent on Actions 53, 54 and 55 and IGEM will revisit in the next Annual Report.



**58. Work with the Latrobe Valley 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 Innovation Zone can be monitored**

**FINDING**

This action is contingent on Actions 53, 54 and 55 and IGEM will revisit in the next Annual Report.

**59. Participate as a member of the Latrobe Valley Health Assembly to identify priorities**

Following the establishment of the health assembly in October 2016, DHHS has committed to assist and work with the health assembly to ensure the above actions are met.

**FINDING**

This action is contingent on Actions 53, 54 and 55 and IGEM will revisit in the next Annual Report.

**60. Work with the Latrobe Valley Health Assembly to conduct annual monitoring of the impact of innovation**

DHHS has committed to develop an evaluation framework and plan by June 2017, which will enable evaluations of the work of the health assembly.

**FINDING**

This action is contingent on Actions 53 to 55 and IGEM will revisit in the next Annual Report.

## 5.3.2 Engagement with the Commonwealth

**Table 10:** Status of 'Engagement with the Commonwealth' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
ENGAGEMENT WITH THE COMMONWEALTH					
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	April 2015	Complete	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	February 2016	Complete	DHHS
63	Present the Gippsland proposal for integrated chronic disease trial to Commonwealth officials	Health Improvement Report: Recommendation 8	April 2016	Complete	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	Ongoing	DHHS

**61. Develop a proposal for a COAG integrated chronic disease trial in Victoria, with Gippsland as the preferred priority location**

DHHS has developed a proposal for the Commonwealth to partner with Victoria on reform which supports more integrated care for people with chronic disease. This proposal noted the Gippsland region as its preferred site for the Commonwealth Healthcare Home and Council of Australian Governments' (COAG) chronic disease integration trials. The proposal was presented to Commonwealth officials by DHHS on 21 March 2016.

**FINDING**

IGEM considers that this action has been implemented as planned.

**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**

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.

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 Primary Health Network to the medical services for the Latrobe Valley community. The Commonwealth provided flexible funding to the Gippsland Primary Health Network to respond to specific priorities and needs of the Gippsland region.

**FINDING**

IGEM considers that this action has been implemented as planned.

**63. Present the Gippsland proposal for integrated chronic disease trial to Commonwealth officials**

Further to Action 61, the proposal for an integrated chronic disease trial was presented to Commonwealth officials on 21 March 2016.

**FINDING**

IGEM considers that this action has been implemented as planned.

**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**

DHHS has indicated that the chronic disease integration trial in Gippsland will be progressed if the Commonwealth selects Gippsland as a trial site. The decision by the Commonwealth is expected by December 2016.

IGEM notes that this action is contingent on Gippsland being selected by the Commonwealth as a trial site.

**FINDING**

IGEM will revisit this action in the next Annual Report.

### 5.3.3 Prevention

**Table 11:** Status of 'Prevention' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
PREVENTION					
65	Provide information and evidence regarding previous place-based prevention interventions to inform the Latrobe Valley Health Taskforce and the Latrobe Valley Health Assembly's work	Health Improvement Report: Recommendation 5	July 2016	Ongoing	DHHS
66	Support the Latrobe Valley Health Taskforce and the Latrobe Valley 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	Ongoing	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	Ongoing	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	Ongoing	DHHS

#### 65. Provide information and evidence regarding previous place-based prevention interventions to inform the Latrobe Valley Health Taskforce and the Latrobe Valley Health Assembly's work

In July 2016, DHHS engaged a consultant to conduct a literature review on place-based prevention initiatives and report on the key infrastructure and implementation requirements for place-based prevention. The report will inform the health assembly's implementation of the place-based prevention approach in the Latrobe Health Innovation Zone. The report was scheduled to be tabled at the taskforce meeting on 10 August 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 66. Support the Latrobe Valley Health Taskforce and the Latrobe Valley Health Assembly to partner with Latrobe City Council in the development of the Latrobe MPHWP Plan 2017-21

The health assembly will work with *Latrobe City Council* to align the *Latrobe Municipal Public Health and Wellbeing (MPHW) Plan 2017-21* with themes that emerged from the Health Improvement Inquiry report. While work is underway to establish the health assembly, DHHS has established a Municipal Planning Development and Partnership Steering Committee to support local governments in Gippsland to develop and deliver the MPHWP Plan 2017-21 for their respective municipalities.

The first meeting of the Steering Committee took place on 13 July 2016, with meetings to be scheduled on an as-needs basis. An online collaboration space has also been established to support the delivery of the MPHWP Plan.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 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

DHHS provided an initial briefing to statewide organisations on the Latrobe Health Innovation Zone in order to understand current activity in the region and discuss next steps for local engagement.

Organisations invited to the briefing included the Heart Foundation, Stroke Foundation, Diabetes Victoria, Cancer Council Victoria, VicHealth and Alfred Health. DHHS will continue to explore how these organisations and DHHS will continue to share information and work collectively on health initiatives within the Latrobe Valley.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 68. Allocate funding to support locally determined actions to improve health and wellbeing in agreed priority areas and settings

In April 2016, the Victorian Government announced \$50 million in the 2016-17 Victorian budget to implement all recommendations from the 2015-16 Inquiry reports. Of this funding, \$27.3 million is allocated over five years to improve the health of the Latrobe Valley community.

The Latrobe Health Zone Budget Outcome 2016-17 to 2019-20 shows how the \$27.3 million budget is allocated in response to the recommendations from the Inquiry reports, consistent with locally determined actions. These actions were determined during the health improvement forums of the Hazelwood Mine Fire Inquiry reports and in response to the recommendations of the Inquiries.

Budget is allocated for:

- ash in roof cavities project, including testing and analysis of ash
- expansion of specific services (for example, to Latrobe Community Health Service to expand its current respiratory nursing and chronic disease work)
- additional work in areas identified as community priorities through the inquiry such as preventative health and screening
- flexible funding pools to expand support in the other priority areas identified through the inquiry into mental health, Aboriginal health and also an innovation pool which the Latrobe Valley Health Assembly is to determine how funds are best allocated.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

## 5.3.4 Early Detection and High Risk Screening

**Table 12:** Status of 'Early Detection and High Risk Screening' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
EARLY DETECTION AND HIGH RISK SCREENING					
69	Review current population and opportunistic screening rates, practices and services in the Latrobe Valley	Health Improvement Report: Recommendation 5	December 2016	Ongoing	DHHS
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	Ongoing	DHHS
71	Implement the smoking cessation initiative, in partnership with the Latrobe Valley Health Assembly, the community and other stakeholders.	Health Improvement Report: Recommendation 5	July 2017	Ongoing	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	Ongoing	DHHS
73	Based on the outcomes of the review of opportunistic screening rates, practices and services, support the Latrobe Valley 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	Ongoing	DHHS
74	Support the Latrobe Valley Health Assembly to commence a trial of integrated screening and assessment approaches for chronic disease	Health Improvement Report: Recommendation 5	July 2017	Ongoing	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	Ongoing	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	Ongoing	DHHS
77	Embed the smoking cessation initiative, in partnership with key service providers	Health Improvement Report: Recommendation 5	July 2018	Ongoing	DHHS

#### 69. Review current population and opportunistic screening rates, practices and services in the Latrobe Valley

An initial scoping group comprising representatives from relevant statewide agencies with a focus on smoking cessation, screening and chronic disease has been convened to develop proposed approaches for the initiatives for consideration by the health assembly. This includes a review of current screening practices and services in the Latrobe Valley by December 2016.

Review outcomes will be used to develop a strategy and implementation plan to improve access to screening services, in partnership with the health assembly.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 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

The government has committed to investing 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 behaviour and offer support to cease. IGEM has received evidence of draft project planning being undertaken by the scoping group (Action 69) to progress this action.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**71. Implement the smoking cessation initiative, in partnership with the Latrobe Valley Health Assembly, the community and other stakeholders.**

The government has committed to implementing the smoking cessation initiative in 2017, in partnership with the health assembly, the community and stakeholders. As reported under Action 69, a scoping group has been convened to develop approaches for the smoking cessation initiative for consideration by the health assembly, the community and other stakeholders.

This action is due to be completed in July 2017 and as such, progress will be reported in the next Annual Report.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**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**

**FINDING**

This action is contingent on Action 69 and IGEM will revisit in the next Annual Report.

**73. Based on the outcomes of the review of opportunistic screening rates, practices and services, support the Latrobe Valley Health Assembly to develop a strategy and implementation plan to improve access to opportunistic screening and early intervention services for identified priority areas**

**FINDING**

This action is contingent on Action 69 and IGEM will revisit in the next Annual Report.

**74. Support the Latrobe Valley Health Assembly to commence a trial of integrated screening and assessment approaches for chronic disease**

**FINDING**

This action is contingent on Actions 53, 54 and 55 and IGEM will revisit in the next Annual Report.

**75. Promote, and increase the use of, existing primary care systems to assist healthcare providers to identify clients for screening**

**FINDING**

This action is contingent on Actions 53, 54 and 55 and IGEM will revisit in the next Annual Report.

**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**

The scoping group brought together for Action 69 is developing a draft project plan which includes provision of a project officer to lead the implementation of the early intervention and screening, and the smoking cessation initiatives. This role is intended to partner with providers to encourage community participation in health screening as part of the implementation of these initiatives.

This action is due to be completed in December 2017.

**FINDING**

IGEM will revisit this action in the next Annual Report.

**77. Embed the smoking cessation initiative, in partnership with key service providers**

**FINDING**

This action is contingent on Actions 69 and 71 and IGEM will revisit in the next Annual Report.

### 5.3.5 Expanding Services for People with Multiple Chronic Conditions

**Table 13:** Status of 'Expanding Services for People with Multiple Chronic Conditions' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
EXPANDING SERVICES FOR PEOPLE WITH MULTIPLE CHRONIC CONDITIONS					
78	Facilitate the establishment of a Chronic Disease Forum, involving both local and statewide providers and experts, to work with the Latrobe Valley Health Assembly to design and develop care pathways to improve coordination for people with chronic disease	Health Improvement Report: Recommendation 5	December 2016	Ongoing	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	Ongoing	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	Ongoing	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	Ongoing	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	Ongoing	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	Ongoing	DHHS

**78. Facilitate the establishment of a Chronic Disease Forum, involving both local and statewide providers and experts, to work with the Latrobe Valley Health Assembly to design and develop care pathways to improve coordination for people with chronic disease**

By December 2016, DHHS will establish a Chronic Disease Improvement Forum to assist the 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.

DHHS is working to establish the forum, including presenting at the recent 'Gippsland Primary Care Partnerships: Integrated Care Community of Practice' event.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**79. Invite primary health partner agencies to investigate options for co-location of respiratory nurses within general practices in the Latrobe Valley**

DHHS has commenced work on Actions 79, 80, 82 and 83 with the Enhancing Priority Services Project Scope. The project objectives as described in the project plan are as follows:

- Expand the existing respiratory nursing service at Latrobe Community Health Service, including co-location of the service in local General Practitioner practices (where agreed) to provide assessment and individualised treatment and support for people with breathing difficulties, including asthma and chronic obstructive pulmonary disease
- Support the Early Intervention in Chronic Disease program delivered by Latrobe Community Health Service to deliver additional allied health services and improve care coordination, multidisciplinary care and holistic care planning. Each client will see a care coordinator who, following assessment, will support the client to formulate goals to limit disease progression and develop a holistic care plan including access to allied health services as required. The frequency of client review and support will be tailored to match self-management capability

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report

**80. Provide an additional 1,000 hours of respiratory nursing service at Latrobe Community Health Service (compared to 2015–16 base level)**

**FINDING**

This action is contingent on Action 79 and IGEM will revisit in the next Annual Report.

**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)**

**FINDING**

This action is contingent on Action 78 and IGEM will revisit in the next Annual Report.

**82. Provide an additional 1,500 hours of respiratory nursing service (compared to 2015–16 base level)**

**FINDING**

This action is contingent on Action 79 and IGEM will revisit in the next Annual Report.

**83. Provide an additional 3,400 hours of allied health and care coordination services (compared to 2015–16 base level)**

**FINDING**

This action is contingent on action 79 and IGEM will revisit in the next Annual Report.



## 5.3.6 Mental Health

**Table 14:** Status of 'Mental Health' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
MENTAL HEALTH					
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 Valley Health Assembly to enhance the mental health of the Latrobe Valley community	Health Improvement Report: Recommendation 5	December 2016	Ongoing	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	December 2016	Ongoing	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	Ongoing	DHHS
87	Expand local mental health support in line with agreed community priorities	Health Improvement Report: Recommendation 5	July 2017	Ongoing	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	Ongoing	DHHS

**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 Valley Health Assembly to enhance the mental health of the Latrobe Valley community**

**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**

**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**

**87. Expand local mental health support in line with agreed community priorities**

### 88. Provide funding for the development and delivery of programs to increase awareness of mental health issues

DHHS is undertaking scoping work to establish the Latrobe Valley Community Mental Health Forum to report to and assist the health assembly. The 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.

On 17 August 2016, department representatives held a planning meeting to discuss the implementation of Actions 85 and 86.

The Forum is scheduled to be established by December 2016, with expanded mental health support and funding for awareness programs scheduled for delivery by July 2017.

#### FINDING

IGEM will revisit Actions 84 to 88 in the next Annual Report.

## 5.3.7 Expanding Options to Access Specialist Services

**Table 15:** Status of 'Expanding Options to Access Specialist Services' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
EXPANDING OPTIONS TO ACCESS SPECIALIST SERVICES					
89	Develop and implement a marketing campaign to promote telehealth as an option for accessing health services	Health Improvement Report: Recommendation 5	December 2016	Ongoing	DHHS
90	Enable telehealth capacity at more points of primary and acute healthcare	Health Improvement Report: Recommendation 5	June 2017	Ongoing	DHHS
91	Facilitate the development of telehealth education and training packages targeted to health service providers	Health Improvement Report: Recommendation 5	June 2017	Ongoing	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	Ongoing	DHHS

### 89. Develop and implement a marketing campaign to promote telehealth as an option for accessing health services

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.

DHHS will work with the 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.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**90. Enable telehealth capacity at more points of primary and acute healthcare**

DHHS has developed a draft project scope intended to increase the capacity of telehealth to improve access to specialist health services and decrease patient travel time.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**92. Facilitate the delivery of telehealth education and training packages to health service providers in the Latrobe Valley**

DHHS will work with the health assembly to develop and deliver telehealth education and training packages to health service providers in the Latrobe Valley.

**FINDING**

IGEM will revisit Actions 91 and 92 in the next Annual Report.

**91. Facilitate the development of telehealth education and training packages targeted to health service providers**

## 5.3.8 Aboriginal Health

**Table 16:** Status of 'Aboriginal Health' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
ABORIGINAL HEALTH					
93	Work with the local Latrobe Aboriginal community to identify priorities for investment	Health Improvement Report: Recommendation 7	March 2017	Ongoing	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	Ongoing	DHHS
95	Support implementation of initiatives to address priorities identified with the local Latrobe Aboriginal community	Health Improvement Report: Recommendation 7	June 2017	Ongoing	DHHS

**93. Work with the local Latrobe Aboriginal community to identify priorities for investment**

Sponsored by DHHS, the Latrobe Local Aboriginal Community Partnership Project brings together representatives from the Latrobe Valley Aboriginal communities, government agencies and service providers.

The objectives of the 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.

The Partnership Project facilitated initial discussions about improving Aboriginal health outcomes through prioritising investment at the Joint Steering Committee meeting in June 2016. With emphasis on community-led decision making,

the Partnership Project will identify initiatives that seek to achieve a significant and measurable impact on improving the length and quality of life for Aboriginal people.

Additionally, membership of the taskforce includes two representatives from the Aboriginal community which strengthens the links to existing partnerships working to improve community outcomes.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 94. Work with the Latrobe Local Aboriginal Community Partnership to scope the potential for a gathering place

The Health Improvement Inquiry report identified the positive impact of gathering places in helping to enhance Aboriginal peoples' health and social wellbeing. DHHS has contracted a consultant to engage with the local Aboriginal community regarding local solutions, which may be inclusive of a gathering place.

##### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 95. Support implementation of initiatives to address priorities identified with the local Latrobe Aboriginal community

##### FINDING

This action is contingent on Action 93 and IGEM will revisit in the next Annual Report.

### 5.3.9 Long Term Health Study

**Table 17:** Status of 'Long Term Health Study' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
LONG TERM HEALTH STUDY					
96	Provide mortality and allied data to the Long Term Health Study lead contractor	2014 Inquiry Report: Recommendation 10 and Affirmations 15 and 28	July 2015	Complete	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	November 2015	Complete	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	Ongoing	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	Ongoing	DHHS
100	Engage an independent contractor to review the scope and structure of the Long Term Health Study	Health Improvement Report: Recommendation 6	April 2016	Complete	DHHS
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	April 2016	Complete	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	May 2016	Complete	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	Complete	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	Ongoing	DHHS

#### 96. Provide mortality and allied data to the Long Term Health Study lead contractor

Monash University, as the lead contractor of the Long Term Health Study, made a formal request for mortality and allied data in order to investigate potential health effects of smoke from the Hazelwood mine fire. DHHS Victorian Data Linkages, System Intelligence and Analytics branch released the data to Monash University in response to this request in March 2016.

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 97. Publicly release the first annual Monash University Report on the Long Term Health Study

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 on the Hazelwood Health Study website<sup>6</sup>. The first annual report was published in November 2015.

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 98. Publicly release the second annual Monash University Report on the Long Term Health Study

This action is due to be completed in November 2016 and as such, progress will be reported in the next annual report.

##### FINDING

IGEM will revisit this action in the next Annual Report.

#### 99. Publicly release the third annual Monash University Report on the Long Term Health Study

This action is due to be completed in November 2017 and as such, progress will be reported in the 2018 annual report.

##### FINDING

IGEM will revisit this action in the next Annual Report.

#### 100. Engage an independent contractor to review the scope and structure of the Long Term Health Study

DHHS engaged a contractor, Deloitte Access Economics on 5 April 2016 to undertake a review of the scope and structure of the Long Term Health Study. The review was to provide:

- 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 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.

##### FINDING

IGEM considers that this action has been implemented as planned.

<sup>6</sup> <http://hazelwoodhealthstudy.org.au/reports/>

**101. Agree on a project plan for the review of the scope and structure of the Long Term Health Study**

Deloitte Access Economics provided DHHS a project plan and project summary which detailed the scope and structure of the review of the Long Term Health Study to the project management group on 18 April 2016.

**FINDING**

IGEM considers that this action has been implemented as planned.

**103. Publicly release contractor report on the review of the scope and structure of the Long Term Health Study**

DHHS publicly released the full consultant report on the review of the scope and structure of the Long Term Health Study on their website<sup>7</sup> on 29 July 2016.

**FINDING**

IGEM considers that this action has been implemented as planned.

**102. Agree on the consultation and stakeholder engagement strategy for the review of the scope and structure of the Long Term Health Study**

At the 26 April 2016 meeting of the project management group, the approach to consultation and stakeholder engagement was agreed and Deloitte Access Economics provided a confirmed stakeholder plan.

**FINDING**

IGEM considers that this action has been implemented as planned.

**104. Response to report on the review of the scope and structure of the Long Term Health Study released**

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.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

## 5.3.10 Ash in Roof Cavities

**Table 18:** Status of 'Ash in Roof Cavities' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
ASH IN ROOF CAVITIES					
105	Develop a project proposal for sampling ash residue in roof cavities in Morwell	Health Improvement Report: Recommendation 9	March 2016	Complete	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	April 2016	Complete	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	Complete	DHHS

<sup>7</sup> <http://www2.health.vic.gov.au/emergencies/hazelwood/health-study>

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	March 2016	Complete	DHHS
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	Complete	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	Ongoing	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	Ongoing	DHHS
112	Publicly release independent expert report	Health Improvement Report: Recommendation 9	June 2017	Ongoing	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	Ongoing	DHHS

#### 105. Develop a project proposal for sampling ash residue in roof cavities in Morwell

In March 2016, DHHS, in consultation with key stakeholders, developed a project proposal that outlines the approach to conducting a risk assessment of ash residue in roof cavities in Morwell.

The project plan proposes engaging an independent expert to undertake random sampling, assessment and reporting on roof cavities in Morwell for ash. DHHS also developed an engagement strategy to guide engagement with stakeholders and the community and to ensure the community has the opportunity to be actively involved in the project.

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 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

DHHS published the fact sheet 'Hazards in roof cavities – Information for householders' on their website in April 2016. The fact sheet provides general advice about hazards in roof cavities and steps people can take to protect their health when entering roof cavities.

The fact sheet is in addition to information developed to support the implementation of the ash residue in roof cavities project (Action 105).

##### FINDING

IGEM considers that this action has been implemented as planned.

**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)**

During June and July 2016, DHHS undertook a series of meetings and communications with key Latrobe Valley stakeholders to present and discuss the proposed implementation plan to assess the risk from exposure to ash in roof cavities.

**FINDING**

IGEM considers that this action has been implemented as planned.

**108. Engage an independent expert (with project management and health risk assessment expertise) to:**

- refine the proposed sampling plan for the analysis of ash residue in roof cavities
- assist with implementation of the project

DHHS undertook a tender process in July 2016 to engage an independent expert with the appropriate expertise to undertake a literature review and to manage the sampling, testing and analysis of ash residue in roof cavities.

The independent expert will design the project in order to meet Action 111 timelines. As well as testing the ash in a number of roof cavities in Morwell, the project will include an assessment of any potential risks to health from exposure to the ash.

**FINDING**

IGEM considers that this action has been implemented as planned.

**109. Establish communication tools including a dedicated web page for project updates and other tools recommended by the key stakeholders in the initial engagement**

DHHS is leading a project that will test ash residue in roof cavities in houses in Morwell (Action 105). As part of the communications for the project, DHHS has established a dedicated web page on its site for the ash project<sup>8</sup>. Two community updates are available on the web page, in addition to information about testing.

Community members can express their interest in receiving project updates and volunteering their house for testing on the page.

**FINDING**

IGEM considers that this action has been implemented as planned.

**110. Hold a community forum to engage with community stakeholders on:**

- final project plan and planned activities in Morwell
- finalised sampling plan
- communication tools

As part of the DHHS engagement strategy (refer to Action 105), a community forum has been scheduled for September 2016. Planning is underway to decide the format and venue for the forum and promote the event locally. The forum will provide an opportunity for the community to engage with the independent expert (see Action 108) regarding the ash residue in roof cavities project, including the project methodology and sampling selection criteria.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**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**

As reported for Action 108, an independent expert is being engaged to undertake the project. This action is scheduled for March 2017 and as such, progress will be reported in the next annual report.

**FINDING**

IGEM will revisit this action in the next Annual Report.

<sup>7</sup> <https://www2.health.vic.gov.au/emergencies/hazelwood/ash-project>



### 112. Publicly release independent expert report

The Victorian Government has committed to the independent consultant report being made public.

#### FINDING

This action is contingent on Actions 108 and 111 and IGEM will revisit in the next Annual Report.

### 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

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.

#### FINDING

This action is contingent on Actions 108, 111 and 112 and IGEM will revisit in the next Annual Report.

## 5.4 Air Quality and Wellbeing

The 2014 Inquiry found that the request for air quality monitoring for the Hazelwood mine fire came too late and that limited equipment and resources delayed the ability of EPA to provide data in a timely way. The Victorian Government Implementation Plan included a commitment to establishing smoke triggers for monitoring and to equip agencies to undertake rapid air monitoring to protect the health of the community.

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.

The State Smoke Working Group is co-chaired by DHHS and EMV, and includes representatives from EPA, AV, CFA, DELWP, MFB, Victoria Police and WorkSafe. The working group reports to the Victorian Government's IDC, which oversees and coordinates the Government's actions towards implementation of recommendations and affirmations.

The following themes, with associated actions, are listed under the 'Air Quality and Wellbeing' theme in the Victorian Government Implementation Plan:

- Rapid Air Quality Monitoring
- State Smoke Framework
- Develop Integrated Predictive Services Framework
- Managing Exposure to Carbon Monoxide (CO)
- Community Smoke, Air Quality and Health Standard
- National Compliance Standard
- EPA Protocols
- EPA Meta-analysis

The following progress summary provides an overview of progress being made in relation to the 'Air Quality and Wellbeing' theme.

### Progress summary

The Victorian Government Implementation Plan lists 34 actions under the 'Air Quality and Wellbeing' theme, of which 21 have now been completed.

Overall, substantial progress has been reported by EPA in acquiring rapid air monitoring equipment, working with the State Smoke Working Group to establish decision-making standards, and improving communication of incident data.

EPA has made significant improvements in its integration into the government's emergency management arrangements and its capability development to deliver rapid air quality monitoring for emergency events. EPA's air monitoring accountabilities are now included in Part 7 of the *Emergency Management Manual of Victoria (EMMV)*.

A number of key policies, procedures and standards have been developed, as part of the State Smoke Framework, to guide the deployment of air monitoring equipment, data collection and analysis and communication of air quality information to key decision makers and the community.

National compliance standards for PM2.5 particulates were established in May 2016 and formally adopted by the Victorian Government in the State Environment Protection Policy for Ambient Air Quality in July 2016.

Work is underway to develop an integrated predictive services framework which will inform decision-making about hazards, including bushfires, smoke, toxic plumes and floods, by predicting the impacts of an event. These predictions aid decision makers to plan community warnings and response actions prior to communities being impacted by hazards such as smoke.

