

# Fire Services Commissioner Latrobe Valley Hazmat/Fire Plan

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**Latrobe Valley Hazmat/Fire Plan** 

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#### **Purpose**

The purpose of this Plan is to document the strategic approach being taken to manage the Latrobe Valley Coal Mine Hazmat/Fire transition to Recovery and the long term recovery process. It is supported by a range of strategies and plans addressing specific issues involved in the recovery of this complex event. These strategies and plans will be updated as appropriate to respond to the needs of the community and responders.

#### **End State**

The ultimate goal of the State LTV Plan is to support and assist the Regional Controllers and Regional Recovery Coordinator to ensure effective management of the well-being and recovery of the Morwell and surrounding communities and to effectively hand over the Hazelwood mine site back to the mine operator for post fire ratification purposes.

### 1. Situation

### 1.1 Background

The Latrobe Valley has a number of power stations and mines around the towns of Moe, Morwell and Traralgon being: Yallourn, Hazelwood and Loy Yang. On Sunday February 9 2014, a large number of grass fires started around the Morwell areas and as a result fire impacted on both the Hazelwood Power Station and Yallourn Power Station. Between these two power stations they supply 47% of Victoria's electricity needs and approximately 13% of Australia's total energy demand.

Hazelwood power station uses lignite or brown coal sourced from the Hazelwood mine. Up to 20 million tonnes of coal is extracted annually to fuel Hazelwood power station and provide coal to Morwell power station (Energy Brix Australia). Hazelwood occupies 3,965 hectares and has a perimeter boundary of 39 km.

Yallourn power station turbines have a combined capacity of 1,480 megawatts of electricity which is enough to supply around two million homes. A unique feature of the power station is its three vast concrete cooling towers, once the steam has passed through the turbine, water from the towers cools the steam so it can be pumped back to the boilers and reheated to steam, once again driving the turbines.

An Incident Management Team was established at the Traralgon Incident Control Centre under the leadership of a Hazmat/Fire Incident Controller. There were two divisions being operated: Hazelwood and Yallourn. Yallourn transitioned back to Energy Australia Yallourn on 19 February 2014. Yallourn continued