### 5.4.1 Rapid Air Quality Monitoring

**Table 19:** Status of 'Rapid Air Quality Monitoring' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
RAPID AIR QUALITY MONITORING					
114	Endorse the Rapid Deployment of Air Quality Monitoring for Community Health Guideline	2014 Inquiry Report: Recommendation 5 and Affirmation 17	October 2015	Complete	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	December 2015	Complete	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	March 2016	Complete	EPA
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	Ongoing	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	Ongoing	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	Ongoing	EPA
120	Pre-deploy smoke monitors to identified high-risk sites across regional Victoria	2014 Inquiry Report: Recommendation 5 and Affirmation 17	April 2017	Ongoing	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	Ongoing	EPA
122	Deliver a fully functional integrated air quality monitoring and information systems	2014 Inquiry Report: Recommendation 5 and Affirmation 17	June 2017	Ongoing	EPA

#### 114. Endorse the Rapid Deployment of Air Quality Monitoring for Community Health Guideline

The Rapid Air Quality Monitoring Response Model was designed to assist decision makers such as incident controllers (ICs) to determine when and how community air monitoring should be implemented to manage health and safety impacts on affected communities during smoke events, based on air quality monitoring data.

Over the 2014-15 summer season, rapid deployment of air quality monitoring equipment was managed by EPA under a single agency response procedure. Following the 2014-15 summer season, the single agency response procedure was replaced with an all-agencies approach to deployment.

The all-agencies approach was first released as a guideline by EMV in October 2015, and was subsequently released in December 2015 as Joint SOP (JSOP) 03.18 for Rapid Deployment of Air Quality Monitoring for Community Health.

#### FINDING

IGEM considers that this action has been implemented as planned.

#### 115. Endorse the JSOP 03.18 for Rapid Deployment of Air Quality Monitoring for Community Health

A JSOP is a procedural document that aims to ensure clarity of roles and avoid miscommunication.

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 ICs in evaluating events that may produce smoke impacting on communities
- directions for communicating decisions on a rapid air quality monitoring response.

JSOP 03.18 was utilised during the 2015–16 summer season, with equipment for rapid air quality monitoring deployed to emergency events as needed. Monitoring data and information was provided by EPA to DHHS to assist public health decisions.

#### FINDING

IGEM considers that this action has been implemented as planned.



Air monitoring equipment

#### 116. Deliver rapid response monitoring capacity for PM2.5 and CO, including transitional data and information management processes for decision making during an event

As reported in the 2015 Annual Report, EPA purchased rapid response monitoring equipment for PM2.5.

EPA released a tender in July 2015 to purchase rapid response (Tier 2) equipment for Carbon Monoxide (CO), ozone, nitrogen and sulphur dioxides and volatile organic compounds. The equipment was delivered and, as part of a commitment to being equipped to monitor CO by December 2015, training was conducted for relevant EPA staff in the deployment and operation of both PM2.5 and CO equipment for the 2015–16 summer season. For the first time, the standard fire season preparedness briefings for emergency services agencies (including regional controllers) introduced information on the trigger levels and process for the deployment of rapid air monitoring.

During the 2015–16 summer season, there were three fire events where EPA conducted incident air monitoring. PM2.5 air monitoring equipment was deployed to each of these events. The deployment procedures included the EPA Alert Forecaster extracting the monitoring data from the data acquisition system, analysing and interpreting the data and the EPA Science Coordinator providing it to DHHS.

#### FINDING

IGEM considers that this action has been implemented as planned.

#### 117. Refine the response model, decision support tools and deployment procedures for 2016/17 summer fire season by incorporating lessons learned

EPA held debriefs with DHHS after the three deployments in 2015–16 to evaluate what worked well and what needed improvement. EPA will work with stakeholders in the lead-up to the 2016–17 summer season to incorporate lessons and further refine the JSOPs and internal SOPs for deployment of incident air monitoring.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 118. Two mobile stations built and operational for deployment to complex events of extended duration and significant community impact

Two mobile air quality monitoring stations, with more sensitive, higher quality instrumentation (tier 3 equipment), will be built for longer-term deployment to complex smoke events of extended duration that significantly impact upon communities. EPA has worked on the design of the new portable stations in the first half of 2016, with construction expected to be completed by December 2016. EPA is also re-purposing an existing mobile station to be ready for deployment in October 2016, including a test deployment in September 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 119. Train relevant staff in EPA regional offices in air quality equipment deployment during emergency events

As noted in Action 116, relevant staff were trained in the deployment and operation of rapid response monitoring equipment (tier 2) for the 2015–16 summer season. EPA is also working to identify further staff for rapid response monitoring and extended duration air monitoring equipment (tier 3) deployment roles. EPA will train staff identified for these roles by 1 October 2016 in preparation for the 2016–17 summer season.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 120. Pre-deploy smoke monitors to identified high-risk sites across regional Victoria

Ten smoke detection monitors will be pre-deployed to high risk areas in regional Victoria, to enable the commencement of monitoring during the early stages of a smoke event and the provision of smoke-related information to first responders. EPA has developed the specification for the monitors following the Government announcement of State Budget funding on 15 April 2016 to expand smoke detection capacity across the State. The smoke detection monitors are expected to be pre-deployed to regional Victoria by April 2017.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 121. Establish EPA and VICSES partnership and train VICSES staff in deployment of smoke monitors

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 regional areas. EPA and VICSES have commenced discussions about locating smoke monitors at VICSES sites.

Training in the deployment of smoke monitors will be provided by EPA staff to relevant emergency services staff by April 2017.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 122. Deliver a fully functional integrated air quality monitoring and information systems

The information infrastructure and systems supporting delivery of incident response air quality monitoring consists of three components:

- data acquisition, which involves transferring data from instruments into EPA's systems
- storing and processing of the data internally
- communicating information to decision makers.

EPA identifies three groups of decision makers in the context of incident response monitoring. These are DHHS for public health messages, emergency services for Occupational Health and Safety (OHS) and operational decisions, and the community for making their own decisions around their wellbeing.

As detailed in Action 116, the capability to acquire data, store and process it internally as well as share it with emergency services and DHHS was successfully tested through deployments during the 2015–16 summer season.

EPA identified improvements to the display of air data on the EPA website as the air quality information could be confusing to the community during an emergency. The decision to revise data display systems did not impact EPA's ability to deliver data to DHHS and emergency services, and it provided the community with important context about DHHS smoke messaging.

The new AirWatch website<sup>9</sup> was released on 7 January 2016 and updated in July 2016 based on feedback from the community.

<sup>9</sup> <http://www.epa.vic.gov.au/our-work/monitoring-the-environment/epa-airwatch/about-epa-airwatch>

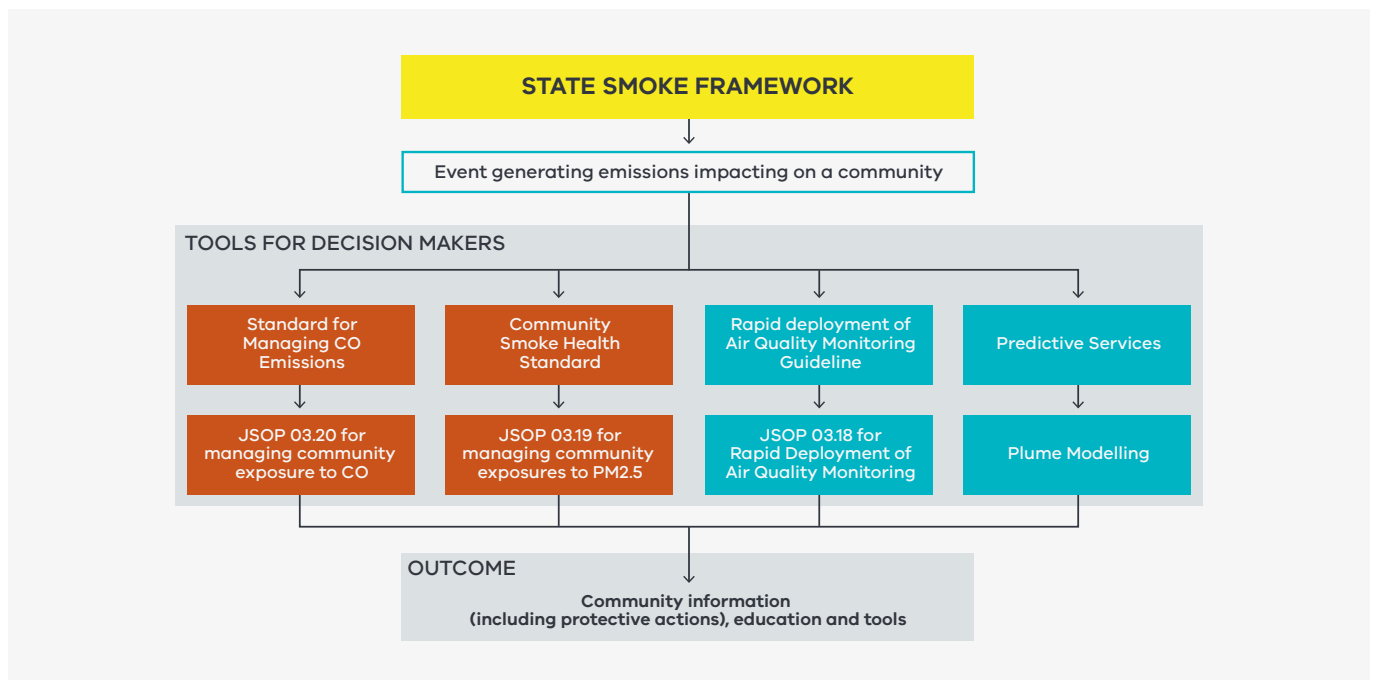
EPA is updating AirWatch to allow it to display incident monitoring data from particulates, CO and ozone monitoring during an event over the 2016-17 summer season. EPA continues to work to improve information infrastructure to provide a solution that will allow the capture and display of data from external sources and integration with the EM-COP public platform.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

## 5.4.2 State Smoke Framework

**Figure 3:** State Smoke Framework



**Table 20:** Status of 'State Smoke Framework' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
STATE SMOKE FRAMEWORK					
123	Endorse State Smoke Framework, Version 2.0	2014 Inquiry Report: Recommendation 9 and Affirmations 24 and 25	December 2015	Complete	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	December 2015	Complete	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	May 2016	Complete	EMV

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	May 2016	Complete	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	Complete	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	Ongoing	CFA

### 123. Endorse State Smoke Framework, Version 2.0

The State Smoke Framework identifies the types of events, tools and processes that facilitate coordinated planning, decision-making and emergency response management in Victoria.

Events include smoke or emissions from extended bushfires, large-scale planned fuel reduction, landfill and waste facility fires, open-cut coal mine fires, industrial and HAZMAT fires, or emissions from chemical fires and spills.

The framework brings together existing and developing strategies and tools for smoke management measures. Version 2.0 of the State Smoke Framework was endorsed in December 2015.

#### FINDING

IGEM considers that this action has been implemented as planned.

### 124. Revise the fire warning templates to include smoke and health messaging

Victorian emergency management agencies currently use the OSOM system to issue the following types of community messaging:

- advice
- watch and act
- emergency warning
- advice – all clear
- recommendation to evacuate
- community updates.

The features of OSOM will be incorporated into a revised version of EM-COP in 2016 (further information available under Action 15). DHHS and EMV have collaborated on the inclusion of improved smoke health information in all warning templates for bushfire, grassfire, structure fire and HAZMAT incidents.

General smoke messages have been included in the templates to ensure that the community is provided with general advice in either of the following situations:

- events which are not expected to be prolonged or significant (and which do not trigger community air quality monitoring by EPA Victoria)
- events which are expected to be prolonged or significant but where EPA has not yet commenced air quality monitoring in the community.

General smoke messages will be replaced by specific smoke messages in the event that air quality monitoring is occurring in the community and specific triggers are reached, in accordance with relevant guidelines and procedures. Smoke and health information was included in community messaging for various incidents over the 2015–16 fire season, including the Wye River-Jamieson Track fire.

#### FINDING

IGEM considers that this action has been implemented as planned.



**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)**

Throughout 2015, a range of high level policy documents were developed and released including:

- State Smoke Framework (Version 2 – September 2015)
- Community Smoke Air Quality and Health Protocol (Version 2 – July 2015)
- Standard for Managing Significant CO Emissions (Version 2 – July 2015)
- Rapid Deployment of Air Monitoring for Community Health (Version 1 – October 2015).

The aim of the collective arrangements, the State Smoke Framework, is to support a more collaborative and coordinated approach to manage the short and long-term risk of smoke and other hazardous emissions.

In 2015, the Emergency Management Commissioner (EMC) requested independent consultants lead a review of the application of the State Smoke Framework and associated protocols at the Somerton Tip Fire, which began on 20 November 2015.

The aim of the review was to document the arrangements put in place to address smoke impacts of the Somerton Tip Fire on responders and the surrounding community. The review included analysis of incident documentation and interviews with key incident and emergency management personnel.

In May 2016, following the review, the report was presented to the State Control Team (SCT), State Coordination Team, State Emergency Management Team (SEMT) and the State Smoke Working Group.

**FINDING**

IGEM considers that this action has been implemented as planned.

**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**

The independent consultant report on the review of the use of the State Smoke Framework and associated protocols during the Somerton tip fire (as described under Action 125) has been publically released on the EMV website.

**FINDING**

IGEM considers that this action has been implemented as planned.

**127. Engage appropriate experts to undertake a review of internationally recognised graduated smoke frameworks and the epidemiological basis for these frameworks**

DHHS advises that the Department of Health, Western Australia is leading a project, through the national Environmental Health Standing Committee (enHealth), to develop a nationally consistent approach for agencies involved in responding to fire incidents and assessing the potential public health risk of bushfire smoke. A literature review was undertaken and included:

- composition of bushfire smoke
- bushfire smoke health effects
- which particulate matter concentrations are important
- particulate matter concentrations during bushfires.

The literature review was peer reviewed by an independent expert from the University of Tasmania. Evidence submitted to IGEM indicates that work completed to date has also considered international practice in relation to smoke exposure. DHHS is providing ongoing input and support to the project.

Given a literature review has been completed as part of the broader project to develop national consistency and to consider international practice in relation to community health impacts from smoke, IGEM considers this action to be complete.

**FINDING**

IGEM considers that this action has been implemented as planned.

**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**

CFA has previously worked with MFB in relation to plume modelling, with CFA developing a modelling capability based around the ALOHA model<sup>10</sup> and MFB developing a shelter-in-place best practice approach for community advice.

<sup>10</sup> ALOHA (Areal Locations of Hazardous Atmospheres) is computer modelling software developed jointly by the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (USEPA), is able to estimate indoor air concentrations during an atmospheric chemical release, however, this software assumes a typical air exchange value for all low-rise buildings (Source: [http://www.cfa.vic.gov.au/fm\\_files/attachments/Publications/sip\\_bestpractice.pdf](http://www.cfa.vic.gov.au/fm_files/attachments/Publications/sip_bestpractice.pdf)).

CFA has commenced a predictive services and plume modelling project with the following objectives:

- provide a comprehensive multi-agency plume modelling platform for toxic atmospheric releases from HAZMAT incidents and structure/urban type fires
- provide auto-forecasting and real time modelling capability
- improve modelling operator capacity.

The project will allow for improved prediction of downwind hazards, providing increased situational awareness.

Other project benefits include:

- the ability to model downwind hazards from fires
- an automated capability providing faster delivery of products

- multi-agency delivery across services and products through knowledge and content sharing
- consolidation and mitigation of weaknesses that exist in current arrangements.

The project management plan indicates that the project will be completed in June 2017.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 5.4.3 Develop Integrated Predictive Services Framework

**Table 21:** Status of 'Develop integrated predictive services framework' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
DEVELOP INTEGRATED PREDICTIVE SERVICES FRAMEWORK					
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	Complete	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	Ongoing	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	Ongoing	DELWP
132	Build an ICT platform for hazard prediction (including smoke) models	2014 Inquiry Report: Recommendation 9 and Affirmations 24 and 25	June 2017	Ongoing	DELWP
133	Design data management requirements for the Predictive Services Framework	2014 Inquiry Report: Recommendation 9 and Affirmations 24 and 25	March 2017	Ongoing	DELWP
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	Ongoing	DELWP



### 129. Establish sector governance arrangements for the Predictive Services Framework, including Project Control Board comprising representation from EMV, DELWP, CFA and MFB

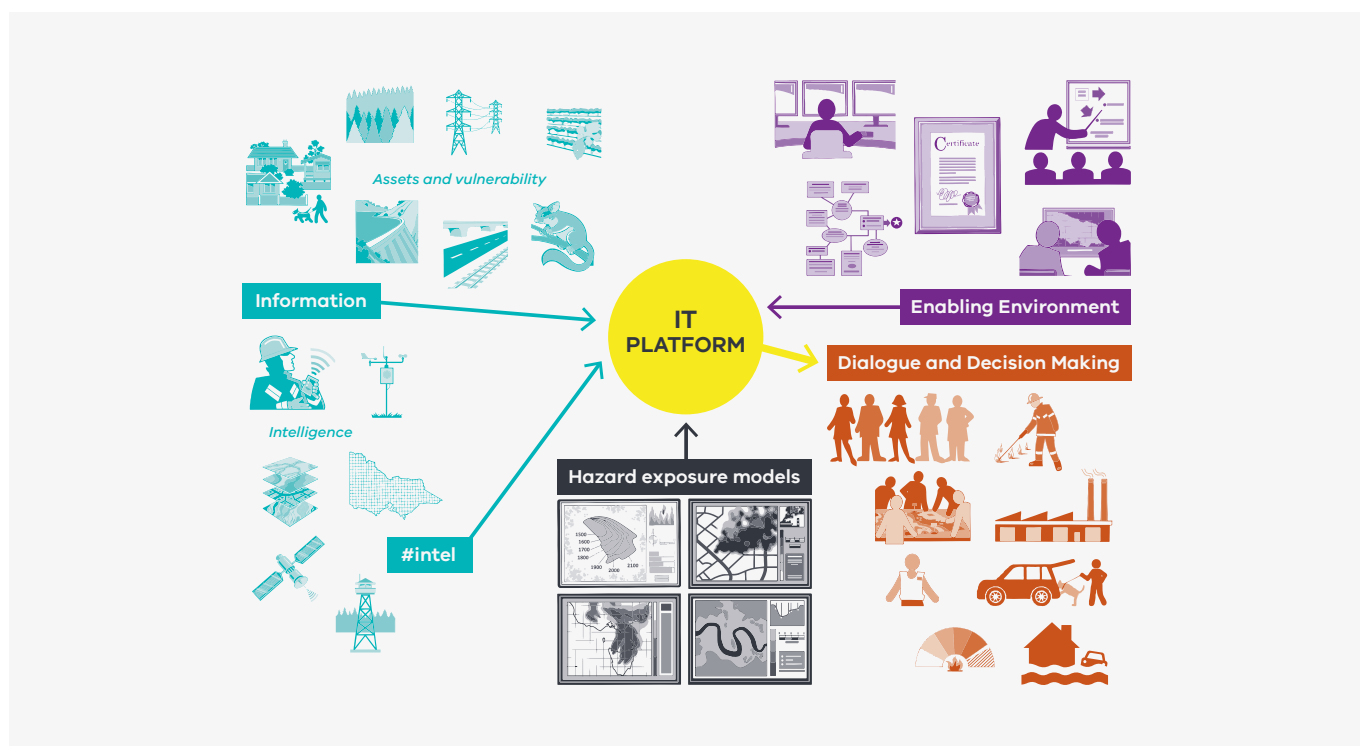
DELWP, as the lead for the development of an integrated predictive services framework, has established a Project Control Board (PCB). The PCB has approved Terms of Reference and representation from EMV, DELWP, CFA and MFB. The governance arrangements for the framework have been mapped to ensure the PCB is linked with established Victorian emergency management governance.

The predictive services framework will be an Information and Communications Technology (ICT) platform and system of intelligence and vulnerability data, information and hazards exposure models and tools. These inform decision-making about hazards, including bushfires, smoke, toxic plumes and floods, by predicting the impacts of an event.

#### FINDING

IGEM considers that this action has been implemented as planned.

Figure 4: Predictive Services Framework



### 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

Predictive services provide valuable intelligence to support the decisions made by emergency managers, IMTs and community members. Services are based on risk models that encompass hazard, exposure and vulnerability datasets underpinned by geographical analysis and visualisation platforms.

Systems allow for risks to be identified prior to impact, allowing for proactive plans to be developed and implemented to minimise damage and enhance public safety.

The Risk Frontiers research centre was engaged by DELWP to develop an understanding of how predictive services can improve hazard management discussions and decision making among community, industry and emergency management

stakeholders. Risk Frontiers produced a draft report for DELWP in July 2016 that included findings from initial stakeholder and community workshops focused on planned burning, smoke and bushfire.

Three further workshops are planned in late August 2016, on the theme of toxic smoke emissions. In September 2016, a workshop with DHHS and EPA staff will include a community smoke exposure and decision making scenario. This action is expected to be completed by December 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### **131. Design an ICT system architecture (design) for the Predictive Services ICT Platform**

DELWP engaged an ICT system architect to design the system architecture for the predictive services platform. The system architect will consult with Victoria's emergency management sector to conduct an options analysis and design a system architecture.

The options analysis and architecture will then be presented to the Predictive Services PCB. This action is expected to be completed by September 2016.

#### **FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### **132. Build an ICT platform for hazard prediction (including smoke) models**

The building of an ICT platform for predictive services technology is expected to begin in October 2016. This action is due to be completed in June 2017 and as such, progress will be reported in the next Annual Report.

#### **FINDING**

IGEM will revisit this action in the next Annual Report.

### **133. Design data management requirements for the Predictive Services Framework**

An assessment of data management requirements for the Predictive Services system will be commenced as part of the ICT system design (Action 131). This action is due to be completed in March 2017 and as such, progress will be reported in the next Annual Report.

#### **FINDING**

IGEM will revisit this action in the next Annual Report.

### **134. Incorporate Predictive Services smoke intelligence module, to incorporate social media, field sensors and satellite image data to calibrate and validate smoke predictions**

DELWP has established high level business requirements for smoke impact management to guide research needs for the department. An expression of interest to research and build a dynamic smoke intelligence module using remote sensing and fixed sensors will be released by the Bushfire and Natural Hazards Cooperative Research Centre (BNHCRC) in August 2016.

This project will engage researchers to develop means of dynamically assessing the extent and concentration of smoke using remote sensing and fixed sensors. The project will also review opportunities to integrate social media and health monitoring intelligence. This action is due to be completed in June 2018 and as such, progress will be reported in the next Annual Report.

#### **FINDING**

IGEM will revisit this action in the next Annual Report.

## 5.4.4 Managing Exposure to Carbon Monoxide

**Table 22:** Status of 'Managing Exposure to Carbon Monoxide' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
MANAGING EXPOSURE TO CARBON MONOXIDE					
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	July 2015	Complete	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	December 2015	Complete	DHHS

### 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:

- Latrobe Valley Coal Fire Carbon Monoxide Response Protocol (February 2014)
- Standard for Managing Significant Carbon Monoxide Emission (for Occupational Exposure) (August 2014)

The Standard for Managing Exposure to Significant CO Emissions forms part of the State Smoke Framework suite of tools and provides guidance for decision makers to manage health and safety of all personnel and affected communities during large, complex incidents that have the capacity to produce significantly elevated levels of CO outdoors.

The Standard is an updated version of the Standard for Managing Significant CO Emissions approved in January 2015 by the CHO (DHHS) and the EMC (EMV).

The standard has been amended to reflect recommendations from an independent expert panel review. The revised standard was authorised in July 2015 by the EMC and Acting CHO.

#### FINDING

IGEM considers that this action has been implemented as planned.

### 136. Endorse the JSOP 03.20 for Managing Significant Community Exposure to Carbon Monoxide from Smoke

JSOP 03.20 details the arrangements between relevant agencies for the provision of air quality monitoring information and the process for communicating corresponding health protection messages to the affected community during a significant or prolonged event which generates CO from smoke.

JSOP 03.20 was approved by the EMC and endorsed by the Acting CHO, DHHS and Chief Executive Officer, EPA in December 2015.

#### FINDING

IGEM considers that this action has been implemented as planned.

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

**Table 23:** Status of 'Community Smoke, Air Quality and Health Standard' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
COMMUNITY SMOKE, AIR QUALITY AND HEALTH STANDARD					
137	Endorse the Community Smoke, Air Quality and Health Protocol	2014 Inquiry Report: Recommendation 8 and Affirmation 19	July 2015	Complete	DHHS
138	Endorse the Community Smoke, Air Quality and Health Standard	2014 Inquiry Report: Recommendation 8 and Affirmation 19	December 2015	Complete	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	December 2015	Complete	DHHS and EMV

#### 137. Endorse the Community Smoke, Air Quality and Health Protocol

The Community Smoke, Air Quality and Health Protocol provided direction to all agencies for the protection of community health in response to large, extended or complex fires resulting in significant levels of fine particles in the outdoor environment. This protocol has now been superseded by the Community Smoke, Air Quality and Health Standard (Action 138).

As noted in the 2015 Annual Report, the protocol was authorised by the CHO, DHHS and Chief Executive Officer EPA and endorsed by the EMC in July 2015.

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 138. Endorse the Community Smoke, Air Quality and Health Standard

The Community Smoke, Air Quality and Health Standard is part of the State Smoke Framework suite of tools and provides guidance for protecting communities during smoke events that have the potential to generate significant levels of fine particles in the air. The standard is supported by cross-government SOP's that define agency-level actions for protecting community health. In particular, it details the basis for air quality categories which will trigger advice to the community during such events.

This standard and the associated SOPs retain amendments to the superseded protocol (Action 137) that were based on recommendations from an independent expert panel review of the Hazelwood mine fire PM2.5 health protection protocol and the Bushfire smoke, air quality and health protocol.

The standard was authorised by the Acting CHO, DHHS and Acting Chief Executive Officer, EPA and endorsed by the EMC in December 2015.

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 139. Endorse the JSOP 03.19 for Managing Significant Community Exposures to Fine Particles from Smoke

The purpose of JSOP 03.19 is to detail the arrangements between relevant agencies for the provision of air quality monitoring information and the process for communicating corresponding health protection messages to the affected community during a significant or prolonged event which generates fine particles, such as PM2.5 and PM10, from smoke.

The JSOP was approved by the EMC and endorsed by the Acting CHO, DHHS and Chief Executive Officer, EPA in December 2015.

JSOP 03.19 is supported by JSOP 03.20 (see Action 136), which is an operational protocol that provides step-by-step guidance for responding to incidents that generate significant levels of CO in the outdoor environment.

##### FINDING

IGEM considers that this action has been implemented as planned.

## 5.4.6 National Compliance Standard

**Table 24:** Status of 'National Compliance Standard' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
NATIONAL COMPLIANCE STANDARD					
140	Advocate for NEPC decision on particulate standards for NEPM AAQ	2014 Inquiry Report: Recommendation 6 and Affirmation 23	December 2015	Complete	EPA
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	Complete	DELWP and EPA

### 140. Advocate for NEPC decision on particulate standards for NEPM AAQ

As reported in the 2015 Annual Report, the Victorian Government has advocated for a PM2.5 compliance standard by writing to all Commonwealth, State and Territory Environment Ministers seeking support for a standard. The issue was discussed at the Heads of EPA meeting in April 2015 and Victorian senior officials and the Victorian Minister for the Environment were briefed prior to relevant meetings.

The National Environment Protection (Ambient Air Quality) Measure (NEPM AAQ) sets monitoring and reporting standards and requirements for CO, nitrogen dioxide, photochemical oxidants (as ozone), sulphur dioxide, lead and PM10 particles, with an advisory reporting standard for PM2.5 particles.

On 13 May 2014, the National Environment Protection Council (NEPC) gave notice of its intention to vary the NEPM AAQ for particles based on the latest scientific understanding of the health risks arising from airborne particle pollution.

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/m<sup>3</sup> and 25µg/m<sup>3</sup> respectively, aiming to move to 7µg/m<sup>3</sup> and 20µg/m<sup>3</sup> respectively by 2025
- annual average PM10 particles of 25µg/m<sup>3</sup>.

The variation to the NEPM was registered on the Federal Register of Legislative Instruments on 2 February 2016 and went through a required procedural Commonwealth parliamentary disallowance period, which ended on 4 May 2016. The updated NEPM, which includes the variation, is now in force<sup>11</sup>.

#### FINDING

IGEM considers that this action has been implemented as planned.

### 141. Amend the SEPP AAQ to formally adopt the national PM2.5 standard, once approved

The SEPP (Ambient Air Quality) (SEPP AAQ) is the instrument under which Victoria formally adopts the national standards in the NEPM. In anticipation of the conclusion of the formal disallowance period on 4 May 2016, DELWP and EPA commenced preparatory works to begin the process to vary the SEPP AAQ.

The Minister for Energy, Environment and Climate Change was briefed and signed the Governor-in-Council papers which include the SEPP AAQ variation in June 2016. The papers were lodged with the Clerk of Executive Council on 18 July 2016 to go before the Meeting of Executive Council on 26 July 2016. The SEPP AAQ variation was passed by Executive Council at the meeting and gazetted in the Government Gazette on 28 July 2016, which gives effect to the changes.

#### FINDING

IGEM considers that this action has been implemented as planned.

<sup>11</sup> See <https://www.legislation.gov.au/Details/F2016C00215>

### 5.4.7 EPA Protocols

**Table 25:** Status of 'EPA Protocols' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
EPA PROTOCOLS					
142	Revise the EPA's emergency management accountabilities	2014 Inquiry Report: Affirmation 16	October 2015	Complete	EPA
143	Conduct exercises to test EPA protocols	2014 Inquiry Report: Affirmation 16	October 2015	Complete	EPA
144	Establish the Environment Protection Incident Management System, using the AIIMS structure	2014 Inquiry Report: Affirmation 16	December 2015	Complete	EPA
145	Refine the relevant EPA protocols, incorporating lessons from exercises	2014 Inquiry Report: Affirmation 16	December 2015	Complete	EPA
146	Train staff in emergency management and response protocols for 2015–16 summer fire season	2014 Inquiry Report: Affirmation 16	December 2015	Complete	EPA

#### 142. Revise the EPA's emergency management accountabilities

The EPA has undertaken a comprehensive review of its emergency management accountabilities in order to align them with the wider emergency management sector. EPA established its new Emergency Management Framework in June 2015 to provide clarity around roles, responsibilities, response action and decision making in emergencies.

EPA has restructured the organisation and established new roles to ensure these accountabilities will be delivered. This includes the establishment of a new unit, the Emergency Management, Field Issues and Safety Unit.

The revised accountabilities have been incorporated into Part 7 of the EMMV, which describes the roles and accountabilities for the emergency management sector.

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 143. Conduct exercises to test EPA protocols

The EPA has completed a series of exercises to test proposed activation protocols and incident response models, including ePIMS (action 144) and communications system testing, and the deployment of EPA's rapid air monitoring capability.

##### FINDING

IGEM considers that this action has been implemented as planned.

#### 144. Establish the Environment Protection Incident Management System, using the AIIMS structure

In December 2015, EPA established ePIMS to manage and provide support during emergencies. ePIMS is based on the Australasian Inter-service Incident Management System (AIIMS) structure, the system used by emergency management agencies for incident response. 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 and in concert with other sector agencies.

##### FINDING

IGEM considers that this action has been implemented as planned.

**145. Refine the relevant EPA protocols, incorporating lessons from exercises**

EPA reviewed the emergency management protocols after participating in exercises to test their effectiveness (Action 143). The lessons from these exercises were incorporated into the protocols in preparation for the 2015–16 summer season. The refined EPA protocols and emergency management accountabilities (Action 142) were outlined in the EPA 2015–16 Summer Readiness Plan, which provided an effective, comprehensive reference for EPA staff undertaking emergency roles.

**FINDING**

IGEM considers that this action has been implemented as planned.

**146. Train staff in emergency management and response protocols for 2015–16 summer fire season**

In the lead up to the 2015–16 summer season, EPA developed and delivered training packages to familiarise staff with emergency management arrangements and the ePIMS system (Action 144). Packages to train staff to work in Emergency Management Liaison Officer (EMLO) roles and command roles were also delivered.

**FINDING**

IGEM considers that this action has been implemented as planned.

## 5.4.8 EPA Meta-analysis

**Table 26:** Status of 'EPA Meta-analysis' action

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
EPA META-ANALYSIS					
147	Release a report on information and knowledge generated from the Hazelwood Mine Fire meta-analysis	2014 Inquiry Report: Affirmation 18	December 2016	Ongoing	EPA

**147. Release a report on information and knowledge generated from the Hazelwood Mine Fire meta-analysis**

As reported in the 2015 Annual Report, 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 endorsed in April 2015. EPA has established a working group of partner agencies, including CFA, DELWP, DHHS, EMV and MFB, to oversee delivery and four meta-analysis information reports were released.

EPA and the CSIRO have finalised a further *Analysis of air quality during the Hazelwood mine fire* report, which summarises the air quality measurements made by organisations including EPA, CFA and CSIRO. The Hazelwood Mine Fire Database, which houses the full collation of data collected during and after the Hazelwood mine fire, was also finalised by EPA and CSIRO.

EPA will continue to coordinate the meta-analysis and make the information publicly available. A final report on the complete body of information and knowledge generated from the Hazelwood mine fire meta-analysis is due to be released by the end of 2016.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.



## 5.5 Latrobe Valley Coal Mine Regulation

A significant theme identified from the 2014 Hazelwood Mine Fire Inquiry and the Mine Rehabilitation Inquiry Report is the need to make improvements to coal mine regulation in the Latrobe Valley.

DEDJTR, WorkSafe and EPA are responsible for regulating Latrobe Valley coal mines.

The 2014 Hazelwood Mine Fire Inquiry found that, due to evolving coal mine regulatory responsibilities of the mining regulators, DEDJTR and WorkSafe:

“the Hazelwood mine fire was a foreseeable risk that slipped through the cracks between regulatory agencies”<sup>12</sup>.

As such, the Board of Inquiry identified gaps in the regulation of the Hazelwood mine in relation to fire risks.

This section details the Government’s response to recommendations and affirmations in the 2014 and reopened Inquiry Reports that relate specifically to Latrobe Valley coal mine regulation.

### Progress summary

The Victorian Government Implementation Plan lists 15 actions under the ‘Latrobe Valley Coal Mine Regulation’ theme, of which four have now been completed.

IGEM considers that significant improvements have been made in relation to the regulation of Latrobe Valley coal mines. Amendments to the *Mineral Resources (Sustainable Development) Act 1990* have commenced which require that when a work plan variation is submitted, that it must comply with the risk-based work plan requirements which include consideration and management of geotechnical, rehabilitation and fire risks, especially in terms of prevention, mitigation and suppression of fire risks.

DEDJTR established the Mine Fire and Emergency Unit (MFEU) in March 2016 to lead its regulatory, compliance and education activities related to mine fire safety and other emergency events related to coal mine fire management.

This unit will also coordinate Earth Resources Regulations’ emergency preparedness and response activities. DEDJTR is currently involved in a number of longer term actions to reform the Latrobe Valley coal mines’ regulatory framework that will require the operators of the Latrobe Valley coal mines to manage risks to the environment and public safety.

A strategy has also been developed to minimise the risk of unacceptable levels of dust impacting the local community as a result of the mining of coal in the Latrobe Valley.

IGEM notes that, as at the cut off date for receipt of evidence, work was still in progress to establish a Victorian Earth Resources Regulator Form, which was due in July 2016.

**Table 27:** Status of ‘Latrobe Valley Coal Mine Regulation’ actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
LATROBE VALLEY COAL MINE REGULATION					
148	Develop a Latrobe Valley Mine Dust – Industry Sector Strategy	2014 Inquiry Report: Recommendation 4	September 2015	Complete	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	December 2015	Complete	DEDJTR
150	Endorse schedules to the DEDJTR and EPA Statement of Agreement	2014 Inquiry Report: Recommendation 4	December 2015	Complete	DEDJTR and EPA
151	Establish a Mine Fire and Emergency Unit	2014 Inquiry Report: Recommendation 4	March 2016	Complete	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	Ongoing (Overdue)	DEDJTR

<sup>12</sup> Hazelwood Mine Fire Inquiry Report 2015/2016, Volume IV – Mine Rehabilitation, p. 18.



153	Undertake twice yearly workshops on the MOU between DEDJTR and WorkSafe	2014 Inquiry Report: Recommendation 4	twice yearly (transition to BAU July 2017)	Ongoing	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	Ongoing	WorkSafe
155	Deliver DEDJTR ERR 2015–16 Action Plan	Mine Rehabilitation Report: Affirmation 2	September 2016	Ongoing	DEDJTR
156	Employ or engage suitable expertise in mine closure and rehabilitation liability assessments	Mine Rehabilitation Report: Recommendation 2	December 2016	Ongoing	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	Ongoing	DEDJTR and CFA
158	Develop progressive rehabilitation milestones, with support from the TRB or other experts	Mine Rehabilitation Report: Recommendation 4	December 2016	Ongoing	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	Ongoing	DEDJTR
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	Ongoing	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	Ongoing	DEDJTR
162	Implement policy, administrative and legislative reforms for the Latrobe Valley Coal Mines' regulatory framework	Mine Rehabilitation Report: Recommendation 17	June 2018	Ongoing	DEDJTR

#### 148. Develop a Latrobe Valley Mine Dust – Industry Sector Strategy

To strengthen regulatory oversight of dust mitigation management in the Latrobe Valley coal mines, EPA and the ERR branch within DEDJTR jointly established the two-year Latrobe Valley Mine Dust Industry Sector Strategy (the Strategy) in September 2016. This is in accordance with the Statement of Agreement signed by EPA and ERR in May 2015.

The Latrobe Valley Mine Dust Industry Sector Strategy sets out a collaborative approach between ERR and EPA using the regulatory powers of each agency to minimise the risk of unacceptable levels of dust impacting the local community as a result of the Latrobe Valley Coal Mines.

The objectives of the Strategy are as follows:

- best practice dust management is implemented across the Latrobe Valley coal mines that uses the most effective and practicable means to minimise the risk to amenity and human health for the local community posed by dust emanating from the mines
- whilst ERR is recognised as the lead regulator for earth resources industries, a joint regulatory approach is adopted by EPA and ERR for effective and efficient dust management
- providing community confidence that concerns are acted upon as a whole of Government approach.

With ERR as the lead regulator, the Strategy outlines a joint Strategic Dust Mitigation Action Plan (the Plan) using the powers of each regulatory agency. The Strategy also includes a Monitoring and Evaluation Plan to ensure that actions within the Plan are subject to periodic review during the life of the strategy to assess effectiveness and implementation.

Since coming into effect, the Strategy has been applied several times. This includes a dust event in December 2015 where both EPA and ERR examined the incident in relation to community impact, the impact of weather on dust generation as well as other matters, to investigate options for regulatory action.

The Strategy was also applied following a joint EPA and ERR Environmental Dust Coal Mine Targeted Audit of all three Latrobe Valley coal mines in 2015 where recommendations were made for each mine. Recommendations were made across a number of themes including: Modelling and Prediction; Planning and Operation; Site Management; Monitoring and Assessment; and Consultation and Follow-up.

#### FINDING

IGEM considers that this action has been implemented as planned.

#### 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

To address Recommendation 4 of the 2014 Hazelwood Mine Fire Inquiry, the *MR(SD) Act 1990* was amended in February 2014 to move towards risk-based Work Plans. The new clause in the *MR(SD) Amendment Act 2014* 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.

The Victorian Government advised the Hazelwood Mine Fire Inquiry that these amendments may not come into operation until 31 December 2016. After receiving advice from the Hazelwood Mine Fire Inquiry, government agreed to bring forward the commencement date to 8 December 2015.

On 8 December 2015, sections 16 and 27 of the *MR(SD) Amendment Act 2014* commenced. This is reflected in section 40(3) of the *MR(SD) Act 2014* and the *MR(SD) (Mineral Industries) Amendment (Risk-Based Work Plans) Regulations 2015*.

#### FINDING

IGEM considers that this action has been implemented as planned.

#### 150. Endorse schedules to the DEDJTR and EPA Statement of Agreement

DEDJTR (ERR) and EPA signed a Statement of Agreement in April 2015, that documents their respective roles and responsibilities for the regulation of the earth resources industries, to minimise adverse impacts on the environment and communities.

To support the Statement of Agreement, DEDJTR and EPA worked collaboratively between April and December 2015 to develop schedules detailing how it is to be implemented. This included an EPA-hosted workshop held on 25 September 2015 for Executive Directors from both organisations to provide feedback on the draft content of the schedules.

Six schedules to the DEDJTR and EPA Statement of Agreement have been developed and were co-signed by Executive Directors from ERR and EPA on 22 December 2015. These were:

- Schedule 1 – Policy and Guidelines
- Schedule 2 – Approvals and Licensing
- Schedule 3 – Operations and Compliance
- Schedule 4 – Emergency Management (revised from agreed interim version)
- Schedule 5 – Rehabilitation and Post-Closure
- Schedule 6 – Governance, Implementation, Communications and Engagement (formerly titled 'Emerging Issues')

EPA advised that oversight of the actions under the Statement of Agreement continues as a business as usual function in accordance with Schedule 6, and with appropriate representation from both organisations on the Project Control Board and Implementation Working Group.

#### FINDING

IGEM considers that this action has been implemented as planned.

#### 151. Establish a Mine Fire and Emergency Unit

In March 2016, DEDJTR established the MFEU, based in the Latrobe Valley. The MFEU leads DEDJTR's regulatory, compliance and education activities related to mine fire safety and other emergency events and will coordinate Earth Resources Regulations' emergency preparedness and response activities.

The primary responsibility of the MFEU is to establish and lead a program of assessment of fire risk in Victorian coal mines, identification of mitigation measures and incorporation of risk identification and mitigation measures in coal mine work plans.

On 12 April 2016, DEDJTR provided the Coal Mines Emergency Management Taskforce<sup>13</sup> with a presentation to describe the functions of the newly formed MFEU.

<sup>13</sup> Chaired by the Emergency Management Commissioner, the Coal Mine Emergency Management Taskforce brings together key agencies, industry and emergency services to promote collaboration in dealing with the risk of fire and considers other emergencies that may impact any of the three coal mines in the Latrobe Valley.

**FINDING**

IGEM considers that this action has been implemented as planned.

**152. Establish a Victorian Earth Resources Regulator Forum, with membership including WorkSafe and EPA**

Following a commitment made in the ERR 2015–16 Action Plan, DEDJTR (ERR) is establishing a Victorian Earth Resources Regulators Forum. This will drive a coordinated, strategic approach to regulation in the earth resources sector, with a focus on robust decision-making and timeliness.

The Victorian Earth Resources Regulators Forum will be comprised of an independent chair and senior representatives from the following agencies:

- EPA
- WorkSafe
- CFA
- DELWP
- DEDJTR – ERR Branch.

Initially, there will be an interim chair from within the Agriculture and Resources Division of DEDJTR before the ministerial appointment of an independent chair. An independent chair is expected to be recommended for appointment by the end of 2016.

As a result, the Regulation Working Group is transitioning to the Earth Resources Regulator Forum.

A draft of the Earth Resources Regulator Forum Terms of Reference has been completed, with finalisation and the first meeting expected to occur by the end of September 2016.

**FINDING**

This action is overdue and IGEM will revisit in the next Annual Report.

**153. Undertake twice yearly workshops on the MOU between DEDJTR and WorkSafe**

The Secretary of DEDJTR and the Chief Executive Officer of WorkSafe approved a revised Memorandum of Understanding (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.

The action plan arising from the MOU between WorkSafe and DEDJTR led to the development of the 'Joint Activity Protocols for ERR and WorkSafe Victoria' which requires twice yearly workshops to be undertaken by DEDJTR and WorkSafe.

These workshops are to involve metropolitan and regional staff so that team members from each agency can drive the activities undertaken jointly, develop relationships and share learnings to build continuous improvement. The workings of the Joint Activity Protocol are to be reviewed at the twice yearly workshops, which occurred at the June 2015 and February 2016 workshops.

These workshops are planned to transition to business-as-usual by July 2017.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**154. Engage technical specialists to assist WorkSafe in the assessment of coal mine fire risk**

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.

In line with this, WorkSafe has created a Manager of Systems Safety role, to support its Earth Resources Team, which commenced in July 2015.

WorkSafe also engaged technical specialists to provide expertise in the area of coal mine fires.

In June 2016, WorkSafe engaged independent consultants (Mining One) to undertake follow-up coaching on fire management. There were two workshops held to provide insight for WorkSafe staff on how to conduct field inspections of fire services and how to review a site safety and health system. The workshop groups visited Yallourn and Loy Yang coal mines for field demonstrations on how to undertake evaluation of mine fire safety systems and processes.

To support and enhance its Earth Resources Team, WorkSafe has also engaged an external technical specialist, to assist in the evaluation of coal mine fire risk. WorkSafe has provided training programs to its staff including Fire Safety Study training and Practical Firefighter Training which was undertaken in July 2016 (in conjunction with DEDJTR).

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**155. Deliver DEDJTR ERR 2015–16 Action Plan**

The DEDJTR ERR 2015–16 Action Plan was released in November 2015 and is available online<sup>14</sup>.

The Action Plan was developed in response to the Statement of Expectations issued by the then Minister for Energy and Resources on 18 September 2015.

<sup>14</sup> <http://www.energyandresources.vic.gov.au/earth-resources-regulation/about-us/earth-resources-regulation-branch/earth-resources-regulation-2015-16-action-plan>

The Action Plan sets out commitments to reform and improve the governance and performance of the ERR Branch of DEDJTR and legislative reform through the Earth Resources Policy and Programs Branch.

The document outlines actions across eight key areas for improvement:

- Role clarity
- Building capability and culture
- Risk-based strategies
- Clear and consistent regulatory activities
- Stakeholder consultation and engagement
- Timeliness
- Communication and transparency
- Continuous improvement.

Regular progress reports have been completed in relation to the Action Plan. Examples of actions completed up to February 2016 include:

- the enactment of a new ERR leadership structure
- the establishment of a Mine Fire Safety Unit in ERR
- the development of a stakeholder engagement approach
- the release of an implementation plan for public reporting by mine and quarry operations in accordance with legislative amendments
- the development of a quantitative risk assessment tool for assessing risks at select earth resources sites.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 156. Employ or engage suitable expertise in mine closure and rehabilitation liability assessments

The *Earth Resources Regulation 2015–16 Action Plan* sets out a strategy to build capability and culture and includes commitments to seek strategic advice from the Technical Review Board (TRB) and establish an external technical expert panel to consider issues such as mine stability, water, and chemical risks.

The TRB was established in 2009 in response to two inquiries into the collapse of the north-east wall of the Yallourn mine in November 2009. The TRB currently consists of four members, including one that was appointed to the TRB in September 2015 as an expert in mine and quarry rehabilitation. The TRB provides strategic advice to government in the areas of mine and quarry stability, rehabilitation and other strategic risks, specifically in relation to reducing risks to the environment,

public safety and infrastructure. The TRB's current appointment is until 31 December 2016.

Action 156 is linked to Action 171 ('Finalise rehabilitation liability assessments'). To implement Action 171, ERR is required to engage suitable expertise in mine closure and rehabilitation liability assessments.

ERR's approach to implementing Action 156 includes:

- establishing an expert panel by appointing qualified experts in mine closure and rehabilitation issues
- engaging a consultant to calculate rehabilitation liability assessments.

DEDJTR is in the process of formally engaging a consultant to conduct rehabilitation liability assessments.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 157. Sign an MOU (DEDJTR and CFA) that describes roles and responsibilities around fires and fire risk at earth resource sites

Given the potential overlap in responsibilities between DEDJTR and CFA, an MOU is planned for the two organisations to delineate roles and responsibilities in monitoring and enforcing compliance with fire risk measures adopted by the Victorian open cut brown coal mining industry.

A draft MOU was completed in June 2016 and is expected to be finalised by the end of October 2016. To support the MOU, an implementation plan is scheduled for completion by September 2016, with implementation planned for commencement by November 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 158. Develop progressive rehabilitation milestones, with support from the TRB or other experts

In the Mine Rehabilitation Inquiry report, the Board of Inquiry stated that it recognises the importance of progressive rehabilitation to both reducing fire risk and to ensuring that final rehabilitation is achievable within an acceptable timeframe. It expressed the view that progressive rehabilitation should include a focus on short, medium and long-term risk reduction, as well as research, trials, and building community and regulatory confidence<sup>15</sup>.

<sup>15</sup> 2015–16 Hazelwood Mine Fire Inquiry, Volume IV, p. 110.

ERR will consult with ENGIE (Hazelwood) and AGL (Loy Yang) to propose progressive rehabilitation milestones. These will be included in work plan variation applications in accordance with licence condition 1A.6. EnergyAustralia (Yallourn) submitted proposed progressive rehabilitation milestones in its work plan variation application on 15 June 2016. ERR requested assistance from the TRB on 1 July 2016 to review EnergyAustralia's progressive rehabilitation milestones. As progressive rehabilitation milestones are proposed for all three mines, DEDJTR will consult with the TRB on the suitability of these milestones. All three mines are expected to submit work plan variation applications with progressive rehabilitation milestones by December 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 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

Current approved work plans propose mining in the three Latrobe Valley coal mines to cease between 2026 and 2048. Once mining has ceased, mine rehabilitation will commence, however, to inform the rehabilitation strategy, research is planned to analyse the technical viability of the mine operators' current rehabilitation strategies.

The Mine Rehabilitation Inquiry report made the following recommendation to mine operators:

##### *Recommendation 18*

*By 31 December 2016, develop an integrated research plan that identifies common research areas and priorities for the next 10 years, to be reviewed every three years. The plan should be developed in consultation with the Mining Regulator and relevant agencies, research bodies and experts. The list of research topics identified in Part 6.11 can be used as a starting point for discussion. The Commissioner and Statutory Authority should promote and coordinate this research (see Recommendations 14 and 15).*

(Refer to Section 7: Progress update – coal mine operators).

As the lead agency for Action 159, DEDJTR is collaborating with mine operators to develop a 10-year, integrated research plan that will be reviewed every three years. DEDJTR has met with senior representatives from each of the Latrobe Valley coal mine operators (individually and collectively) to discuss the Latrobe Valley Regional Rehabilitation Strategy (LVRRS).

Representatives from each of the mine operators meet fortnightly as part of the Integrated Mines Research Group to discuss and develop the research plan. DEDJTR will contribute to this group to ensure that it aligns with the LVRRS.

The integrated plan is scheduled to be finalised and delivered by mine operators by December 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 160. Review the regulatory framework for the Latrobe Valley coal mines and develop options for policy, administrative and legislative reform

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 LVRRS
- 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.

DEDJTR provided IGEM with a draft project plan for this action.

DEDJTR also engaged consultancy KPMG to review the sanctions regime for the earth resources sector in Victoria and NERA Economic Consulting to conduct a policy analysis of options for strategic management of resources and related land use planning in the Latrobe Valley. Both reports were finalised in February 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.



**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**

**162. Implement policy, administrative and legislative reforms for the Latrobe Valley Coal Mines' regulatory framework**

#### FINDING

Actions 161 and 162 are contingent on Action 160 and IGEM will revisit in the next Annual Report.

## 5.6 Latrobe Valley Coal Mine Rehabilitation Bonds

Section 80(1) of the *MR(SD) Act 1990* states that:

“a licensee or an applicant for an extractive industry work authority must enter into a rehabilitation bond for an amount determined by the Minister”.

The purpose of the rehabilitation bond is to ensure financial security should the licensee be unable to meet their rehabilitation obligations. In the 2015–16 Inquiry, the Board of Inquiry found that current rehabilitation bonds for each Latrobe Valley coal mine are insufficient to cover the costs of rehabilitation.

This section details the Government's response to Recommendations 5 to 12 of the Mine Rehabilitation Report.

## Progress summary

The Victorian Government Implementation Plan lists 11 actions under the 'Latrobe Valley Coal Mine Rehabilitation Bonds' theme, of which one has been completed.

After considering the sufficiency of existing rehabilitation bonds, the then Minister for Energy and Resources determined that they were insufficient. The Minister wrote to each of the Latrobe Valley coal mine licensees and Latrobe City Council to commence consultation on a proposal to implement further rehabilitation bonds through a staged approach. The Minister for Resources determined to implement further bonds to total 50 per cent of self-assessed liabilities (Stage 1) by 30 June 2016. Consultation is currently still occurring for the implementation of further bonds, however overall, IGEM is satisfied this process is progressing satisfactorily.

Detailed progress updates for each of the related actions follow.

**Table 28:** Status of 'Latrobe Valley Coal Mine Rehabilitation Bonds' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
LATROBE VALLEY COAL MINE REHABILITATION BONDS					
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	Complete	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	Ongoing	DEDJTR
165	Publish a statement of reasons for any decision to implement further rehabilitation bonds on the DEDJTR website	N/A	December 2016	Ongoing	DEDJTR

166	Complete bond policy review	Mine Rehabilitation Report: Recommendation 11	December 2016	Ongoing	DEDJTR
167	Specify the manner and form for rehabilitation liability assessments for the Latrobe Valley Coal Mines	Mine Rehabilitation Report: Recommendation 5	December 2016	Ongoing	DEDJTR
168	Identify skills and expertise for the conduct of rehabilitation liability assessment audits	Mine Rehabilitation Report: Recommendation 6	August 2016	Ongoing	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	Ongoing	EPA
170	Assess current pool of appointed auditors for the appropriate skills and expertise	Mine Rehabilitation Report: Recommendation 6	December 2016	Ongoing	DEDJTR and EPA
171	Finalise rehabilitation liability assessments	Mine Rehabilitation Report: Recommendations 7 and 8	March 2017	Ongoing	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	Ongoing	DEDJTR
173	Determine an effective mechanism to manage: <ul style="list-style-type: none"> <li>the costs of ongoing monitoring, maintenance and management of the earth resources industry sites</li> <li>risks of closure on the community's social and economic welfare</li> </ul>	Mine Rehabilitation Report: Recommendation 12	June 2017	Ongoing	DEDJTR

Recommendation 9 of the Mine Rehabilitation Inquiry report requested that the Minister for Energy and Resources, by 30 June 2016, consider the sufficiency of the existing rehabilitation bonds for each of the three Latrobe Valley coal mines.

#### *Recommendation 9*

*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.*

- *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:*

– Yallourn mine: \$34.25 million

– Hazelwood mine: \$36.7 million

– Loy Yang mine: \$56 million

- *The interim increase should be undertaken in accordance with s.80(4) of the Mineral Resources Act.*
- *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.*

Subject to the outcomes of the consultation required under section 80 of the *MR(SD) Act 1990*, a staged approach is being considered to implement further rehabilitation bonds in response to the Inquiry report. The following approach is proposed:

- By 30 June 2016, with a proposal to implement further bonds to 50 per cent of self-assessed liabilities (Stage 1, based on Recommendation 9)
- By 1 January 2017, with a proposal to implement further bonds to 100 per cent of self-assessed rehabilitation liabilities (Stage 2)

- By mid-2017, to finalise bonds after reviewing bond policy with regard to the Inquiry's findings, finalising the independent assessment of the rehabilitation liabilities for each mine (Stage 3).

After considering the sufficiency of existing rehabilitation bonds, the Minister for Energy and Resources determined that they were insufficient. The Minister wrote to each of the Latrobe Valley coal mine licensees and Latrobe City Council on 14 April 2016 to commence consultation (as per section 80(4) of the *MR(SD) Act 1990*) on a proposal to implement further rehabilitation bonds through a staged approach:

MINE	CURRENT BOND	TOTAL BOND BY 30 JUNE 2016	TOTAL BOND BY 31 DECEMBER 2016
<b>Yallourn mine</b>	\$11.46 million	\$34.25 million	\$68.5 million
<b>Hazelwood mine</b>	\$15 million	\$36.7 million	\$73.4 million
<b>Loy Yang mine</b>	\$15 million	\$56 million	\$112 million

**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**

The Minister proposed that in Stage 1, total bonds held by the state would increase to 50 per cent of their self-assessed rehabilitation liability assessments by 30 June 2016, as per Recommendation 9.

Each coal mine licensee agreed to provide the revised rehabilitation bond on an interim basis, for the amounts specified in Recommendation 9, by 30 June 2016.

As a result, the Minister issued notices for further rehabilitation bonds (30 June 2016 totals).

**FINDING**

IGEM considers that this action has been implemented as planned.

**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**

DEDJTR will commence consultation with the three mine operators and Latrobe City Council in October 2016 on further rehabilitation bonds to total 100 per cent of the Latrobe Valley coal mines' self-assessed liabilities by 1 January 2017 (Stage 2).

Once the consultation process has been completed, a decision will be made in November 2016 about whether a further rehabilitation bond for each Latrobe Valley coal mine is required.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**165. Publish a statement of reasons for any decision to implement further rehabilitation bonds on the DEDJTR website**

In the interest of transparency, on 12 July 2014, the then Minister for Energy and Resources published a statement of reasons on the DEDJTR website to require further rehabilitation bonds from the Latrobe Valley coal mines.

In the statement, the Minister described the factors that were taken into consideration to determine the sufficiency of the rehabilitation bond for the Latrobe Valley coal mines. These include:

- the findings of the Inquiry report



- the existing amounts of the rehabilitation bonds of the Latrobe Valley coal mines
- the rehabilitation liabilities reported for the 2014–15 period by each of the Latrobe Valley coal mines
- the rehabilitation liabilities estimated by AECOM for DEDJTR
- the comments provided by each of the Latrobe Valley coal mines and the Latrobe City Council regarding the proposed further rehabilitation bonds.

The Minister stated that the Government will further review the rehabilitation bonds for the Latrobe Valley coal mines in 2016–17.

A further statement of reasons will be published on the DEDJTR website by 2 December 2016 once a decision has been made about implementing further rehabilitation bonds in November 2016. The 2 December 2016 date allows mine operators 28 days to submit further rehabilitation bonds (as per section 80(4) of the *MR(SD) Act 1990*) by 31 December 2016, if the Minister decides that further rehabilitation bonds are required.

## FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 166. Complete bond policy review

The current *Establishment and Management of Rehabilitation Bonds for the Mining and Extractive Industries* (known as the bond policy) is established under the *MR(SD) Act 1990* and outlines DEDJTR's policies for the establishment and management of rehabilitation bonds and the methods to be used in assessing rehabilitation liability for mining and extractive operations.

The current bond policy requires that mine operator bonds reflect 100 per cent of the assessed rehabilitation liability for a site. However the Board of Inquiry found that this requirement has not been fully implemented, with the current administrative practice requiring bonds to be in the form of a bank guarantee.

DEDJTR conduct reviews of the rehabilitation bonds to ensure that they remain at appropriate levels during the life of the operation. These reviews occur periodically; when a work plan variation is submitted; when a tenement is transferred; or when requested by the tenement holder.

In addition, mine operators are required to provide an annual self-assessment of the rehabilitation liability of an operation as required under the *MR(SD) Regulations 2013*.

Bonds are returned to mine operators when DEDJTR is satisfied that the land has been rehabilitated in accordance with the rehabilitation plan or code of practice.

The Mine Rehabilitation Inquiry Report made the following recommendation:

#### *Recommendation 11*

*The State 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.*

To address this recommendation, the Victorian Government made the following commitment:

*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)*<sup>16</sup>.

NERA Economic Consulting was engaged by DEDJTR to analyse instruments to secure mine rehabilitation financing in the Latrobe Valley. As part of this process, NERA was asked to review a range of financial surety mechanisms that could be alternatives or enhancements to the current system of rehabilitation bonds. NERA produced the 'Policy analysis of options for the strategic management of coal resources and related land use planning in the Latrobe Valley' report in February 2016. Like the Board of Inquiry, the NERA report recommended that rehabilitation bond policy arrangements in Victoria be reviewed to ensure they are practical, sustainable, effective and efficient.

At the time of reporting, DEDJTR was in the process of engaging a consultant to conduct a review of the current rehabilitation bond policy as it applies to the Latrobe Valley coal mines and will develop a risk and incentive-based financial assurance framework for rehabilitation bonds. This will ensure that the Latrobe Valley coal mines meet their rehabilitation liabilities.

<sup>16</sup> Hazelwood Mine Fire Inquiry: Victorian Government Implementation Plan, June 2016, p. 72

The Rehabilitation Bond Policy Discussion Paper is expected to be drafted and peer reviewed by September 2016. Following a public consultation process in October, the Rehabilitation Bond Policy Discussion Paper is expected to be finalised by December 2016.

The Bond Policy will then be updated for the Latrobe Valley coal mines as appropriate.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 167. Specify the manner and form for rehabilitation liability assessments for the Latrobe Valley Coal Mines

The Mine Rehabilitation Inquiry Report found that while self-assessed rehabilitation estimates by mine operators were based on detailed models with costs for activities such as earthworks and rehabilitation costs, they were not consistently based on third party rates for the activities and omitted potential costs that are likely to be incurred, such as the cost of acquiring the water to fill the pit voids. The Board of Inquiry found that in order for the mine operators to provide consistent rehabilitation estimates, there must be a transparent and clear determination about the manner and form in which rehabilitation cost estimates are provided.

The Mine Rehabilitation Inquiry Report made the following recommendation:

##### *Recommendation 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.*

Under section 79A of the *MR(SD) Act 1990*, the Minister has the power to specify the manner and form in which it requires the self-assessed rehabilitation liabilities to be made for the purposes of determining the amount of a rehabilitation bond.

The self-assessed rehabilitation liabilities may be considered by the Minister when making any future decisions in relation to the amount of the rehabilitation bonds.

In order to address this action, DEDJTR set out to determine each rehabilitation task to be costed, the basis for the costing, and how the information is to be presented to DEDJTR in order to have confidence that the rehabilitation liability assessments are appropriate and accurate.

DEDJTR plans to engage a consultant by September 2016 to adapt the rehabilitation liability estimates developed by AECOM into an electronic tool based on ERR's existing bond calculator. Following consultation with the Latrobe Valley mine operators in November 2016, they will be advised of the revised manner and form in which rehabilitation costs are to be provided, by December 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 168. Identify skills and expertise for the conduct of rehabilitation liability assessment audits

Once a transparent and clear determination about the manner and form in which rehabilitation costs are provided has been made (see Action 167), each Latrobe Valley mine operator will be required to adopt that approach when undertaking a rehabilitation liability assessment. The mine operators may then be required to engage an auditor to conduct an audit of its 2016–17 liability assessment, as per section 79A(3) of the *MR(SD) Act 1990*.

The Board of Inquiry stated that these audits should be comprehensive to assess for compliance with the established manner and form, as well as accuracy. As a result, to ensure that audits of the rehabilitation liability assessments are carried out by certified auditors that have the appropriate skills and experience, DEDJTR will review approved rehabilitation plans and the rehabilitation liability estimates developed by AECOM to identify the topics relevant in rehabilitating open cut coal mines. It will then review these against existing skills specified by EPA for appointed auditors under section 53S of the *Environment Protection Act 1970*.

DEDJTR and EPA met on 27 June 2016 to establish a common understanding of requirements to deliver this action. Following the meeting, more detailed information on both the environmental audit system and the content of Latrobe Valley coal mines rehabilitation liability assessments was exchanged for examination.

A further meeting was held on 19 July 2016 between DEDJTR and EPA to plan the approach for delivery, including a workshop with auditors. The workshop was held on 29 July 2016 to explore the range of skills and expertise that might be required of EPA appointed auditors to ensure robust and authoritative audits of rehabilitation liability assessments prepared by mine operators.

ERR is expected to specify to the EPA the skills that are required to be held by EPA auditors to conduct rehabilitation liability assessment audits by August 2016.

## FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 169. Amend the accreditation criteria as necessary for auditors appointed under section 53S of the EP Act

EPA is working collaboratively with DEDJTR to identify the skills and expertise required of auditors to conduct rehabilitation liability assessment audits (see Action 168). Following the specification of skills required to be held by auditors in August 2016, EPA will amend the accreditation criteria as necessary for auditors appointed under section 53S of the *Environment Protection Act 1970*, by December 2016.

## FINDING

IGEM notes that this action is contingent on Action 168 and will revisit in the next Annual Report.

### 170. Assess current pool of appointed auditors for the appropriate skills and expertise

Once Actions 168 and 169 are complete, EPA and DEDJTR will subsequently assess the current pool of appointed auditors for the necessary skills and expertise, by December 2016.

## FINDING

This action is contingent on Actions 168 and 169 and IGEM will revisit in the next Annual Report.

### 171. Finalise rehabilitation liability assessments

The Victorian Government will engage independent experts by September 2016, to determine an accurate assessment of the rehabilitation liabilities of the three Latrobe Valley coal mines, by 30 March 2017.

## FINDING

This action is contingent on Actions 167, 168, 169 and 170 and IGEM will revisit in the next Annual Report.

### 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

Based on the outcome of the rehabilitation liability assessments (see Action 171) and the revised rehabilitation bond policy, the Minister may initiate consultation with the mine operators and Latrobe City Council as per section 80 of the *MR(SD) Act 1990*, to implement further rehabilitation bonds by 30 June 2017.

The Minister will make a decision about the amount of the rehabilitation bonds and issue a notice for further rehabilitation bonds (if required) by May 2017, and approve publish a statement of reasons on the DEDJTR web site by June 2017.

## FINDING

This action is contingent on Action 171 and IGEM will revisit in the next Annual Report.

### 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

This action is due in June 2017 and DEDJTR have advised that this action has not yet started, so no update or evidence has been provided.

## FINDING

IGEM will revisit this action in the next Annual Report.

## 5.7 Latrobe Valley Regional Rehabilitation Strategy

The Latrobe Valley Regional Rehabilitation Strategy is being led by DEDJTR, with support from DELWP, and in consultation with the mine operators, the community, key stakeholders and technical experts.

This section details the government's response to recommendations and affirmations in the reopened Inquiry reports that relate specifically to the Latrobe Valley Regional Rehabilitation Strategy.

### Progress summary

The Victorian Government Implementation Plan lists 31 actions under Latrobe Valley Regional Rehabilitation Strategy (LVRRS), of which four have now been completed.

Two major projects will help to guide future rehabilitation of the coal mines in the Latrobe Valley:

- the Batter Stability Project
- the LVRRS.

The Batter Stability Project was launched in April 2016 and is based on field work research at the Yallourn coal mine to improve the understanding of the impact of engineering, geology and hydrogeological processes on brown coal mine stability. DEDJTR has formally engaged EnergyAustralia and Federation University to progress the project. To be completed over several stages, the results of the Batter Stability Project will inform the LVRRS.

The LVRRS project is planned for completion over five stages. To initiate the project, DEDJTR and DELWP have established an MOU. The scope and methodology for the project is currently being developed in consultation with the mine operators to ensure integration with their research program.

Due to the complexity and long term nature of coal mine rehabilitation, the implementation of many of the actions relating to this theme are in their infancy, with several not expected for completion until 2019. Overall, ongoing actions are progressing satisfactorily.

Detailed progress updates for each of the related actions follow.

### 5.7.1 Batter Stability Project

**Table 29:** Status of 'Batter Stability Project' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
BATTER STABILITY PROJECT					
174	Execute contracts with EnergyAustralia and Federation University for the Batter Stability Project	Mine Rehabilitation Report: Affirmation 3	March 2016	Complete	DEDJTR
175	Appoint Project Manager within DEDJTR to review progress reports and report to the DEDJTR Project Control Board	Mine Rehabilitation Report: Affirmation 3	March 2016	Complete	DEDJTR
176	Public launch of the Batter Stability Project	Mine Rehabilitation Report: Affirmation 3	April 2016	Complete	DEDJTR
177	Participate in the Technical Advisory Group administered by Federation University as required	Mine Rehabilitation Report: Affirmation 3	Ongoing	Ongoing	DEDJTR
178	Provide funding upon completion of milestones as per schedules to the contracts with EnergyAustralia and Federation University	Mine Rehabilitation Report: Affirmation 3	As per contract milestones	Ongoing	DEDJTR

In April 2016, the then 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 and 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. Mine batters are the sloping pit walls between the top of the mine and the pit floor.

These slopes can become unstable due to the interaction of surface and ground water levels, excavation work and the structure and strength of soils and rock. A worst-case scenario is a slope collapse or creation of a sink hole putting at risk the safety of workers, the community, public infrastructure, and the environment.

Researchers from Federation University will carry out the five year project at the Yallourn mine site with technical support from the Victorian mining regulator, ERR.

The findings will be used at all of Victoria's open pit coal mines to help prevent major accidents, such as wall collapses, and ensure mine rehabilitation is safe and stable into the future.

Field work will start immediately, with the project due to be finished by June 2020.

A PCB provides project oversight and is chaired by the Executive Director, Earth Resources and Regulation (ERR), DEDJTR.

A Technical Advisory Group has been formed and is comprised of representatives from:

- ERR
- The Latrobe Valley mines (Yallourn, Hazelwood and Loy Yang)
- Geotechnical and Hydrogeological Engineering Research Group (GHERG), Federation University
- Members of the TRB.

The project will be undertaken over several stages:

- **Stage 1** – creating the foundation for the research component of the project by the collation of background data from the Latrobe Valley mines.
- **Stage 2** – undertaking a gap analysis of available data and developing the information requirements to understand how to maintain stability of batters in the Latrobe Valley mines.

This will be followed by the installation of monitoring equipment on a batter in the Yallourn mine to generate real-time data assessment of the stability of the batter (which has similar characteristics and properties to the batter that failed in 2007). This stage was scheduled for completion in June 2016.

- The latter stages of the project will involve more comprehensive research and analysis, monitoring and

modelling of the data obtained from the Yallourn mine. This component is expected to be completed by June 2020.

The results of the Batter Stability Project will be incorporated into the current geotechnical and hydrogeological models and will inform the LVRRS (see Actions 179 to 204).

#### **174. Execute contracts with EnergyAustralia and Federation University for the Batter Stability Project**

DEDJTR, in partnership with EnergyAustralia Yallourn Pty Ltd and GHERG at Federation University, are leading the Batter Stability Project, with in-kind support from industry.

An 'Agreement for Services' between DEDJTR and EnergyAustralia and the 'Grant Agreement' between DEDJTR and Federation University were signed on 24 March 2016.

##### **FINDING**

IGEM considers that this action has been implemented as planned.

#### **175. Appoint Project Manager within DEDJTR to review progress reports and report to the DEDJTR Project Control Board**

On 10 May 2016, DEDJTR appointed a person to the position of Manager, Technical Services, who will carry out the duties of Project Manager for the Batter Stability Project.

The position is responsible for the delivery of specialist technical advice to both ERR and broader DEDJTR. It will lead a team of geotechnical, hydrogeological, well integrity, mine stability environmental, petroleum, geothermal and carbon storage experts for the regulation of the minerals, extractive, petroleum, geothermal and pipeline industries for onshore and offshore Victoria.

##### **FINDING**

IGEM considers that this action has been implemented as planned.

#### **176. Public launch of the Batter Stability Project**

The Minister for Energy and Resources launched the \$2.2 million Batter Stability Project at EnergyAustralia's Yallourn Mine on 11 April 2016.

##### **FINDING**

IGEM considers that this action has been implemented as planned.

### 177. Participate in the Technical Advisory Group administered by Federation University as required

DEDJTR will participate in the Technical Advisory Group administered by Federation University.

DEDJTR advised that, following the execution of the contract between DEDJTR and EnergyAustralia, and the contract between DEDJTR and Federation University, the parties to those contracts met on 10 June 2016 and decided that there had been no change to the technical matters for the field program. The first meeting of the Technical Advisory Board is scheduled for September 2016, once data has been collated and a preliminary assessment made.

#### FINDING

IGEM will revisit this action in the next Annual Report.

### 178. Provide funding upon completion of milestones as per schedules to the contracts with EnergyAustralia and Federation University

The contracts with EnergyAustralia and Federation University (see Action 174) include clauses that specify the requirement for DEDJTR to provide funding or reimbursement to the two agencies when deliverables or services are received.

Federation University has provided DEDJTR with the following deliverables:

- Batter Stability Project Status Report 1 for the period 1 July 2014 to 15 April 2016
- Statutory Declaration verifying the amount of project expenditure incurred for the period 1 July 2014 to 23 April 2016
- Batter Stability Project Inception Report for the period 15 April 2016 to 31 May 2016.

These deliverables satisfy the requirements for the first payment to Federation University under the 'Grant Agreement'. As at 14 July 2016, DEDJTR was processing the payment.

EnergyAustralia has issued DEDJTR with two invoices for reimbursement and, as at 14 July 2016, DEDJTR was processing the two payments.

#### FINDING

IGEM will revisit this action in the next Annual Report.

## 5.7.2 Latrobe Valley Regional Rehabilitation Strategy Project Initiation (Stage 1)

**Table 30:** Status of 'Latrobe Valley Regional Rehabilitation Strategy Project Initiation (Stage 1)' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
LATROBE VALLEY REGIONAL REHABILITATION STRATEGY PROJECT INITIATION (STAGE 1)					
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	Complete	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	Ongoing	DEDJTR
181	Appoint independent peer reviewers	Mine Rehabilitation Report: Recommendations 14, 15, 17 and 18	November 2016	Ongoing	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	Ongoing	DEDJTR
183	Establish Latrobe Valley Mine Rehabilitation Advisory Committee	Mine Rehabilitation Report: Recommendations 14, 15, 17 and 18	December 2016	Ongoing	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	Ongoing	DEDJTR

The Board of Inquiry identified the need to undertake research, in consultation with stakeholders, to increase mine rehabilitation knowledge and address the need for definitions and criteria for progressive and final rehabilitation<sup>17</sup>.

The primary objective of the LVRRS Project is to set a safe, stable, and sustainable landform for the three Latrobe Valley mine voids and surrounding areas, and identify appropriate end land uses post mine closure.

The LVRRS work program includes:

- investigations to address knowledge gaps relating to mine rehabilitation, such as geotechnical, hydrogeological and water availability at both a regional and mine-specific level
- working with the community and the Latrobe Valley mine operators to understand the findings of these investigations
- developing a LVRRS to guide regional level planning for mining operations, rehabilitation, closure and post closure, taking account of the interconnectivity between the three mine voids.

The development of the LVRRS will recognise the rights and obligations of the mine operators. It will also take into account the rights of water users, including the environment, when assessing the viability of options to source water to partially fill the mine voids.

The LVRRS will be used to inform the design and delivery of other government regional plans and programs for economic transition in the Latrobe Valley.

Governance arrangements for the LVRRS have been established through the Rehabilitation Planning Working Group under the Hazelwood Mine Fire Inquiry Response IDC. Reporting directly to the IDC, the working group oversees the preparation of the LVRRS and includes membership from DELWP, DEDJTR and EPA, with DPC as an observer.

The working group is empowered to develop and deliver the project scope, manage milestones and any project variations, as well as assign funds in accordance with its approved Terms of Reference and the respective departments' financial delegations.

#### **179. Establish MOU between DEDJTR and DELWP to implement the project as a schedule to the existing partnership agreement**

DEDJTR and DELWP established a bilateral MOU under the existing DEDJTR/DELWP Partnership Agreement to deliver the LVRRS as a priority project in June 2016.

The Schedule to the Partnership Agreement states that the assignment of departmental leadership for individual work packages is as follows:

- DEDJTR's portfolio responsibilities include mining and related geotechnical factors
- DELWP's portfolio responsibilities include water resource assessment and management (surface and ground-water), land use planning, public land management, energy and environmental policy, including biodiversity and climate change.

#### **FINDING**

IGEM considers that this action has been implemented as planned.

#### **180. Prepare an overarching stakeholder engagement strategy for the project (and refine in response to experience)**

The Board of Inquiry reported that "throughout the Inquiry process, a consistent theme raised was the desire for the community to be better informed of, and included in, discussions about, rehabilitation of the Latrobe Valley mines"<sup>18</sup>.

<sup>17</sup> Hazelwood Mine Fire Inquiry Report, Volume IV – Mine Rehabilitation, pp. 166-181

<sup>18</sup> Hazelwood Mine Fire Inquiry Report, Volume IV – Mine Rehabilitation, p. 173

To support the implementation of the LVRRS, an overarching stakeholder engagement strategy is planned to guide the project team's approach to engaging stakeholders, including the community.

At the time of reporting, DEDJTR had issued a Request for Quotation and was in the process of appointing a service provider to prepare a comprehensive community and stakeholder strategy, in consultation with government and key stakeholders.

A finalised community and stakeholder engagement strategy is planned for completion by October 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 181. Appoint independent peer reviewers

The Board of Inquiry identified significant knowledge gaps in relation to the technical viability of mine operators' currently approved rehabilitation strategies. To address this issue, independent peer reviewers are to be appointed to the LVRRS to provide expert review at key stages of the project.

This process involves identifying required peer review expertise disciplines before undertaking a Request for Tender to establish an expert panel, from which a subset of experts would be engaged periodically on commissioned projects or activities. The independent peer reviewers are expected to be appointed by October 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 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

DEDJTR issued a Request for Tender in July 2016 to appoint a service provider to develop a project plan to deliver the LVRRS. The successful service provider will facilitate project scoping which will include at least twelve workshops with technical specialists and consultants, expected to be held by October 2016.

Following the workshops, a project plan will be developed and peer reviewed. The project plan will outline how the LVRRS will be conducted, including the policy and technical approach, as well as the requirement to interact/communicate with stakeholders (see Action 180).

The project plan is expected to be provided to the working group for approval by December 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 183. Establish Latrobe Valley Mine Rehabilitation Advisory Committee

The Board of Inquiry found that given the range of areas that require greater coordination, their potential regional impacts, and the diversity and competing priorities of the organisations that are involved, there is a need for a new coordinating body for mine rehabilitation in the Latrobe Valley<sup>19</sup>.

As a result, a 'Function, Terms of Reference, Operation and Procedures' document for the Latrobe Valley Mine Rehabilitation Advisory Committee was developed in April 2016.

Cabinet approval will be sought in October 2016 to establish the Latrobe Valley Mine Rehabilitation Advisory Committee. The Committee will represent a broad range of stakeholder interests and act as a conduit to broader community and stakeholder engagement to provide expert and strategic advice to DEDJTR regarding the development of the LVRRS for the three Latrobe Valley coal mine voids.

Following Cabinet approval, nominations for Committee representatives will then be sought, with letters for appointment scheduled by December 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

### 184. Review Stage 1 Project outputs and confirm Stage 2 work plan, including technical peer review

This action is contingent on the completion of Action 182. Once the project plan for the LVRRS has been developed (Action 182), it will be quality assured (Action 184) through a staged approach by independent peer reviewers.

This action is scheduled for completion by December 2016.

#### FINDING

This action is contingent on Action 182 and IGEM will revisit in the next Annual Report.

<sup>19</sup> Hazelwood Mine Fire Inquiry 2015–16, Volume IV – Mine Rehabilitation, p. 191



### 5.7.3 Latrobe Valley Regional Rehabilitation Strategy – Existing Conditions Review (Stage 2)

**Table 31:** Status of 'Latrobe Valley Regional Rehabilitation Strategy – Existing Conditions Review (Stage 2)' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
LATROBE VALLEY REGIONAL REHABILITATION STRATEGY - EXISTING CONDITIONS REVIEW (STAGE 2)					
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	Ongoing	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	Ongoing	DEDJTR
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	Ongoing	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	Ongoing	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	Ongoing	DEDJTR
190	Conduct annual progress review and produce a report	Mine Rehabilitation Report: Recommendations 14, 15, 17 and 18	July 2017	Ongoing	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	Ongoing	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	Ongoing	DEDJTR

Stage 2 of the LVRRS includes:

- a review of current mine rehabilitation strategies
- the establishment of the Latrobe Valley Mine Rehabilitation Commissioner
- a review of existing Latrobe Valley coal mine and power station entitlements and water licensing
- a report on baseline data (such as existing water use, water availability, aquatic ecosystems and water quality)
- a brief to the Latrobe Valley Mine Rehabilitation Commissioner
- conducting and producing an annual progress review report
- assessing possible impacts on water availability due to climate change and climate variability
- reviewing Stage 2 project outputs and confirming the Stage 3 work plan.

**185. Review current mine rehabilitation strategies, in consultation with DELWP and EPA, to identify water requirements for mine closure and restoration strategies.**

The reopened Hazelwood Inquiry reported that the 2011 *Gippsland Region Sustainable Water Strategy* (Sustainable Water Strategy) found that current rehabilitation plans to flood open-cut mines to create artificial lakes may not be a viable option due to insufficient water availability<sup>20</sup>.

As a result, Action 6.8 of the Sustainable Water Strategy tasks the Department of Primary Industries (now DEDJTR) with reviewing the groundwater and surface water impacts of mine rehabilitation strategies, in consultation with the Department of Sustainability and Environment (now DELWP), EPA, and the mine operators. However, the Board of Inquiry heard that Action 6.8 has not been progressed by any of the parties. Given the implications for mine rehabilitation, the Board of Inquiry made the following recommendation:

*Recommendation 13 (Hazelwood Mine Fire Inquiry Report 2015–16, Volume IV)*

*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.*

To progress this action, DEDJTR plans to consult with DELWP, EPA and the mine operators by November 2016, to identify the scope and methodology to be applied to the LVRRS, including the approach to considering the broad water requirements, potential water sources and potential impacts on surface water and groundwater associated with mine rehabilitation. DEDJTR then plans to have this approach independently peer reviewed to ensure that it adequately meets the intent of Recommendation 13.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**186. Establish the Latrobe Valley Mine Rehabilitation Commissioner as a statutory appointment under the MR(SD) Act**

The Mine Rehabilitation Inquiry Report made the following recommendation:

*Recommendation 14*

*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:*

- Advising the Minister, State and industry on a range of matters, including policy, legislation and regulation
- Monitoring the implementation and effectiveness of strategies
- Undertaking strategic audits of State departments and mine operators
- Conducting investigations into significant issues with powers to obtain information
- Coordinating parties to resolve outstanding issues
- Promoting and coordinating research to address knowledge gaps, as contained in Recommendation 18
- Sharing and publishing information including research findings
- Undertaking public education and community engagement
- Publishing an annual report.

DEDJTR has commenced this action by conducting a workshop on 7 July 2016 to determine the scope of the functions of the Latrobe Valley Mine Rehabilitation Commissioner. In addition to discussing the gaps that the role will address, risk identification and mitigation were also discussed.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**187. Review of existing Latrobe Valley coal mine and power station water entitlements and water licensing (groundwater and surface waters)**

DELWP has reported that the review of existing Latrobe Valley coal mine and power station water entitlements and water licensing (groundwater and surface waters) has commenced. Work conducted to date includes DELWP requesting legal clarification about the water entitlements held by the Latrobe Valley coal mine operators. Legal advice was sought about whether these entitlements remain valid when mining and electricity generation cease, and the future access to water for use in the rehabilitation of the mines.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**188. Report on existing water use, water availability, aquatic ecosystems and water quality to provide baseline data and inform the works program**

Actions 187, 188 and 191 are three actions within Stage 2 of the LVRRS which DELWP is leading.

<sup>20</sup> Hazelwood Mine Fire Inquiry Report 2015–16, Volume IV, p. 96

The completion of Actions 188 and 191 are contingent on the completion of Stage 1 of the LVRRS which includes the preparation of a project methodology and a comprehensive work plan.

DELWP appointed an acting Manager, Latrobe Valley Regional Water Study on 25 July 2016 to undertake a number of tasks including leading the Regional Water Study and coordinating the technical investigations Actions 187, 188 and 191. The investigations will include assessment of existing water use, water availability, aquatic ecosystems and water quality to provide baseline data and inform the works program.

#### FINDING

IGEM notes that Action 188 is due in December 2017 and will revisit in the next Annual Report.

#### 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

IGEM was advised that Action 189 is yet to commence and therefore received no update in relation to this action.

#### FINDING

IGEM notes that this action is due in July 2017 and will revisit in the next Annual Report.

#### 190. Conduct annual progress review and produce a report

IGEM was advised that Action 190 is yet to commence and therefore received no update in relation to this action.

#### FINDING

IGEM notes that this action is due in July 2018 and will revisit in the next Annual Report.

#### 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

DELWP advised that it will use its soon to be released Guidelines for Assessing the Impacts of Climate Change on Water Resources in Victoria to guide the implementation of Action 191 and to discuss the scope of the work required with regional stakeholders.

#### FINDING

IGEM notes that Action 191 is due in December 2017 and will revisit in the next Annual Report.

#### 192. Review Stage 2 Project outputs and confirm Stage 3 work plan, including technical peer review

IGEM was advised that Action 192 is yet to commence and therefore received no update in relation to this action.

#### FINDING

IGEM notes that this action is due in December 2017 and will revisit in the next Annual Report.

## 5.7.4 Latrobe Valley Regional Rehabilitation Strategy – Modelling and Analysis (Stage 3)

**Table 32:** Status of 'Latrobe Valley Regional Rehabilitation Strategy – Modelling and Analysis (Stage 3)' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
REGIONAL LATROBE VALLEY REHABILITATION STRATEGY – MODELLING AND ANALYSIS (STAGE 3)					
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	Ongoing	DEDJTR

194	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	January 2019	Ongoing	DEDJTR
195	Deliver a regional water study on the viability of pit lake filling options and impacts, including: <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	Ongoing	DEDJTR
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	Ongoing	DEDJTR
197	Conduct annual progress review and produce a report	Mine Rehabilitation Report: Recommendations 14, 15 and 17	July 2019	Ongoing	DEDJTR

**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.**

IGEM was advised that Action 193 is yet to commence and therefore received no update in relation to this action.

**FINDING**

IGEM will revisit this action in the next Annual Report.

**194. Deliver a regional geotechnical study including:**

- investigation of potential water demands for pit lake fill scenarios
- investigation of regional ground stability and associated potential impacts on land use, communities and infrastructure
- monitoring – outline likely requirements for long-term regional geotechnical monitoring

IGEM was advised that Action 194 is yet to commence and therefore received no update in relation to this action.

**FINDING**

IGEM will revisit this action in the next Annual Report.

**195. Deliver a regional water study on the viability of pit lake filling options and impacts, including:**

- potential water availability and use of regional water resources
- 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
- potential water quality impacts in pit lakes, groundwater and off-site surface waters
- potential impacts on aquatic ecosystems and downstream users
- the scope of likely requirements for long-term regional groundwater monitoring

DELWP is leading the Latrobe Valley Regional Water Study on the viability of pit lake filling options and impacts.

DELWP has worked actively with DEDJTR to scope this component of the overall strategy at planning workshops on 2 March and 23 June 2016 as well as numerous informal meetings. In developing the scope of the study, the following factors were considered in analysing the feasibility of filling the mine voids with water (the 'pit lake' option):

- whether it is possible
- if it is safe
- if it is non-polluting
- if it is a stable land form
- if it sustains agreed land use
- if it sustains agreed water use
- if it can be done in perpetuity.

DELWP appointed an acting Manager, Latrobe Valley Regional Water Study in July 2016 for a 3-month period to lead the development of the Regional Water Study while recruitment for this position is undertaken.

DELWP will formally commence this action after the scope of Stage 3 is confirmed via Action 192.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**196. Review Stage 3 Project outputs and confirm Stage 4 work plan, including technical peer review**

IGEM was advised that Action 196 is yet to commence and therefore received no update in relation to this action.

**FINDING**

IGEM will revisit this action in the next Annual Report.

**197. Conduct annual progress review and produce a report**

IGEM was advised that Action 197 is yet to commence and therefore received no update in relation to this action.

**FINDING**

IGEM will revisit this action in the next Annual Report.

## 5.7.5 Latrobe Valley Regional Rehabilitation Strategy – Integrate Findings (Stage 4)

**Table 33:** Status of 'Latrobe Valley Regional Rehabilitation Strategy – Integrate Findings (Stage 4)' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
LATROBE VALLEY REGIONAL REHABILITATION STRATEGY – INTEGRATE FINDINGS (STAGE 4)					
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	Ongoing	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	Ongoing	DELWP
200	Release draft assessment of potential impacts at a regional scale for consultation	Mine Rehabilitation Report: Recommendations 14 and 15	December 2019	Ongoing	DEDJTR (with DELWP support)
201	Release draft integrated regional scale mine rehabilitation Strategy for consultation	Mine Rehabilitation Report: Recommendations 14 and 15	December 2019	Ongoing	DEDJTR
202	Assess potential impacts at a regional scale	Mine Rehabilitation Report: Recommendations 14 and 15	June 2020	Ongoing	DEDJTR (with DELWP support)
203	Deliver Integrated regional scale mine rehabilitation strategy	Mine Rehabilitation Report: Recommendations 14 and 15	June 2020	Ongoing	DEDJTR

**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**

**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**

**200. Release draft assessment of potential impacts at a regional scale for consultation**

**201. Release draft integrated regional scale mine rehabilitation Strategy for consultation**

**202. Assess potential impacts at a regional scale**

**203. Deliver Integrated regional scale mine rehabilitation strategy**

#### FINDING

Actions 198 to 203 are contingent on Action 196 and IGEM will revisit in the next Annual Report.

## 5.7.6 Stage 5 – Ongoing Review and Adaptation (Subsequent Work)

**Table 34:** Status of 'Stage 5 – Ongoing Review and Adaptation (Subsequent Work)' action

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
STAGE 5 – ONGOING REVIEW AND ADAPTATION (SUBSEQUENT WORK)					
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	Ongoing	DEDJTR



**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**

IGEM was advised that Action 204 is yet to commence and therefore received no update in relation to this action.

**FINDING**

IGEM will revisit this action in the next Annual Report.

## 5.8 Emergency Management Planning, Response and Recovery

This section reports on activities to strengthen the arrangements for emergency management planning, response and recovery through government actions to:

- integrate the Latrobe Valley coal mines into Victoria's emergency management arrangements through integrated Incident Management Teams
- 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

The following themes, with associated actions, are listed under 'Emergency Management Planning, Response and Recovery' theme in the Victorian Government Implementation Plan:

- Industry integration in emergency management
- Emergency management planning
- Emergency management training
- Local government capability
- Natural disaster recovery assistance payment

### Progress summary

The Victorian Government Implementation Plan lists 42 actions under the 'Emergency Management Planning, Response and Recovery' theme, of which 25 have now been completed.

Overall, IGEM believes responsible agencies and departments have made good progress with implementing the diverse range of actions under this theme.

Primarily through the continuing work of the Coal Mine Emergency Management Taskforce, a number of actions have been completed that are facilitating the integration of the Latrobe Valley coal mines into Victoria's emergency management arrangements.

Designated mine staff have received AIIMS training with work underway by the Australasian Fire and Emergency Service

Authorities Council (AFAC), with the help of the agencies, to upgrade the AIIMS doctrine to formally allow industry personnel to be brought into functional IMT roles under the AIIMS structure.

In October 2015, exercise 'Latrobe 15' brought together 31 organisations, including observers, from across government and industry to conduct a facilitated, discussion exercise to promote knowledge sharing and a better understanding of the challenges facing local industry and agencies. A key aspect of the exercise was to practice the integration of industry into AIIMS.

Outcomes of the exercise helped inform the completion in December 2015 of the *Latrobe Valley Coal Mines Major Emergency – Strategic Concept of Operations and Industry Integration* document, which formalises the integration of Latrobe Valley coal mine personnel into Regional Emergency Management Teams (REMTs) and IMTs. Local emergency management plans were also updated to incorporate the integration of industry in emergency planning and response.

The government continues to strengthen the emergency management planning framework by enactment of the *Emergency Management Amendment (Critical Infrastructure Resilience) Act 2014* in July 2015 and release of the Exposure Draft of the Emergency Management Legislation Amendment (Planning) Bill 2016 for public comment in May 2016.

CFA has established volunteer health monitoring and rehabilitation units across Victoria. MFB also has after hours and on-call capability through the Brigade Medical Services (BMS) health provider, however, the action to provide personal monitoring equipment to MFB firefighters is now overdue.

Training for response to mine fires is progressing with the Brown Coal Mine Firefighting Package, developed by CFA in August 2015, to be piloted in CFA District 27 in late September 2016. Further training has been conducted by MFB and CFA scientific advisors on the hazards of fighting mine fires.

An interim solution to track payments made by DHHS under the Personal Hardship Assistance Program was implemented in November 2015, with a final solution scheduled for completion in November 2017.

Local Government Victoria (LGV), within DELWP, is working to build capability and capacity of local government to meet their emergency management responsibilities through increased coordination and collaboration. LGV is also conducting a long-term project to review the capability and capacity required for local government to fulfil their roles and develop an action plan to address any capability or capacity gaps.

## 5.8.1 Industry Integration in Emergency Management

**Table 35:** Status of 'Industry Integration in Emergency Management' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
INDUSTRY INTEGRATION IN EMERGENCY MANAGEMENT					
205	Convene an industry forum in the Latrobe Valley, with quarterly attendance	2014 Inquiry Report: Recommendation 2 and Affirmation 10	June 2015	Complete	CFA
206	Update local emergency management plans to incorporate industry into emergency management planning and response. <sup>21</sup>	2014 Inquiry Report: Recommendation 2 and Affirmation 10	August 2015	Complete	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	September 2015	Complete	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	October 2015	Complete	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	December 2015	Complete	EMV
210	Train Emergency Commanders and identified staff in AIIMS Level 2 accreditation <sup>22</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	December 2015	Complete	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	March 2016	Complete	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	Ongoing	EMV

<sup>21</sup> 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.

<sup>22</sup> 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/20141201055015/Coal-Mine-Emergency-Taskforce-Status-report-31-December-2015-V6-DraftCAedit-CLapp-and-PS-acc.pdf>.



213	District 27 District Command Centre is operational	2014 Inquiry Report: Recommendation 2	December 2016	Ongoing	CFA
214	Deliver the Final Report of the Latrobe Valley Coal Mine Taskforce	2014 Inquiry Report: Recommendation 2 and Affirmation 10	December 2016	Ongoing	EMV
215	Attend bi-monthly CGEIG Standardisation Committee meetings	2014 Inquiry Report: Recommendation 2 and Affirmation 10	transition to BAU by December 2016	Ongoing	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	Ongoing	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	Ongoing	EMV

#### 205. Convene an industry forum in the Latrobe Valley, with quarterly attendance

In June 2015, CFA established an industry forum that enables CFA and Latrobe Valley industry to work collaboratively to ensure consistency in emergency management planning and consequence management.

Membership includes, but is not limited to:

- CFA
- Latrobe Valley mine operators
- power generation companies
- HVP Plantations
- Australian Paper Maryvale.

To date, the forum has discussed a diverse range of issues such as emergency planning, exercising, debriefing, integration of mine and emergency services personnel, training packages, doctrine, recovery and communications.

Evidence provided to IGEM indicates the organisations and agencies represented at the forum have been working collaboratively, routinely sharing information, undertaking joint training and exploring funding opportunities for joint projects.

The forum has reassessed its membership on a number of occasions with a view to including additional organisations or agencies as appropriate.

#### FINDING

IGEM considers this action has been implemented as planned.

#### 206. Update local emergency management plans to incorporate industry into emergency management planning and response<sup>23</sup>.

It was reported in the Victorian Government Implementation Plan that local emergency management plans had been updated to incorporate the integration of industry into emergency management planning and response.

These plans are listed as:

- Gippsland Region Emergency Relief and Recovery Plan
- Gippsland Risk and Consequence Plan Bushfire and Heat 2015–16
- Gippsland Regional Control Team (RCT) Fire Readiness Matrix 2015–16
- Gippsland REMT (Regional Emergency Management Team) Fire Readiness Matrix 2015–16.

The Risk and Consequence Plan Bushfire and Heat 2015–16 documents the obligation of the Regional Controller to ensure industry representation on the REMT, where relevant.

The RCT Fire Readiness Matrix requires the RCT to brief the REMT (incorporating industry where relevant) about requirements at pre-determined times, according to the readiness level based on the Fire Danger Index (FDI).

The REMT Fire Readiness Matrix documents the readiness levels and actions of specific industry at various bushfire threat levels, based on the FDI. A Bushfire Readiness Matrix for industry is also being finalised, which lists the readiness levels and actions of broader industry across the region, according to the FDI.

<sup>23</sup> 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

The Region Emergency Relief and Recovery Plan also recognises the importance of business and industry in emergencies.

EMV reports that the Coal Mine Emergency Management Taskforce coordinated the updating of all relevant local emergency management plans and the plans were tested during Exercise Latrobe 15 in October 2015. The plans will be reviewed and updated annually.

#### FINDING

IGEM considers this action has been implemented as planned.

#### **207. Develop the Latrobe Valley Coal Mines Major Emergency – Strategic Concept of Operations and Industry Integration**

The initial *Latrobe Valley Critical Infrastructure Major Emergency Guideline – Concept of Operations and Industry Integration for Incident Controllers* (the guideline) was developed in September 2015, with outcomes from Exercise Latrobe 15 used to inform the final guideline, which was completed in December 2015.

An updated version (No. 3.2) was finalised in March 2016. See Action 209.

#### FINDING

IGEM considers this action has been implemented as planned.

#### **208. Hold Exercise Latrobe 15 to implement and test the pilot integrated management structure, fully integrating industry into the REMT and IMTs**

In October 2015, exercise 'Latrobe 15' brought together 31 organisations, including observers, from across government and industry to conduct a facilitated, discussion exercise to test the integration of industry into AIIMS.

EMV undertook a review of the exercise, surveying participants to measure the extent to which Latrobe 15 was successful in testing integration. A review report was distributed to relevant stakeholders to guide the implementation of further industry integration more broadly across the state.

Outcomes from the exercise were used to inform the *Latrobe Valley Critical Infrastructure Major Emergency Guideline – Concept of Operations and Industry Integration for Incident Controllers*, finalised in December 2015. An updated version (No. 3.2) was finalised in March 2016 (see Actions 207 and 209).

#### FINDING

IGEM considers this action has been implemented as planned.



Latrobe 15 Exercise, October 2015

## 209. Finalise the Latrobe Valley Coal Mines Major Emergency – Strategic Concept of Operations and Industry Integration

The Latrobe Valley Critical Infrastructure Major Emergency Guideline – Concept of Operations and Industry Integration for Incident Controllers (the guideline) was finalised in December 2015. An updated version (No. 3.2) was finalised in March 2016.

Industry and agencies have worked collaboratively to develop the guideline, which has a focus on formalising the integration of Latrobe Valley coal mine personnel into REMTs and IMTs.

Within the Version No. 3.2, incident level functions and responsibilities in an emergency are described, with lead agencies and core member agencies assigned to each function. These include:

- coordination of response
- suppression and extinguishment
- emergency responder health and safety
- community smoke impacts
- health
- community engagement and information
- planning, performance and reporting
- respite, relief and recovery.

Industry is part of the core membership for the suppression and extinguishment, emergency responder health and safety and community engagement and information functions.

The principles of AIIMS are reflected in the document, allowing for incident management to escalate and de-escalate as required. Control arrangements, health considerations, possible strategies, possible operational actions and strategic risks and consequences are also considered.

### FINDING

IGEM considers this action has been implemented as planned.

## 210. Train Emergency Commanders and identified staff in AIIMS Level 2 accreditation and enable designated ENGIE personnel to attend regional ICC during incidents that have potential to impact the mine.

As previously reported in the 2015 Annual Report, AIIMS training has been provided to relevant industry personnel, with emergency commanders having also achieved level 2 IC accreditation.

AIIMS level 2 accreditation has been achieved by 51 personnel from the Latrobe Valley coal mines, with six individuals able to operate in an ICC for the purposes of providing functional support.

Additional AIIMS training will continue to be provided through new training arrangements with a contracted provider, certified by AFAC.

EMV has advised that ENGIE personnel have the ability to attend the ICC as appropriate, however this has not occurred since implementation of the practice due to no significant incidents occurring.

### FINDING

IGEM considers this action has been implemented as planned.

## 211. Finalise the Coal Mine Emergency Taskforce Status Report detailing the status and initiatives undertaken by the Taskforce members

Chaired by the EMC, the Coal Mine Emergency Management Taskforce brings together key agencies, industry and emergency services to promote collaboration in dealing with the risk of fire and considers other emergencies that may impact any of the three coal mines in the Latrobe Valley.

A Surf Coast Taskforce was also established, but was disbanded when Alcoa made the decision to close the Anglesea mine. Oversight of the Anglesea mine's fire preparedness regime and rehabilitation activities has been maintained through regulatory bodies.

EMV issued the Coal Mine Emergency Management Taskforce Report, as at 31 December 2015, which outlines 178 initiatives recorded by the Taskforce that are either completed or ongoing. The Taskforce was initially due to end at the end of December 2015 but was extended at the request of the Minister for Emergency Services until September 2016.

### FINDING

IGEM considers this action has been implemented as planned.

## 212. Hold Coal Mine Taskforce Exercise to further implement and test the pilot integrated management structure, fully integrating industry into the REMT and IMTs.

As at the evidence submission cut-off date for IGEM's 2016 Annual Report, planning for the 2016 Coal Mine Taskforce exercise (Latrobe 16) was being finalised and the exercise scheduled for 25 and 26 August 2016.

IGEM has been advised that the overarching aim of the exercise is to provide insight into response arrangements and the capability of key players to work in an integrated manner.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report<sup>24</sup>.

**213. District 27 District Command Centre is operational**

District Command Centres (DCCs) are used by the CFA as part of its response to fires and other incidents within a particular district. Following the creation of District 27 in April 2015, CFA is finalising building works associated with the new District Headquarters and DCC.

The draft District 27, DCC Facility Operations Manual outlines the functions of the DCC, which include:

- monitoring incidents occurring within the District
- coordinating, prioritising and maintaining strategic resourcing in support of incidents, prior to the transfer of control to an ICC
- providing a support facility for the remainder of the District that is not directly involved in an incident.

IGEM personnel visited the new District Headquarters and the DCC in April 2016 to observe, first-hand, the progress of its construction. CFA has advised that it is on track to have building works completed and operational doctrine finalised by December 2016, at which time the DCC will be made operational.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**214. Deliver the Final Report of the Latrobe Valley Coal Mine Taskforce**

In 2015, the Minister for Emergency Services requested that the Latrobe Valley Coal Mine Taskforce be extended until September 2016 in order to support ongoing fire and emergency preparedness at Victorian coal mines.

EMV is scheduled to deliver the final report on the activities of the Latrobe Valley Coal Mine Taskforce in December 2016.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**215. Attend bi-monthly CGEIG Standardisation Committee meetings**

Established in the 1990s, the Central Gippsland Essential Industries Group (CGEIG) is a regional group consisting of government bodies including emergency services organisations, as well as major industry within central Gippsland. The group supports its members to provide assistance to each other and to share information during emergencies (State Government of Victoria 2014a, p. 84).

Representatives include:

- mining, power generation, water, oil and gas bodies
- electricity transmission and distribution
- Australian Energy Market Operator
- Victoria Police, VICSES, CFA and AV
- local, state and federal government.

The CGEIG Standardisation Committee has existed as a sub-set of the broader group, working to implement common standards across member organisations and agencies. The 2015 CGEIG Annual Report outlines a number of work areas in which the sub-committee and its members have been involved in, including:

- auto radio bridging systems
- major mine incident lesson learned
- pre-set notification call buttons for critical infrastructure sites to the Emergency Services Telecommunications Authority (ESTA) state emergency communications centres
- community engagement programs
- participation in cross sector smoke monitoring and CO monitoring procedures and practices (incorporation regulators, industry and agencies).

EMV advises a limited number of Standardisation Committee meetings have been held, but all have been attended by EMV staff. CFA has provided representation at all CGEIG meetings.

Given the similar nature of work undertaken by the newly established industry forum and the pre-existing CGEIG standardisation sub-committee, the CGEIG Committee of Management agreed in August 2016 to establish an aligned standardisation group and industry forum, which would meet monthly.

**FINDING**

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

**216. Update EMV Joint Standing Operating Procedure for Incident Management Team Operations to incorporate industry integration into IMT operations**

<sup>24</sup> IGEM subsequently attended the Latrobe 16 exercise on 25 and 26 August 2016 as an observer.

*Incident Management Team Operations Readiness Arrangements for Bushfire* (JSOP 2.03) provides Regional Controllers with guidance on pre-positioning IMTs to manage major bushfires, or those with the potential to become major bushfires, taking account of the State and Regional risk profile and the need for sustainable deployment of available resources.

The JSOP applies to:

- the responder agencies (CFA, DELWP, MFB and VICSES)
- IMT readiness arrangements
- readiness for major bushfires.

EMV has advised preliminary work has begun on updating the JSOP to incorporate industry into arrangements as part of the revised version, scheduled for formal agency review in March 2017. The update has been progressed by the Coal Mine Emergency Management Taskforce.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 217. Assist in the re-write of the AIIMS doctrine to accommodate the full integration of industry into the AIIMS structure and process

AIIMS is an incident management system commonly used across Australia by emergency management agencies when responding to and managing any incident regardless of size or complexity, including but not limited to bushfires, house fires or floods.

Version 5 of AIIMS is currently under development and will incorporate changes to formally allow industry personnel to be brought into functional IMT roles under the AIIMS structure, rather than simply providing a liaison officer.

AFAC has been coordinating the re-write of the AIIMS doctrine, with involvement from Victorian agencies including EMV, VICSES, CFA, MFB and Parks Victoria. EMV has advised that a key aspect of the Latrobe 15 exercise was to practice the integration of industry into AIIMS. Following the exercise, an AFAC consultant met with industry representatives to confirm industries willingness and commitment to becoming a formal part of the AIIMS structure for the management of major incidents that impact, or have the potential to impact industry.

AFAC, EMV and the agencies are collaborating 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.

Version 5 of AIIMS is scheduled to be finalised and released in March 2017.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

## 5.8.2 Emergency Management Planning

**Table 36:** Status of 'Emergency Management Planning' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
EMERGENCY MANAGEMENT PLANNING					
218	Publish the Critical Infrastructure Resilience Strategy	2014 Inquiry Report: Affirmation 36	July 2015	Complete	EMV
219	Enact the Emergency Management (Critical Infrastructure Resilience) Act 2014	2014 Inquiry Report: Affirmation 36	July 2015	Complete	EMV
220	Declare 'vital' critical infrastructure in the Latrobe Valley	2014 Inquiry Report: Affirmation 36	August 2015	Complete	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	April 2016	Complete	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	May 2016	Complete	EMV
223	Begin the Critical Infrastructure Resilience Improvement Cycle	2014 Inquiry Report: Affirmation 36	July 2016	Complete	DEDJTR and EMV
224	Consider emergency resource planning in CFA's District 27 boundaries at the industry forum	2014 Inquiry Report: Affirmation 13	Transition to BAU by September 2017	Complete	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	Ongoing	EMV

## 218. Publish the Critical Infrastructure Resilience Strategy

The Victorian *Critical Infrastructure Resilience Strategy* (State Government of Victoria, 2015) works in conjunction with Part 7A of the *Emergency Management Act 2013* (the Act) to set out the framework to reform Victoria's security and emergency management arrangements for critical infrastructure. The new arrangements are in line with the *Emergency Management Reform White Paper* (State Government of Victoria 2012a) and *A Roadmap for Victorian Critical Infrastructure Resilience* (State Government of Victoria 2012b).

The strategy describes priorities and sets out management arrangements for critical infrastructure resilience. It also outlines Victoria's model which comprises the following four levels:

- **vital** – infrastructure that is of State significance and is critical to the continuity of supply of essential services to the State, and to the overall economic and social wellbeing of Victorians
- **major** – infrastructure that is critical to the continuity of supply of essential services to more than one region, or to the overall economic and social wellbeing of those regions
- **significant** – infrastructure that is critical to the continuity of supply of essential services to a region or to the overall economic and social wellbeing of that region
- **local** – infrastructure that is critical to the continuity of supply of essential services to a community or to the overall economic and social wellbeing of that community (State Government of Victoria 2015a).

The strategy has been published and is available for the community to download on the EMV website.

### FINDING

IGEM considers this action has been implemented as planned.

## 219. Enact the Emergency Management (Critical Infrastructure Resilience) Act 2014

The *Emergency Management Amendment (Critical Infrastructure Resilience) Act 2014* (the Act) was enacted 1 July 2015. At that time, the corresponding regulations, the *Victorian Critical Infrastructure Resilience Strategy* (State Government of Victoria, 2015), and the Ministerial Guidelines, came into operation and EMV assumed responsibility for coordination and management of the new critical infrastructure arrangements. This responsibility was transferred from DPC.

As a result of the legislative amendment, the Act now includes requirements in relation to:

- what is an essential service
- assessment of infrastructure
- responsibilities in relation to critical infrastructure
- the Victorian Critical Infrastructure Register
- the Resilience Improvement Cycle.

### FINDING

IGEM considers this action has been implemented as planned.

## 220. Declare 'vital' critical infrastructure in the Latrobe Valley

Victoria's *Critical Infrastructure Resilience Strategy* defines 'vital' as "infrastructure that is of State significance and is critical to the continuity of supply of essential services to the State, and to the overall economic and social wellbeing of Victorians" (State Government of Victoria 2015a, p. 20).

The Latrobe Valley's major coal-fired electricity generation infrastructure has been classified as 'vital' critical infrastructure (State Government of Victoria 2016c, p. 86). The assessment

and designation of infrastructure is undertaken under the requirements of the *Critical Infrastructure Resilience Strategy* and Part 7A of the *Emergency Management Act 2013*.

DEDJTR is the department responsible for the energy sector and is working with the operators of the Latrobe Valley coal mines (as 'vital' infrastructure) to commence the resilience improvement cycle that this declaration triggers. This assists both industry and government to identify risks to the supply of essential services and to create risk management strategies as part of the management and mitigation of those risks.

#### FINDING

IGEM considers this action has been implemented as planned.

### 221. Develop guidelines to support the management of ongoing response requirements in relation to Class 1 emergencies impacting on the Latrobe Valley Coal Mines

Guidance to support the management of ongoing response requirements in relation to the Latrobe Valley coal mines are included as part of *The Latrobe Valley Critical Infrastructure Major Emergency Guideline – Concept of Operations and Industry Integration for Incident Controllers* (the guideline), finalised in December 2015. An updated version (No. 3.2) was finalised in March 2016. Further information on this document is available under Action 209.

#### FINDING

IGEM considers this action has been implemented as planned.

### 222. Release the draft Emergency Management Legislative Amendment (Planning) Bill 2016 for public consultation

The Exposure Draft, Emergency Management Legislation Amendment (Planning) Bill 2016 has been released for public comment, with submissions accepted until 30 June 2016 (State Government of Victoria 2016d).

The Bill "establishes a new governance structure for emergency management planning [and] . . . provides clear and transparent arrangements for planning under the *Emergency Management Act 2013*, to promote a shared understanding of relevant roles in the planning process" (State Government of Victoria 2016d, p 3).

As part of the public consultation, the Exposure Draft was released with an issues paper, a mark-up of the Act and a statement of compatibility. Members of the public were able to provide submissions in relation to a number of specific questions described in the issues paper, as well as any other aspect of the exposure draft.

Submissions were available on the DJR website following the 30 June 2016 submission cut-off date.

#### FINDING

IGEM considers this action has been implemented as planned.

### 223. Begin the Critical Infrastructure Resilience Improvement Cycle

As identified under Action 220, the Latrobe Valley's major coal-fired electricity generation infrastructure has been classified as 'vital' critical infrastructure (State Government of Victoria 2016c, p. 86). This classification triggers the requirement to begin the resilience improvement cycle. This assists both industry and government to identify risks to the supply of essential services and to create risk management strategies as part of the management and mitigation of those risks (Emergency Management Victoria 2015).

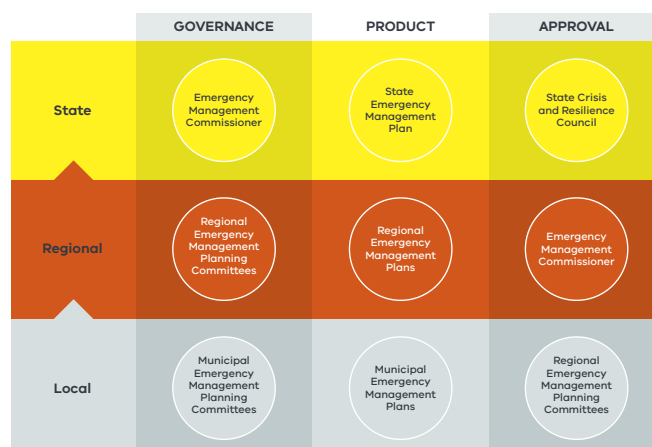
DEDJTR, the government department responsible for the energy sector, has been working with EMV and the operators of the Latrobe Valley coal mines to commence the resilience improvement cycle.

Key aspects of the cycle includes:

- developing an emergency risk management plan to identify and mitigate against risks to continuity of supply
- undertaking annual exercises to test the emergency management arrangements in the risk management plans, 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 (State Government of Victoria 2016c, p. 85).

Since the commencement of Part 7A of the *Emergency Management Act 2013*, the first statements of assurance have been submitted by the responsible entities to DEDJTR.

Figure 5: Emergency Management Planning Framework



**FINDING**

IGEM considers this action has been implemented as planned.

**224. Consider emergency resource planning in CFA's District 27 boundaries at the industry forum**

In May 2016, CFA developed the Interim Latrobe Valley (District 27) Service Delivery Strategy, which focuses on the:

- Morwell Emergency Services Hub (a new facility bringing together the CFA and AV at one location in Morwell)
- housing and crewing of the two Compressed Air Foam System (CAFS) appliances (further information available under Actions 226 and 234).

CFA advises work will be undertaken to further develop the Service Delivery Strategy to encompass the district more broadly.

While the Service Delivery Strategy is an internal document, emergency resource planning, more generally, has been discussed at the industry forum convened by CFA. As identified under Action 205, CFA and Latrobe Valley industry work collaboratively through the forum to ensure consistency in emergency management planning and consequence management.

**FINDING**

IGEM considers this action has been implemented as planned.

**225. Full implementation of the Emergency Management Legislative Amendment (Planning) Bill 2016**

Full implementation of the Emergency Management Legislation Amendment (Planning) Bill 2016 will occur following enactment.

**FINDING**

This action is contingent on enactment of the Bill and IGEM will revisit in the next Annual Report



Hazelwood mine (Courtesy: ENGIE)

### 5.8.3 Emergency Management Training

**Table 37:** Status of Emergency Management Training actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
EMERGENCY MANAGEMENT TRAINING					
226	Retrofit two heavy tankers with specialist CAFS capability for deployment in Churchill and Traralgon South (within District 27)	2014 Inquiry Report: Affirmation 11	April 2015	Complete	CFA
227	Undertake a health monitoring trial with LifeAid at emergency site in Portland and Kaladbro	2014 Inquiry Report: Affirmation 12	November 2015	Complete	CFA



228	Locate CFA Health monitoring teams located at nine locations across Victoria (eight regionally, and one at headquarters)	2014 Inquiry Report: Affirmation 12	December 2015	Complete	CFA
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	August 2016	Complete	CFA
230	Develop a pilot Brown Coal Mine Firefighting Training Package, which incorporates Standard for Managing Exposure to Significant Carbon Monoxide Emissions and associated JSOPs	2014 Inquiry Report: Affirmations 11 and 12	August 2016	Complete	CFA
231	Development of a Detection Team (Scientific Officers and HAZMAT) Training Package	2014 Inquiry Report: Affirmation 11	June 2016	Complete	CFA and MFB
232	Contract on-call capability with health services and fire services	2014 Inquiry Report: Affirmation 12	June 2016	Complete	CFA and MFB
233	Provide personal monitoring equipment to MFB firefighters	2014 Inquiry Report: Affirmation 12	June 2016	Ongoing (Overdue)	MFB
234	Release tender for two purpose-built specialist CAFS trucks	2014 Inquiry Report: Affirmation 11	September 2016	Ongoing	CFA
235	Convert pilot Brown Coal Mine Firefighting Training Package into a blended learning program (e-learning and face to face)	2014 Inquiry Report: Affirmation 11	October 2016	Ongoing	CFA
236	Develop and deliver training to IMTs with a focus on Incident Controllers	2014 Inquiry Report: Affirmation 11	October 2016	Ongoing	CFA and MFB
237	Deliver Detection Team Training (Scientific Officers and HAZMAT)	2014 Inquiry Report: Affirmation 11	October 2016	Complete	CFA and MFB
238	Deliver Brown Coal Mine Firefighting Training Package	2014 Inquiry Report: Affirmation 11	November 2016	Ongoing	CFA and MFB

#### **226. Retrofit two heavy tankers with specialist CAFS capability for deployment in Churchill and Traralgon South (within District 27)**

Compressed Air Foam System (CAFS) appliances have proven to be very effective in coal mine fires. CAFS appliances from outside Victoria were utilised as part of the firefighting response during the 2014 Hazelwood mine fire.

CFA have deployed two standard heavy crew cab tankers, which have been retrofitted with CAFS capability, to Churchill and Traralgon South. These CAFS appliances have been used operationally in District 27 and at other incidents across the state including the Strathdownie peat fire and the Somerton tip fire in November 2015.

#### **FINDING**

IGEM considers this action has been implemented as planned.

#### **227. Undertake a health monitoring trial with LifeAid at emergency site in Portland and Kaladbro**

CFA completed on-site health monitoring trials with LifeAid at Kaladbro between 26 November – 9 December 2015 and at Portland between 10 and 14 November 2015.

**FINDING**

IGEM considers this action has been implemented as planned.

**228. Locate CFA Health monitoring teams located at nine locations across Victoria (eight regionally, and one at headquarters)**

A Volunteer Rehabilitation and Health Unit has been established by the CFA, to coordinate firefighter welfare and recovery at incidents in extreme weather and to conduct health monitoring (such as CO and hydration monitoring). All agencies are able to access the service, which will deliver increased support for the wellbeing of emergency personnel, underpinned by increased levels of awareness.

CFA reports that it currently has 11 rehabilitation units, with eight having health monitoring capability. A health team is also located at CFA headquarters in Burwood. CFA will attempt to establish a further five units for this year's summer season, which will provide a total of 17 rehabilitation and 15 health teams.

**FINDING**

IGEM considers this action has been implemented as planned.

**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)**

The *CFA District 27 Operating Procedure: Latrobe Valley Open Cut Coal Mines – Response to fires* (SOP 27.01) was endorsed by the District Operations Manager in August 2015.

SOP 27.01 applies to all CFA operational responses to fire in any of the three Latrobe Valley open cut coal mines. The SOP exists alongside the *State Smoke Framework 2015* and the *Standard for Monitoring Significant CO Emissions 2015*, describing the steps that must be followed during response, with a particular emphasis on the safety aspects involved with managing the risks of CO.

The SOP is scheduled for review in September 2016.

**FINDING**

IGEM considers this action has been implemented as planned.

**230. Develop a pilot Brown Coal Mine Firefighting Training Package, which incorporates Standard for Managing Exposure to Significant Carbon Monoxide Emissions and associated JSOPs**

CFA and MFB have worked together to develop the Brown Coal Mine Firefighting Training Package, which is designed to ensure that CFA has the capability and capacity to respond to fires within coal mines. The training addresses the role of coal mine firefighter and forms the minimum operational training for all members responding to coal mine fires in Victoria.

Various training topics are covered including extinguishment methods, safety, command and control and information on the industry.

MFB also advise that elements of the training package have been embedded into the MFB recruit firefighter and promotional training syllabus.

**FINDING**

IGEM considers this action has been implemented as planned.

**231. Development of a Detection Team (Scientific Officers and HAZMAT) Training Package**

A detection team training package for scientific officers and HAZMAT personnel has been co-developed by CFA and MFB. See Action 237 for further information in relation to delivery of this training.

The training covers the following topics:

- CO definition
- health effects of inhalation
- exposure standards
- differences in the standards
- working exposure guidelines
- CO monitoring
- responder health and safety
- first aid management.

MFB reports the current package is listed on the work schedule of the MFB Training Development Department in late 2016 to be developed into a full training package in accordance with the Public Safety Training Package requirements. The training package will then be delivered as stand-alone or as a component of MFB skills acquisition and skills maintenance training programs.

CFA reports that training in HAZMAT detection is provided to all CFA firefighters at integrated stations. The course is available at the on-line training portal and provides industry standard instruction on the selection, use and maintenance of atmospheric monitoring equipment including gas, vapour and smoke monitoring.

Specialist Heavy Hazmat Brigades at Hallam, Shepparton, Ballarat City and Corio are undertaking specific awareness training on smoke framework atmospheric monitoring procedures. They will work in the HAZMAT sector with brigade Scientific Officers at smoke events recording measurements, managing data, maintaining instruments, providing information to the IC and assisting other brigades across the state to conduct atmospheric monitoring.

#### FINDING

IGEM considers this action has been implemented as planned.

### 232. Contract on-call capability with health services and fire services

MFB has a longstanding after hours and on-call contract in place with the Brigade Medical Services (BMS) health provider. This service provides the MFB with 24-hour, 7-days-a-week on-call medical services and attendance at any incident deemed a 4th alarm or higher.

MFB IC's may contact the BMS at any time to seek immediate medical advice for an incident.

CFA utilises a similar contracted service, which provides health support for incident controllers and decision makers during emergency events. The 7 day-a-week service provides oversight and guidance for internal agency health activities as required.

Core health monitoring capability and capacity is provided by eight volunteer brigades, which have extended membership to paramedics/nurses who will provide this service. Three additional brigades will have this capability by the 2016-17 summer.

CFA is progressing an MOU with AV for the provision of surge capacity and is finalising negotiations with a number of agencies to provide health services at incidents as required.

#### FINDING

IGEM considers this action has been implemented as planned.

### 233. Provide personal monitoring equipment to MFB firefighters

Although MFB has provided details of a suite of specialist detection and monitoring equipment that is carried on MFB appliances, this action requires the provision of personal monitoring equipment to MFB firefighters. The MFB has advised that a project has been created to progress the purchase of personal monitors, to be worn by all firefighters,

for detection of CO, hydrogen cyanide and hydrogen sulphide. Funding has been approved for initial scoping of this project. MFB has not provided an estimated completion date for this project.

#### FINDING

This action is overdue and IGEM will revisit in the next Annual Report.

### 234. Release tender for two purpose-built specialist CAFS trucks

As identified under Action 226, CAFS appliances have shown to be very effective at coal mine fires. CAFS appliances from outside Victoria were utilised as part of the firefighting response during the 2014 Hazelwood Mine Fire.

CFA reports that a Requirements Specification has been completed and tender process has commenced with tenders being validated to better understand the scope and options available to CFA in the marketplace.

#### FINDING

IGEM considers this action is progressing satisfactorily and will revisit in the next Annual Report.

### 235. Convert pilot Brown Coal Mine Firefighting Training Package into a blended learning program (e-learning and face to face)

As described under Action 230, a Brown Coal Mine Firefighting Training Package has been developed.

CFA reports that this action is dependent on outcomes from the Brown Coal Training Package pilot (see Action 238).

Although not leading this action, MFB has advised it is planning to introduce a learning management system across the organisation. Once implemented, training content will be developed for delivery as e-learning packages and this will include the Brown Coal Mine Firefighting Training Package.

#### FINDING

This action is contingent on Action 238 and IGEM will revisit in the next Annual Report.

### 236. Develop and deliver training to IMTs with a focus on Incident Controllers

CFA and MFB developed a training package for ICs and IMTs on the State Smoke Guide, CO Response Protocol and PM 2.5 Protocol.

MFB advises training delivery commenced in the 2015-2016 pre-season briefings and will be incorporated as part of 2016-2017 pre-season briefings. Training was delivered to:

- senior officers at skills maintenance sessions in September 2015
- all platoons at fire station 38 attended in September 2015
- level 3 ICs in October and November 2015
- CFA Operations Managers in October 2015.

CFA reports smoke training packages designed for multi-agency use are located on the Smoke Work Group Share Point Page. Smoke protocol awareness presentations have been delivered by CFA and MFB Scientific Officers as follows:

- CFA, VICSES and DELWP Level 3 ICs (October and November 2015)
- CFA Operations Managers' Conference, Burwood East (October 2015)
- Latrobe 15 multi-agency exercise, Traralgon (October 2015)
- Gippsland Operations Officer Professional Development Conference (25 July 2016)
- MFB Senior Officers skills maintenance sessions (September 2015)
- Coal Mine Emergency Management Taskforce Meeting (November 2015)
- WorkSafe Victoria, Earth Resources Group (February 2016).

Although not specified in the wording of Action 236, the Victorian Government Implementation Plan refers to training for IMTs, with a focus on Incident Controllers, developed as part of the Brown Coal Mine Firefighting Training Package. It is not clear, however, which of the activities reported above are related to this package.

#### FINDING

IGEM notes the reported progress of this action and will revisit in the next Annual Report.

### 237. Deliver Detection Team Training (Scientific Officers and HAZMAT)

As identified under Action 231, a detection team training package for scientific officers and HAZMAT personnel has been co-developed by CFA and MFB.

MFB reports this training was delivered to MFB command staff, Scientific Officers and HAZMAT technicians in:

- October and November 2015 – MFB command staff
- November and December 2015 – HAZMAT technicians and scientific officers.

CFA has advised that this training is being delivered to the Heavy Hazmat Platoons by the CFA Scientific Officer. Training delivered to date includes:

- Hallam A-platoon (11 July 2016), B Platoon (18 August 2016)
- Shepparton B-platoon (9 August 2016)
- Corio B-Platoon (30 June 2016), C-Platoon (15 August 2016).

Further training is scheduled for September, with completion due in October 2016.

#### FINDING

IGEM considers this action has been implemented as planned.

### 238. Deliver Brown Coal Mine Firefighting Training Package

A pilot of the Brown Coal Firefighter Training Package is scheduled for the end of September 2016.

The pilot will be conducted in CFA District 27 and involve staff from CFA Morwell. An evaluation of the pilot will be conducted by representatives from CFA Learning & Development, United Firefighters Union of Victoria Enterprise Bargaining Implementation Committee (EBIC) and MFB Consultative Committee and reported to the EBIC Learning and Development Committee and the Joint Interoperability Committee. A decision on statewide delivery of the package will be made following the pilot.

MFB has advised it will prioritise the delivery of this package as part of the MFB operational training program. MFB also advises elements of the training package have been embedded into the MFB recruit firefighter and promotional training syllabus.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

## 5.8.4 Local Government Capability

**Table 38:** Status of 'Local Government Capability' actions

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
LOCAL GOVERNMENT CAPABILITY					
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	September 2015	Complete	DELWP
240	Hold planning days with all 11 collaborative council clusters to assist with strategic planning	2014 Inquiry Report: Affirmation 31	May 2016	Complete	DELWP
241	Conduct an annual forum for all council emergency management staff in Bendigo	2014 Inquiry Report: Affirmation 31	June 2016	Complete	DELWP
242	Define the roles and responsibilities of local government in emergency management	2014 Inquiry Report: Affirmation 31	September 2016	Ongoing	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	Ongoing	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	Ongoing	DELWP
245	Develop an action plan to address any local government emergency management capability and capacity gaps	2014 Inquiry Report: Affirmation 31	December 2018	Ongoing	DELWP

### 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

Under current legislation, local municipalities are required to prepare and maintain a Municipal Emergency Management Plan (MEMP), with VICSES required to audit the plans every three years at a minimum.

The MEMP for Latrobe City Council was submitted to VICSES for auditing in December 2014, after being reviewed by the Regional Emergency Management Committee.

As a result of the audit, VICSES deemed the plan required amendments to ensure it met its requirements. Latrobe City Council then made revisions before it was finalised in September 2015.

The MEMP was deemed to comply with audit requirements in November 2015.

#### FINDING

IGEM considers this action has been implemented as planned.

#### 240. Hold planning days with all 11 collaborative council clusters to assist with strategic planning

Across the state, collaborative council clusters bring together emergency management personnel from local governments to discuss, and in some cases, work together on a range of projects or issues. The clusters are generally based around specific geographic areas and vary in the nature and formality of their collaboration and resource sharing. They also vary in the frequency of their meetings and the issues they discuss.

Planning days for council collaborative groups have been held to assist with strategic planning in relation to emergency management.

Objectives for each group were developed collaboratively at the planning days. Examples include:

- building relationships
- strengthening systems that support collaboration
- identifying training needs
- formalising resource sharing MOUs
- sharing lessons.

##### FINDING

IGEM considers this action has been implemented as planned.

#### 241. Conduct an annual forum for all council emergency management staff in Bendigo

The State Municipal Emergency Management Enhancement Group (MEMEG) fosters collaboration and knowledge sharing across emergency management, particularly in relation to the role of local government. This coordinating body conducted an annual forum for all council emergency management staff in June 2016.

Some 91 representatives from across local government, state government and emergency management agencies attended the forum. A variety of presentations were made including:

- recent incidents
- community engagement initiatives
- relief and recovery
- legislative changes.

Results from a survey distributed to attendee's post-forum show more than ninety per cent thought the content and quality of presentations was 'excellent' or 'very good'.

LGV intends to ensure the forum is conducted regularly.

##### FINDING

IGEM considers this action has been implemented as planned.

#### 242. Define the roles and responsibilities of local government in emergency management

The emergency management roles and responsibilities of local government are specified in legislation, the EMMV and state policies.

DELWP, through LGV, has commenced a three year project to define the roles and responsibilities of local government in emergency management. LGV has undertaken a literature review of the work completed by various parties that describes or recommends changes to the role of local government in emergency management. LGV has also consulted with local government and the emergency management sector through a series of 16 stakeholder workshops, held in April and May 2016.

Following the workshops, a report was developed which described current and potential emergency management roles for councils before, during and after emergencies, as identified by workshop participants. It also identified factors that limit or enable councils' ability to undertake an effective emergency management role.

LGV will present the findings of the initial phase of the project to the SCRC by September 2016.

##### FINDING

IGEM considers this action is progressing satisfactorily and will revisit in the next Annual Report.

#### 243. Review the current roles and responsibilities of local government in emergency management for alignment with the defined roles and responsibilities

As outlined under Action 242, a three year project is being conducted by DELWP through LGV to define the roles and responsibilities of local government in emergency management. To date, LGV has undertaken a literature review of the work completed by various parties that describes or recommends changes to the role of local government in emergency management, and has conducted a series of 16 stakeholder workshops to inform a report on current and potential emergency management roles for councils.

LGV has aligned the findings from the workshops report to the Victorian Preparedness Goal, which was released in early August 2016. The Goal identifies 21 core capabilities as critical components required to ensure Victoria is prepared and can respond and recover from the greatest risks facing the state. The council roles identified in the workshop report align to 16 the 21 core capabilities.

LGV, together with the local government sector, is working with EMV to design the critical tasks associated with the 16 core capabilities to ensure they align to councils' roles, and that the associated Victorian Preparedness Goal is representative and relevant to local governments.

##### FINDING

IGEM considers this action is progressing satisfactorily and will revisit in the next Annual Report.



**244. Review the capability and capacity required for local government to fulfil their emergency management roles and responsibilities**

As part of LGV's three year project identified under Actions 242 and 243, DELWP advises phase two (to address Action 244) is due for commencement in 2018. As part of this phase, councils and other sector stakeholders will be consulted to assess the emergency management skills and expertise needed to fulfil the emergency management roles and responsibilities of councils.

This phase will involve the development or adaptation of an assessment tool which compares councils' capability and capacity to benchmarks required to undertake core roles and responsibilities.

DELWP advises the model used in this phase will be consistent with the approach taken by the *Victorian Emergency Management Capability Blueprint 2015–2025* and the *Emergency Management Strategic Action Plan* project led by EMV, which aims to progress to an all-hazards emergency management capability model that captures and baselines the state's current capability and capacity, and identifies gaps and reinvestment opportunities.

**FINDING**

IGEM considers this action is progressing satisfactorily and will revisit in the next Annual Report.

**245. Develop an action plan to address any local government emergency management capability and capacity gaps**

Informed by outcomes from phases one and two, phase three of DELWP's three year project will see action plans developed to address any capability and capacity gaps within local government, to ensure emergency management roles and responsibilities can be fulfilled.

DELWP advises a number of different approaches are available for developing action plans, for example, grouping plans to particular regions, municipalities or issues. It is expected that phases one and two will inform the selection of appropriate structures for action plans.

Action plans are anticipated to include specific programs and projects, and be will be dependent upon consultation with a variety of government, community and business stakeholders and partners.

DELWP notes that any work undertaken will align to the Resilient Melbourne Strategy and the Resilience Framework, given outcomes of any projects linked to these two documents will be seeking to increase the capability and capacity of local government.

**FINDING**

This action is contingent on Action 244 and IGEM will revisit in the next Annual Report.

## 5.8.5 National Disaster Recovery Assistance Payment

**Table 39:** Status of 'National Disaster Recovery Assistance Payment' action

NO.	ACTION	RELATED RECOMMENDATION/ AFFIRMATION	DUE DATE	STATUS	LEAD AGENCY
STAGE 5 – ONGOING REVIEW AND ADAPTATION (SUBSEQUENT WORK)					
246	Introduce new technology to track payments	2014 Inquiry Report: Affirmation 30	November 2015	Ongoing	DHHS

**246. Introduce new technology to track payments**

The Personal Hardship Assistance Program provides payments to eligible Victorians affected by an emergency event, to assist them in meeting their immediate needs.

DHHS advises it is in the process of implementing a finalised system to more effectively track payments made under this program, scheduled for introduction in November 2017. The new system will give personnel the ability to operate on multiple mobile devices and systems in relief centres and other locations across Victoria, and will have a real-time search functionality to assist in timely processing and the minimisation of fraudulent payments.

The system is part of a wider program of enhancements being implemented within DHHS to support its response to emergencies.

DHHS advises the implementation of this system was delayed due to technical and developmental issues. As such, it implemented an interim solution in November 2015, which shares information on public calls, appointments and payments across multiple sites, and includes a real-time search function to minimise accidental duplicate or fraudulent payments.

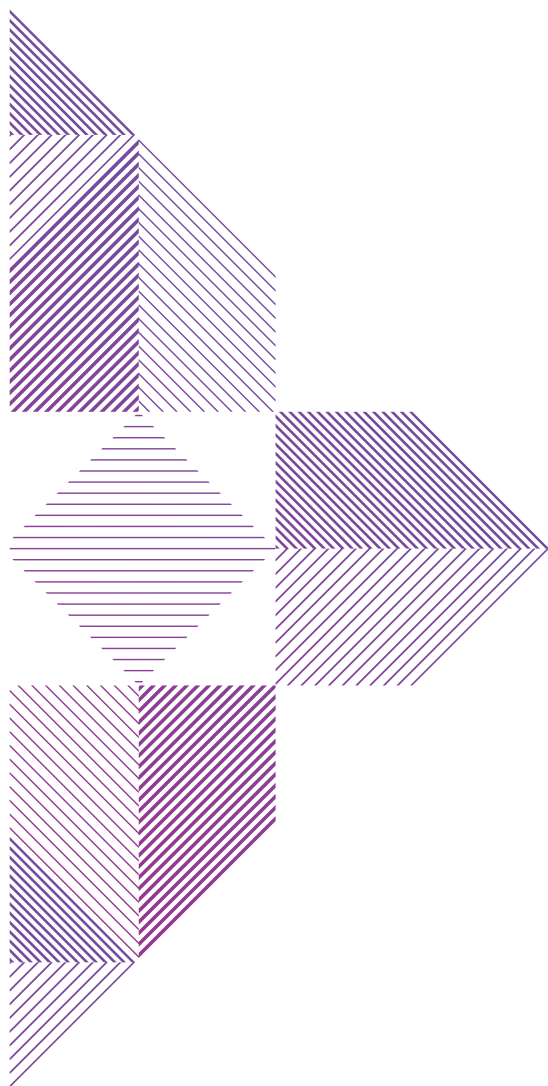
Whilst IGEM notes the intent of this action has been met to a large extent by the introduction of the interim solution, IGEM will revisit this action in the next Annual Report, once the final system is in place.

**FINDING**

IGEM considers this action is progressing satisfactorily and will revisit in the next Annual Report.



## 6. Progress update – Non-government Health Agencies



In the Health Improvement Inquiry report, Recommendations 11 and 12, were the two recommendation made by the Board of Inquiry to be implemented by the four principal health agencies in the Latrobe Valley and statutory authorities and state-level, non-government health agencies.

The Board of Inquiry also affirmed commitments made by statutory authorities, state-level non-government health agencies, the key principal stakeholder agencies and individual members of expert panels to numerous actions relevant to improving health in the Latrobe Valley in the short, medium and long-term.

The Inquiry Report defines the four principal health agencies as Latrobe Regional Hospital, Latrobe Community Health Service, Latrobe City Council, and the Gippsland Primary Health Network. These are the key organisations responsible for health and wellbeing in the Latrobe Valley<sup>25</sup>.

‘Statutory authorities’ refers to public entities such as the EPA, VicHealth and WorkSafe.

‘State-level non-government health agencies’ refers to non-government agencies that have a specific focus on promoting health and/or preventing or addressing ill health across Victoria, such as beyondblue, Cancer Council Victoria, Diabetes Victoria, Heart Foundation Victoria, the Victorian Branch of the Public Health Association Australia, Quit Victoria and the Victorian Healthcare Association<sup>26</sup>.

The sections that follow provide a summary of progress being made to implement Recommendations 11 and 12 and Affirmations 1 to 12, which fall outside the scope of the Victorian Government Implementation Plan.

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<sup>25</sup> Hazelwood Mine Fire Inquiry Report 2015-16: Volume III – Health Improvement, p 10

<sup>26</sup> Hazelwood Mine Fire Inquiry Report 2015-16: Volume III – Health Improvement, p 10

**Table 40:** Status of Health Improvement Inquiry Report non-government health agency recommendations and affirmations

NO.	RECOMMENDATION/AFFIRMATION	STATUS
Rec 11	Commit to, support and promote the Latrobe Valley Health Innovation Zone. In particular they should support health innovations and service integration, including the pooling of resources.	Ongoing
Rec 12	Commit to, support and promote the Latrobe Valley Health Innovation Zone. These bodies should prioritise the Latrobe Valley Health Innovation Zone for investments in program delivery and health innovation projects, recognising that the lessons learned will have broader application.	Ongoing
Aff 1	The commitment of the principal stakeholder organisations for health in the Latrobe Valley to making improvements in the way that they engage with the Latrobe Valley community.	Ongoing
Aff 2	The commitment of Latrobe Regional Hospital to continue to develop as a regional hospital for the people of the Latrobe Valley and the wider Gippsland area. The Board considers that the State should give serious consideration to ensuring that future investment in this facility is at least equitable with other regional areas in Victoria.	Ongoing
Aff 3	The commitment of Ms Kellie O'Callaghan, Chair of the Board of Latrobe Regional Hospital, to progress a community screening day, in partnership with the community and other major health services. This day could be approached as the 'launch' of a new outreach screening program to support chronic disease prevention.	Complete
Aff 4	The intention of Dr Alistair Wright, general physician from Latrobe Regional Hospital and Dr Daniel Steinfort, respiratory physician from the Royal Melbourne Hospital, to work together to understand the risk profile of the Latrobe Valley relevant to lung cancer, and the implications of this for a possible lung cancer screening program.	Ongoing
Aff 5	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.	Complete
Aff 6	The intention of Monash Health and the Latrobe Regional Hospital to consider the development of an advanced physician training program for general physicians in the short term.	Ongoing
Aff 7	The commitment of the Gippsland Primary Health Network to develop 'care pathways' to assist general practitioners in the management of complex conditions	Ongoing
Aff 8	The commitment of state-level statutory and non-government health agencies to assist Latrobe Valley organisations and the broader community to improve health through policies, plans, funding, infrastructure, programs, campaigns, training, research and evaluation, recognising that for action to be effective it needs to be community-led as much as possible.	Ongoing
Aff 9	The commitment by the Children and Youth Area Partnership to include an early intervention focus to protect vulnerable children and support access to education for children in out-of-home care, having regard to the fact that children in the Latrobe Valley often start school developmentally behind their peers when measured according to the Australian Early Development Index.	Ongoing
Aff 10	The commitment of the Latrobe City Council to develop a tracks, trails and paths strategy to create supportive environments for physical activity and community engagement.	Complete
Aff 11	The commitment of members of a Health Improvement Forum expert panel on community engagement and communication to work together to develop a community-led shared vision for the health, wellbeing and prosperity of the Latrobe Valley. The panel comprised representatives from EW Tipping Foundation, Gippsland Multicultural Service, GDF Suez Australian Energy, Latrobe City Council, Latrobe Valley Express, Morwell Community Recovery Committee, Morwell Neighbourhood House, VicHealth and Voices of the Valley.	Complete
Aff 12	The Board affirms work being undertaken by the Community Wellbeing Study (part of the Hazelwood Mine Fire Health Study) to enhance agencies' ability to effectively engage with the Latrobe Valley community.	Ongoing

## Health Improvement Inquiry Report: Recommendation 11

The Board of Inquiry recommended that each of the principal health agencies in the Latrobe Valley:

### *Recommendation 11*

*Commit to, support and promote the Latrobe Valley Health Innovation Zone. In particular they should support health innovations and service integration, including the pooling of resources.*

The Board of Inquiry, in the Health Improvement Inquiry report, recommended that the State:

- create, as an interim measure for 12 months, a Latrobe Valley Health Innovation Taskforce to assist in progressing recommendations 1 – 4. (Recommendation 10)
- designate the Latrobe Valley as a special geographical zone for health improvement (Latrobe Valley Health Innovation Zone) for a minimum of eight years (two electoral cycles), with a focus on innovation, integration and community engagement. (Recommendation 2)
- establish the Latrobe Valley Health Assembly and executive Board to promote, support and oversee the development of the Latrobe Valley Health Innovation Zone. (Recommendation 3)
- 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. (Recommendation 4)

In Section 5 of this report, IGEN has provided a progress update on actions led by DHHS to designate the Latrobe Valley as the Latrobe Valley Health Zone and establish a time-limited Latrobe Valley Health Taskforce (taskforce) to support the creation of the Latrobe Valley Health Assembly (health assembly).

The following section provides details of the support being provided by the principal health agencies in the Latrobe Valley.

On 15 March 2016, the four principal health agencies in the Latrobe Valley wrote to the Premier, urging the Government to accept the 12 recommendations from the Health Improvement Inquiry report in full. The health agencies identified this as “a significant opportunity to improve the health of the Latrobe Valley by intensively addressing the longstanding intergenerational health challenges. It will also raise the level of health and social wellbeing of our community to that of most other Victorians”.

In July 2016, DHHS established a time-limited taskforce to facilitate the appointment of the independent health assembly, which will promote, support and oversee the development of the Latrobe Valley Health Innovation Zone.

The taskforce has an independent Chair with representatives from DHHS, Latrobe City Council, Latrobe Community Health Service, Latrobe Regional Hospital, the Gippsland Primary

Health Network, community members and local business representatives.

The Terms of Reference for the taskforce include the following goals:

- to establish a local team to support the work of the taskforce and health assembly
- to develop and finalise Terms of Reference and an operating model for the health assembly that incorporates:
  - a governance structure
  - a constitution, partnering agreement or Memorandum of Understanding, as appropriate
  - oversight of the preparation of information, informed by the local community, to assist the health assembly to identify:
    - › outcomes, and
    - › processes for monitoring and reporting
- to develop and implement an engagement strategy to help identify and attract applications from broad community, business and industry representatives for membership of the health assembly
- to undertake an expression of interest process to establish the membership of the health assembly
- to develop and implement a communication strategy to ensure community and other stakeholders are kept well informed on taskforce activities
- to undertake preparatory work to inform the selection of a Health Advocate.

IGEM considers that the principal health agencies, through their achievements as members of the taskforce, have demonstrated their strong support for the establishment of the health assembly, which, in turn, will promote, support and oversee the development of the Latrobe Valley Health Innovation Zone.

IGEM notes also that the four principal health agencies will be members of the Health Assembly when it is formed.

### **FINDING**

IGEM considers this recommendation is proceeding satisfactorily will revisit in the next Annual Report.

## Health Improvement Inquiry Report: Recommendation 12

The Board recommends that the statutory and state-level non-government health agencies:

### Recommendation 12

*Commit to, support and promote the Latrobe Valley Health Innovation Zone. These bodies should prioritise the Latrobe Valley Health Innovation Zone for investments in program delivery and health innovation projects, recognising that the lessons learned will have broader application.*

In the Health Improvement Inquiry report, the Board of Inquiry suggested that membership of the Latrobe Valley Health Assembly should comprise a broad cross-section of stakeholders that have a direct interest in improving the health of the Latrobe Valley, including the Chief Executive Officers from EPA, VicHealth WorkSafe and state-level non-government agencies.

IGEM is unable to report progress on the implementation of Recommendation 12 until the establishment of the health assembly, which will bring together the 'statutory authorities' and 'state-level non-government health agencies' listed previously.

#### FINDING

IGEM will revisit Recommendation 12 in the next Annual Report.

## Affirmations

### 1. The commitment of the principal stakeholder organisations for health in the Latrobe Valley to making improvements in the way that they engage with the Latrobe Valley community.

As described previously, the four principal stakeholder organisations for health have demonstrated their commitment through membership of the Health Innovation Taskforce.

#### FINDING

IGEM considers this affirmation is progressing satisfactorily and will revisit in the next Annual Report.

### 2. The commitment of Latrobe Regional Hospital to continue to develop as a regional hospital for the people of the Latrobe Valley and the wider Gippsland area. The Board considers that the State should give serious consideration to ensuring that future investment in this facility is at least equitable with other regional areas in Victoria.

Latrobe Regional Hospital is currently undertaking construction of Stage 2A of an agreed master plan (cost \$73 million) and is making representation to the State Government for the next stage of redevelopment at an estimated cost of \$200 million.

#### FINDING

IGEM considers this affirmation is progressing satisfactorily and will revisit in the next Annual Report.

### 3. The commitment of Ms Kellie O'Callaghan, Chair of the Board of Latrobe Regional Hospital, to progress a community screening day, in partnership with the community and other major health services. This day could be approached as the 'launch' of a new outreach screening program to support chronic disease prevention.

Latrobe Regional Hospital had been offering screening at its lung function clinic, however, this was interrupted for some five weeks due to a fire that destroyed the consulting suites in which they were located. The clinic has recommenced following the purchase of replacement equipment.

#### FINDING

IGEM considers this affirmation has been implemented as planned.

### 4. The intention of Dr Alistair Wright, general physician from Latrobe Regional Hospital and Dr Daniel Steinfert, respiratory physician from the Royal Melbourne Hospital, to work together to understand the risk profile of the Latrobe Valley relevant to lung cancer, and the implications of this for a possible lung cancer screening program.

Latrobe Regional Hospital reports that Associate Professor Alistair Wright is engaging with Dr Daniel Steinfert to progress this affirmation.

#### FINDING

IGEM considers this affirmation is progressing satisfactorily and will revisit in the next Annual Report.

### 5. 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 provided IGEM with commentary on this affirmation even though it is not documented in the Victorian Government Implementation Plan.

The Health 2040 Summit was held in September 2015, hosted by the Minister for Health and attended by key leaders, experts, service providers and others to discuss the future of the health care system. One of 10 principles that were identified at the forum to guide future reform was person centred care with equitable access.

DHHS advises that person-centred care is a way of planning and working. Person-centred services and care is a key priority in the department's Strategic Directions and is for the entire department not just health programs. DHHS actions detailed in the Victorian Government Implementation Plan are underpinned by this priority and their delivery is evidence of progress on this principle.

#### FINDING

IGEM considers that this affirmation has been implemented as planned.

#### 6. The intention of Monash Health and the Latrobe Regional Hospital to consider the development of an advanced physician training program for general physicians in the short term.

Latrobe Regional Hospital reports that work on the advanced training is progressing and the position of an advanced trainee in a combined general medicine and palliative care role is being advertised.

#### FINDING

IGEM considers this affirmation is progressing satisfactorily and will revisit in the next Annual Report.

#### 7. The commitment of the Gippsland Primary Health Network to develop 'care pathways' to assist general practitioners in the management of complex conditions.

Gippsland PHN has significantly progressed care pathways, renaming the program Gippsland HealthPathways. The program is a collaborative and structured approach to coordinating acute and primary patient care. It brings together General Practitioners, specialists, nurses and allied health professionals to discuss optimal assessment and management of common medical conditions, including when and where to refer patients.

The initiative commenced with an inter-agency training workshop in March 2016 and Gippsland PHN reports substantial progress being made in the design and editing of clinical and resource pathways for many chronic diseases and complex conditions.

#### FINDING

IGEM considers this affirmation is progressing satisfactorily and will revisit in the next Annual Report.

#### 8. The commitment of state-level statutory and non-government health agencies to assist Latrobe Valley organisations and the broader community to improve health through policies, plans, funding, infrastructure, programs, campaigns, training, research and evaluation, recognising that for action to be effective it needs to be community-led as much as possible.

IGEM is unable to report progress on the implementation of Affirmation 8 until the establishment of the health assembly, which will bring together the 'statutory authorities' and 'state-level non-government health agencies' listed previously.

#### FINDING

IGEM will revisit this affirmation in the next Annual Report.

#### 9. The commitment by the Children and Youth Area Partnership to include an early intervention focus to protect vulnerable children and support access to education for children in out-of-home care, having regard to the fact that children in the Latrobe Valley often start school developmentally behind their peers when measured according to the Australian Early Development Index.

Children and Youth Area Partnerships were established in response to the 2012 Cummins Inquiry "Protecting Victoria's Vulnerable Children". The Inner Gippsland Children and Youth Partnership was formed in November 2014, led by a steering group of state government, local government, community sector organisations, Aboriginal community and other area partners. The Inner Gippsland Children and Youth Partnership is co-chaired by DET and DHHS.

The Inner Gippsland Children and Youth Partnership Framework was finalised in May 2015.

The Leadership Group meets on a monthly basis and continues work from previous meetings and actions including *Keeping Children and Young People safe and secure with family*, *Exploring our priorities: co-defining Children and Young People at risk of neglect and abuse*.

#### FINDING

IGEM considers this affirmation is progressing satisfactorily and will revisit in the next Annual Report.

**10. The commitment of the Latrobe City Council to develop a tracks, trails and paths strategy to create supportive environments for physical activity and community engagement.**

Latrobe City Council formally adopted the tracks, trails and walking paths strategy at a council meeting held on 20 June 2016.

**FINDING**

IGEM considers that this affirmation has been implemented as planned.

**11. The commitment of members of a Health Improvement Forum expert panel on community engagement and communication to work together to develop a community-led shared vision for the health, wellbeing and prosperity of the Latrobe Valley. The panel comprised representatives from EW Tipping Foundation, Gippsland Multicultural Service, GDF Suez Australian Energy, Latrobe City Council, Latrobe Valley Express, Morwell Community Recovery Committee, Morwell Neighbourhood House, VicHealth and Voices of the Valley.**

Inquiries by IGEM in relation to this affirmation have revealed that it was not the intention of panel members to reconvene following the Health Improvement Forum. IGEM notes, however, the commitment of these organisations to share in the development of a community-led shared vision for the health, wellbeing and prosperity of the Latrobe Valley.

**FINDING**

IGEM considers that this affirmation has been implemented as planned.

**12. The Board affirms work being undertaken by the Community Wellbeing Study (part of the Hazelwood Mine Fire Health Study) to enhance agencies' ability to effectively engage with the Latrobe Valley community.**

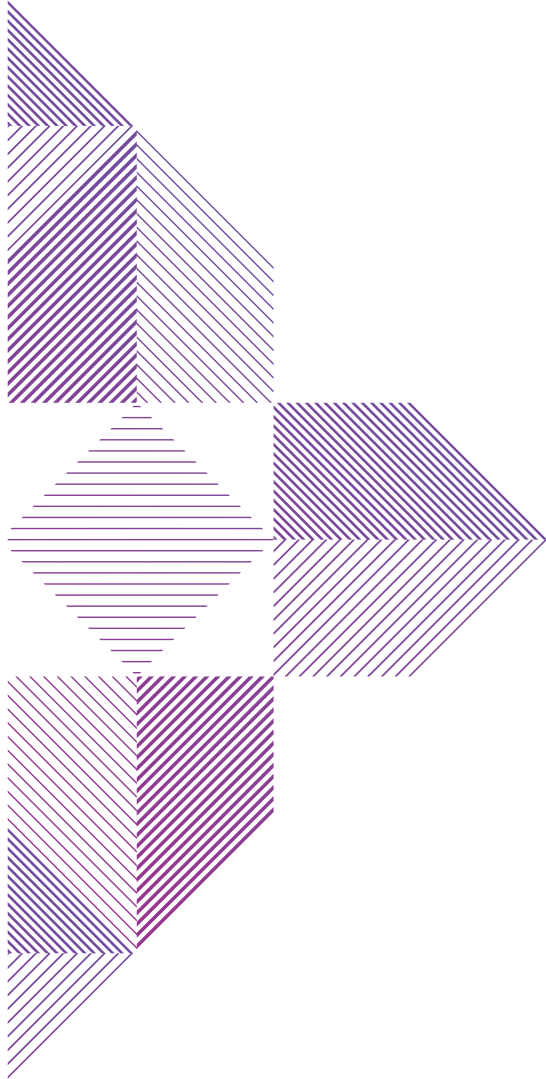
IGEM has received an update from the leader of the Community Wellbeing Stream of the Hazelwood Health Study on work being done to identify community perceptions of:

- the impact of the smoke event on community wellbeing
- the effectiveness of community rebuilding activities
- effective communication during and after the smoke event.

**FINDING**

IGEM considers that this affirmation is progressing satisfactorily and will revisit in the next Annual Report.

## 7. Progress Update – Coal mine operators



During the 2015–16 Inquiry, the Board of Inquiry was unable to make a definitive assessment on the viable rehabilitation option for each of the three mines due to many areas of uncertainty that were not addressed by relevant agencies and the mine operators. These issues included mine stability, sourcing water, water quality and fire risk.

The Board of Inquiry concluded that a significant amount of research must be conducted into these issues to provide certainty about the rehabilitation options, which must be done in the short to medium-term and in a coordinated manner.

In the Mine Rehabilitation Inquiry report, the Board of Inquiry made 17 recommendations to be implemented by the State. The associated actions are included in the Victorian Government Implementation Plan and reported on in Section 5.

The Board of Inquiry made two recommendations, (Recommendations 18 and 19), and one affirmation, for implementation by the Latrobe Valley mine operators. Their progress is reported in the following sections.



**Table 41:** Status of Mine Rehabilitation Inquiry Report coal mine operator recommendations and affirmation

NO.	RECOMMENDATION/AFFIRMATION	STATUS
Rec 18	By 31 December 2016, develop an integrated research plan that identifies common research areas and priorities for the next 10 years, to be reviewed every three years. The plan should be developed in consultation with the Mining Regulator and relevant agencies, research bodies and experts. The list of research topics identified in Part 6.11 [of the Victorian Government Implementation Plan] can be used as a starting point for discussion. The Commissioner and Statutory Authority should promote and coordinate this research (see Recommendations 14 and 15).	Ongoing
Rec 19	Increase the rate of progressive rehabilitation by achieving milestones within the mines' progressive rehabilitation plans, as set by the Mining Regulator under Recommendation 4.	Ongoing
Aff 1	The commitments of EnergyAustralia, GDF Suez and AGL Loy Yang to increase coordination and collaboration between themselves and the regulatory authorities.	Ongoing

## Mine Rehabilitation Report: Recommendation 18

**By 31 December 2016, develop an integrated research plan that identifies common research areas and priorities for the next 10 years, to be reviewed every three years. The plan should be developed in consultation with the Mining Regulator and relevant agencies, research bodies and experts.**

**The list of research topics identified in Part 6.11 can be used as a starting point for discussion. The Commissioner and Statutory Authority should promote and coordinate this research (see Recommendations 14 and 15).**

In July 2016, the Latrobe Valley coal mine operators established the Integrated Mines Research Group (IMRG), comprising representatives from the three Latrobe Valley mines – ENGIE, EnergyAustralia and AGL Loy Yang.

The IMRG meets regularly to develop an integrated research plan that identifies common research areas and priorities for the next 10 years.

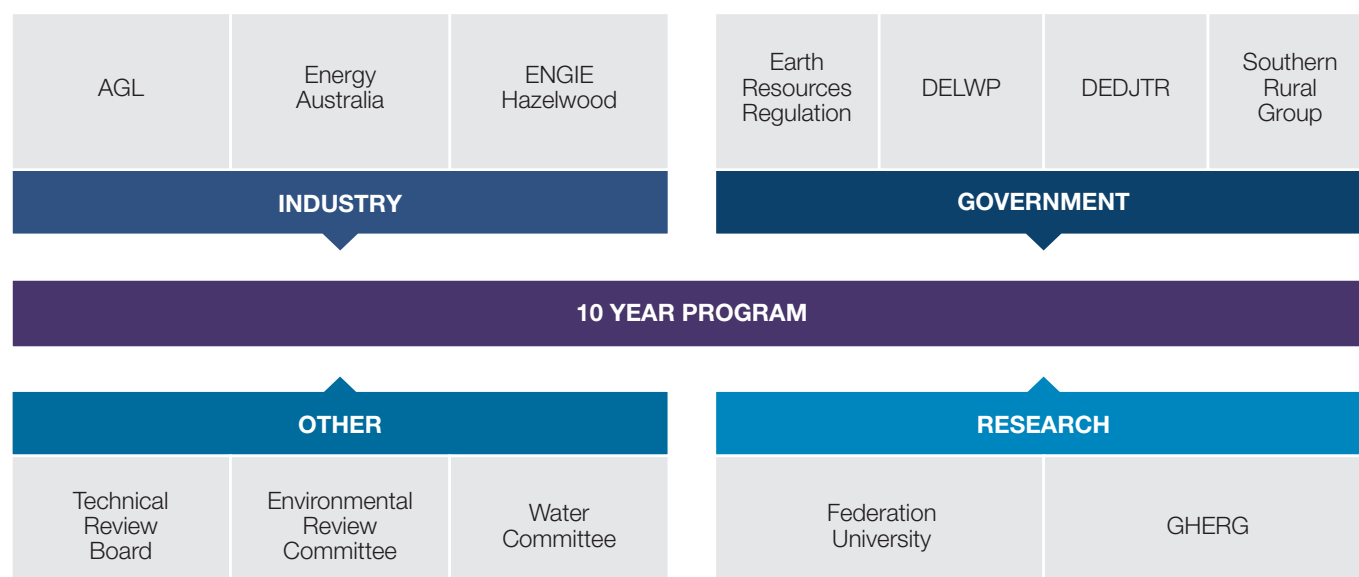
At the inaugural meeting on 1 July 2016, the IMRG identified key stakeholders that will have an interest in the 10-year program. They include:

- DEDJTR – Coal Resources Victoria, Earth Resources Regulation
- GHERG, Federation University
- DELWP
- Technical Review Board (TRB)
- Environment Review Committee.

The meetings provide a forum for stakeholders to discuss and progress the research topics identified in Part 6.11 of the Mine Rehabilitation Inquiry report.

The following chart identifies the key stakeholders.

**Figure 6:** Integrated Mines Research Group key stakeholders



IGEM notes that Action 159 of the Victorian Government Implementation Plan, led by DEDJTR, relates to Recommendation 18:

*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 (Due Date: December 2016)*

DEDJTR has initiated a project for the mine operators and DEDJTR to collectively develop a comprehensive 10-year research plan, taking into account the research work that will be undertaken by DEDJTR as part of the preparation for the Regional Rehabilitation Strategy (see Actions 179 – 204).

The mine representatives have committed to supporting DEDJTR in the preparation of the Strategy. DEDJTR is working closely with the IMRG to prepare the research plan.

### Key Milestones

DATE	MILESTONES	STATUS
<b>May – June 2016</b>	Meet with mine operators to provide overview of Regional Rehabilitation Strategy Project	Complete
<b>July 2016</b>	Deliver formal presentation regarding the Regional Rehabilitation Strategy at meeting of IMRG	On track
<b>31 Dec 2016</b>	Final research project plan agreed to by DEDJTR and coal mine operators	On track

The results of the Batter Stability Project (See Actions 174-178) will be incorporated into the current geotechnical and hydrogeological models and will inform the Strategy as research progresses.

The three mine operators also met with members from the government's Regional Rehabilitation Planning Working Group on 29 July 2016. A plan has been developed for future meetings to be hosted by the mines.

A facilitated workshop will also be held with the Technical Review Board (TRB) and mine operators in October 2016.

The research plan is currently on schedule for delivery to IGEN by 31 December 2016.

Individually, the mine operators have progressed key initiatives that relate to the development of the integrated research plan.

### AGL Loy Yang

Monash University, Federation University and AGL Loy Yang commenced the Rehabilitation Research Project in 2015-16. The project involved the planning, scoping and commencement of the first rehabilitation field trial. The rehabilitation trials are key initiatives in the development of the integrated research plan.

Site-based trials and associated research aim to further assist in determining the final rehabilitation design for batters and maintenance requirements to achieve the key objectives for long term mine rehabilitation. A number of areas are being considered including inter-slope angle, clay and topsoil coverage, infrastructure layout, drainage and maintenance.

The current commitment to a five year program within the Work Plan Variation will provide a good basis for AGL Loy Yang to work with stakeholders to achieve Recommendations 18 (and 19).

Condition 6.8 of the Work Plan Variation states that:

*The licensee must provide the Department updates annually (by the 30 June each year when a rehabilitation trial has commenced or is in progress during the previous 12 months) on the progress, outcomes and recommendations of the rehabilitation trials as described in Section 6.2 of the Work Plan Variation and development of rehabilitation objectives and acceptance criteria under condition 6.6 (a) and (b).*

Accordingly, AGL Loy Yang produced the Rehabilitation Research Project Annual Progress Report in June 2016.

### EnergyAustralia Yallourn

EnergyAustralia Yallourn, in partnership with DEDJTR and Federation University's Geotechnical and Hydrogeological Engineering Research Group (GHERG) are leading the government-sponsored Batter Stability Project (see Actions 174 – 178).

Federation University is a key industry stakeholder and the mine operators will actively engage with it research topics associated with brown coal mining and its impacts.

The project is based on field work at the Yallourn coal mine and 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.

A Technical Advisory Group has been formed and comprises representatives from ERR, Latrobe Valley mines, GHERG and members of the Technical Review Board.

### FINDING

IGEM considers that this recommendation is proceeding satisfactorily and will revisit in the next Annual Report.

## Mine Rehabilitation Report: Recommendation 19

**Increase the rate of progressive rehabilitation by achieving milestones within the mines' progressive rehabilitation plans, as set by the Mining Regulator under Recommendation 4.**

Further to the Inquiry's findings on knowledge gaps or research areas that will be addressed by the mine operators (see Recommendation 18), the Board of Inquiry also identified the need to increase the rate of progressive rehabilitation, to be overseen by DEDJTR.

The Mine Rehabilitation Inquiry Report made the following recommendation:

#### Recommendation 4

*The Board recommends that the State 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.*

The milestones will provide clarity of expectations for each mine operator in their rehabilitation works.

DEDJTR will develop progressive rehabilitation milestones that require each Latrobe Valley coal mine operator to carry out specific rehabilitation works within set timeframes to ensure that final rehabilitation is achieved within the timeframe detailed in the work plan for each coal mine.

DEDJTR will:

- consult with the Hazelwood and Loy Yang coal mine operators to propose progressive rehabilitation milestones that will ultimately be included in work plan variation applications due in response to licence condition 1A.6.
- consult the Technical Review Board on the suitability of the proposed progressive rehabilitation milestones found in the work plan variation application for the Yallourn coal mine in response to licence condition 1A.6 and those that will be proposed by the Hazelwood and Loy Yang coal mine operators. AGL Loy Yang

AGL Loy Yang's current work plan contains an extensive program for progressive mine rehabilitation.

Since approval of the work plan in December 2015, AGL Loy Yang was advised by DEDJTR that, as a result of the approval of the Risk Assessment and Management Plan (RAMP) in May 2016, it is required to submit a Risk Based Work Plan Variation in accordance with Condition 1A of Mining Licence 5189 and recently revised legislation.

AGL Loy Yang advises that it is currently reassessing opportunities to further accelerate mine rehabilitation. A variation to the December 2015 work plan is currently underway.

AGL Loy Yang has requested an extension of time for the submission to 31 December 2016, which will provide for additional community engagement activities and further consideration of progressive rehabilitation options.

#### **EnergyAustralia Yallourn**

EnergyAustralia Yallourn has made commitments to increased progressive rehabilitation in its RAMP Implementation Plan.

As of July 2016, the following progressive rehabilitation activities had been completed at Yallourn mine:

- Rehabilitate an area of the mine greater than or equal to the area disturbed during the year – on target 30 hectares completed
- Coal covering of Maryvale Field mine floor (6 hectares) – 8 hectares completed to May 2016 and works will continue in spring/summer 2016
- Coal covering of East Field Extension batters (5 hectares) – Completed 11 hectares to July 2016
- East Field coal floor covering with overburden material (4.5 million cubic metres) – 2.7 million cubic metres covering approximately 20 hectares to July 2016.



Batter rehabilitation



## ENGIE

ENGIE's current work plan also contains an extensive program for progressive mine rehabilitation. In May 2016, DEDJTR advised ENGIE of the approval of ENGIE's RAMP. ENGIE, in accordance with its mining licence and applicable legislation, is currently finalising its 2016 Work Plan Variation to incorporate the RAMP.

The Variation includes a description of:

- progressive rehabilitation undertaken at the Hazelwood mine in the period to 2016, comprising 77 hectares of coal and 481 hectares of overburden (558 hectares in total)
- further progressive rehabilitation planned in future.

ENGIE also reports that during 2015-16, the following areas of the mine were rehabilitated:

- over 14 hectares of coal mine batters (re-profiled and covered with clay and topsoil)
- over 50 hectares at Spoil Mound 4 and 5 and the West Field Southern Batters.

## FINDING

IGEM considers that this recommendation is proceeding satisfactorily and will revisit in the next Annual Report.

## Mine Rehabilitation Report: Affirmation 1

**The commitments of EnergyAustralia, GDF Suez and AGL Loy Yang to increase coordination and collaboration between themselves and the regulatory authorities.**

AGL Loy Yang, EnergyAustralia, ENGIE are working closely together and with DEDJTR as evidenced by work underway in relation to the IMRG, the Batter Stability Project and Regional Rehabilitation Strategy Project.

Mine operators continue to participate in workshops, meetings and share information on mine rehabilitation with the purpose of further developing collaboration between mine operators and regulators.

Examples of their collaboration include participation in the Mine Stability Program Emergency Scenario Planning Steering Committee, Critical Control Master Practitioner Session, sharing of presentations from the UNSW and Tom Farrell Institute Conference on Mine Rehabilitation in Singleton NSW.

The three Latrobe Valley mine operators have expressed their willingness and commitment to continuing and increasing coordination and collaboration among themselves and with the regulators.

## FINDING

IGEM considers that this affirmation is proceeding satisfactorily and will revisit in the next Annual Report.

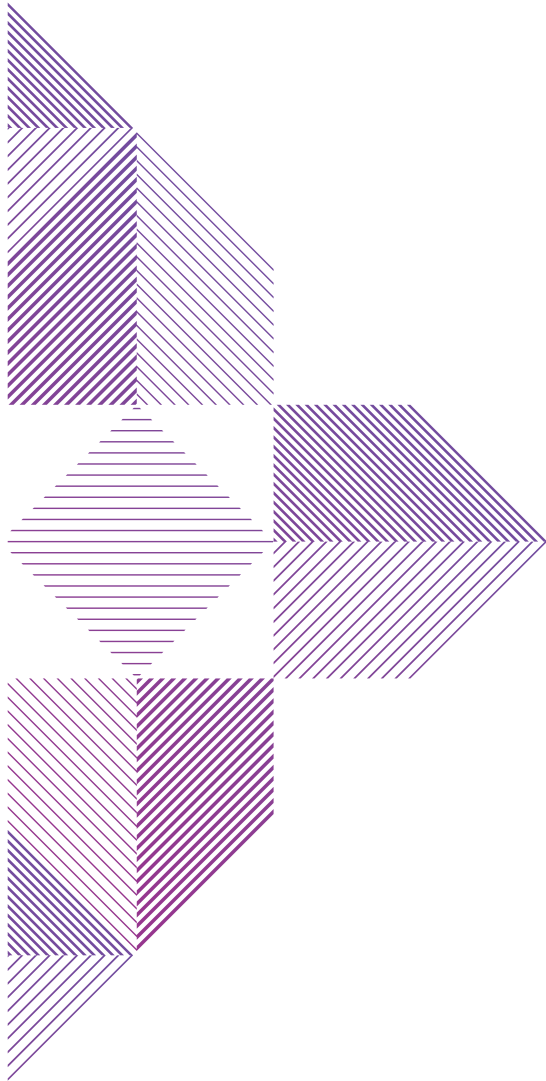


Electricity pylons

## 8. Progress update – Ongoing ENGIE recommendations and affirmation from 2014 Inquiry Report

The Hazelwood Mine Fire Inquiry Report 2014 made six recommendations and 17 affirmations to be led by GDF Suez (now ENGIE). The 2015 Annual Report found that two recommendations (Recommendations 15 and 16), and one affirmation (Affirmation 15) remained 'ongoing'.

The following sections provide an update on ENGIE's progress in implementing the remaining recommendations and affirmation.



## 2014 Inquiry Report: Recommendation 15

### GDF Suez (ENGIE):

- conduct, assisted by an independent consultant, a risk assessment of the likelihood and consequences of fire in the worked out areas of the Hazelwood mine, and an assessment of the most effective fire protection for the coal surfaces;
- prepare an implementation plan that ensures the most effective and reasonably practicable controls are in place to eliminate or reduce the risk of fire; and
- implement the plan

**Table 42:** Status of 2014 Inquiry Report Recommendation 15 actions

NO.	ACTION	DUE DATE	STATUS
R15.1	Conduct, assisted by an independent consultant, a risk assessment of the likelihood and consequences of fire in the worked out areas of the mine, including an assessment of the most effective fire protection means for exposed coal surfaces.	June 2015	Complete <sup>^</sup>
R15.2	Fire Risk Implementation Plan prepared	August 2015	Complete
R15.3	Plan implemented	September 2015	Ongoing

<sup>^</sup> Previously reported as 'complete' in 2015 Annual Report

In October 2014, ENGIE engaged GHD, an independent engineering and environment consultant, to undertake a risk assessment, which was completed in April 2015. The assessment included six key recommendations for ENGIE:

- Complete the update of the Mine Fire Service Policy and Code of Practice and use this document as the system design and operational standards for use by ENGIE and other design parties
- Undertake further work to develop additional improvement actions to raise the predicted adequacy level of the critical controls
- Audit activities be focused on the critical controls to ensure their effectiveness and robustness
- Undertake additional analysis to support the selected fire protection controls
- Conduct post risk assessment review by appropriate specialists
- Review documentation relating to each Critical Control to inform the adequacy assessment.

The 2015 Annual Report (p. 87) noted that:

*"The scope of the risk assessment was not limited to the worked out areas of the mine. It also included the assessment of the likelihood and consequence of fire in all operating areas, the coal bunker and areas above grass level. The IM [Implementation Monitor] notes GDF Suez's (now ENGIE) commitment to attain a comprehensive understanding of fire risk across the entire mine site."*

### R15.2. Fire Risk Implementation Plan prepared

In January 2015, a new condition, 1A – Risk Management, was added to the mining licence for the Hazelwood mine. This required the development of a RAMP that partially superseded the GHD Implementation Plan completed in April 2015.

The RAMP was developed by ENGIE with the support of GHD and relevant third parties, including emergency services agencies, and included:

- a comprehensive review of all fire risk assessments for the Hazelwood Mine (including the completed GHD Risk Assessment pursuant to Recommendation 15 of the Board of Inquiry's 2014 Report) in accordance with the 'Requirements for Compliance with Risk Management Conditions' guidelines document issued by DEDJTR, and
- development of an Action Plan to support the fire risk assessment and updated bow tie<sup>27</sup> diagrams/controls.

The RAMP was submitted to DEDJTR and approved by the Minister on 19 May 2016.

### FINDING

IGEM considers that this action has been implemented as planned.

<sup>27</sup> ENGIE uses a 'bow tie' system to document the various preventative and responsive controls implemented in order to reduce the risk of a major fire within the mine.



**Action R15.3: Plan implemented**

ENGIE reports that the Action Plan is being progressed as a priority and supersedes a number of the outstanding actions within the GHD Implementation Plan.

ENGIE cites the extended time frame for this action as being due to the imposition of the new Mining Licence conditions by DEDJTR that required the development of a detailed RAMP and a related draft 2016 Work Plan Variation to incorporate work required by the RAMP.

IGEM notes that approximately two-thirds of the actions are reported as complete with the remainder scheduled for completion by 31 December 2016.

**FINDING**

IGEM considers that this action is proceeding satisfactorily and will revisit in the next Annual Report.

## 2014 Inquiry Report: Recommendation 16

GDF Suez (ENGIE):

- review its 'Mine Fire Service Policy and Code of Practice' so that it reflects industry best practice and ensures that, by taking a risk management approach, it is suitable for fire prevention, mitigation and suppression in all parts of the Hazelwood mine; and
- incorporate the revised 'Mine Fire Policy and Code of Practice' into the approved work plan for the Hazelwood mine.

**Table 43:** Status of 2014 Inquiry Report Recommendation 16 actions

NO.	ACTION	DUE DATE	STATUS
R16.1	GDF Suez reviews its 'Mine Fire Service Policy and Code of Practice' so that it reflects industry best practice and ensure that, by taking a risk management approach, it is suitable for fire prevention, mitigation and suppression in all parts of the Hazelwood mine	September 2015	Complete
R16.2	GDF Suez to apply to DEDJTR for its revised Mine Fire Service Policy and Code of Practice to be incorporated into the Hazelwood Mine Work Plan	December 2015	Ongoing

**R16.1. GDF Suez reviews its 'Mine Fire Service Policy and Code of Practice' so that it reflects industry best practice and ensure that, by taking a risk management approach, it is suitable for fire prevention, mitigation and suppression in all parts of the Hazelwood mine**

In November 2015, GHD finalised a review of the Mine Fire Service Policy and Code of Practice (MFSP&COP) and reported that, in conclusion:

*The latest version of Hazelwood Mine Fire Services Policy and Code of Practice (Rev 2.1) is substantially in line with best proactive documentation for Latrobe Valley Coal Mines.*

ENGIE reviewed its MFSP&COP on several occasions in 2014–15 and 2015–16 to ensure that it adopts a fire risk management approach across the entire mine site. MFSP&COP Version 2.2 (December 2015) is the current version.

**FINDING**

IGEM considers that this action has been implemented as planned.

**R16.2 GDF Suez to apply to DEDJTR for its revised Mine Fire Service Policy and Code of Practice to be incorporated into the Hazelwood Mine Work Plan.**

ENGIE has advised that regulatory reform as described previously under Action 15.2 necessarily delayed the implementation of this action.

The revised MFSP&COP (Section 4.3.4.5 Mine Fire Service System) has been incorporated into the draft WPV. A public consultation process is currently under way and the ENGIE Work Plan Variation, Mining Licence MIN5004 – August 2016 draft plan (redacted version) is available on the public web site.

Once the WPV is finalised, ENGIE will submit it to DEDJTR for assessment and approval by 31 December 2016.

#### FINDING

IGEM considers that this action is progressing satisfactorily and will revisit in the next Annual Report.

## 2014 Inquiry Report: GDF Suez (ENGIE) Affirmation 15

**GDF Suez work with Victorian WorkCover Authority (VWA) to review its Safety Assessment and Safety Management System in light of rr. 5.3.21 and 5.3.23 of the Occupational Health and Safety Regulations 2007 (Vic).**

**Table 44:** Status of 2014 Inquiry Report Affirmation 15 action

NO.	ACTION	DUE DATE	STATUS
GDF A15.1	Giving proper regard to OH&S Regulations, and in consultation with WorkSafe, GDF Suez Safety Assessment and Safety Management Systems for mine fire revised	June 2015	Complete

Under the Occupational Health and Safety Regulations 2007, mine operators are required to establish and implement a Safety Management System for the mine and conduct a comprehensive and systematic Safety Assessment to assess the risks associated with major mining hazards.

The 2015 Annual Report stated that extensive reviews and revisions of mine emergency management policies, procedures and guidelines by GDF Suez contributed in part to improving safety management systems at Hazelwood. The report also noted that ENGIE had worked with WorkSafe as the OH&S regulator to provide guidance on the review of the company's approach to safety systems, particularly on OH&S requirements.

In December 2014, ENGIE engaged an independent consultant to review the company's safety management systems. Following the review, ENGIE updated its *Major Mining Hazard Review* procedures and *Safety Assessment and Safety Management System* processes, and provided the documents to WorkSafe for consideration in May 2015.

#### **GDF A15.1. Giving proper regard to OH&S Regulations, and in consultation with WorkSafe, GDF Suez Safety Assessment and Safety Management Systems for mine fire revised.**

ENGIE has provided evidence that an Improvement Notice, Major Mining Hazard #7 – Mine Fires Safety Assessment, issued by WorkSafe on 3 October 2014, was lifted following a visit by WorkSafe on 29 January 2016.

This visit was a continuation of previous visits, meetings and correspondence between WorkSafe and ENGIE including, but not limited to, the review of documents provided to WorkSafe in May 2015.

IGEM considers that the lifting of the Improvement Notice demonstrates compliance with this action.

#### FINDING

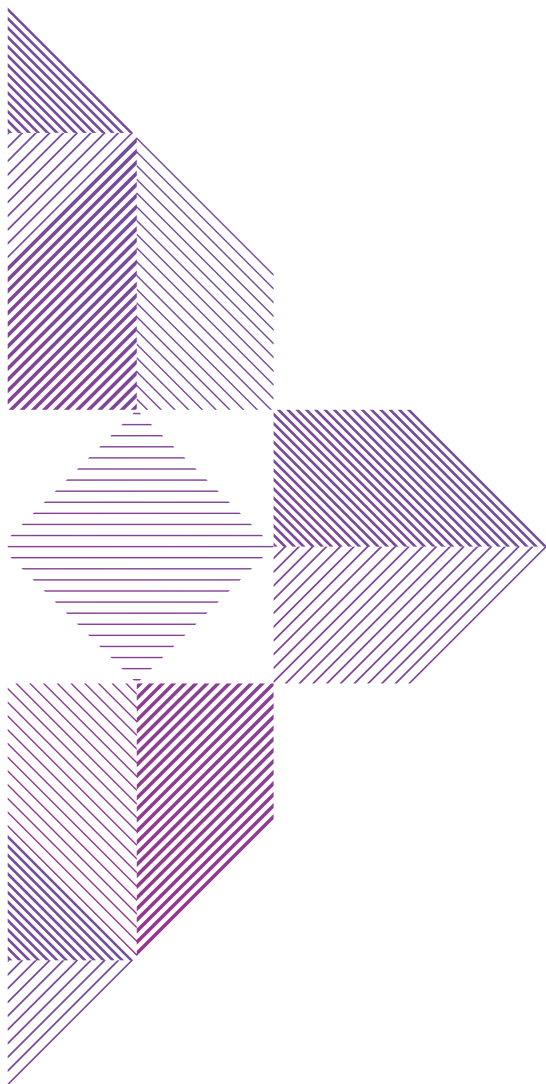
IGEM considers that this affirmation has been implemented as planned.

## 9. Concluding Remarks

Overall, IGEM has found that significant progress is being made in addressing the recommendations and affirmations from the 2014 and 2015–16 Inquiry reports.

IGEM wishes to thank government departments and agencies, non-government health agencies and the Latrobe Valley mine operators for their cooperation and strong support of IGEM in carrying out its monitoring and reporting activities. IGEM was generously provided with invitations to attend meetings and forums conducted by the Coal Mine Emergency Management Taskforce, State Smoke Working Group, Latrobe Valley Health Taskforce and Integrated Mines Research Group. IGEM also had the opportunity to attend the Latrobe 15 Exercise and participate in site visits to the Hazelwood and Loy Yang mines.

IGEM will continue monitoring the implementation of ongoing recommendations, affirmations and actions from both the 2014 and 2015–16 Inquiry reports and provide the Minister for Emergency Services with annual reports on progress until 2019.



## 10. References

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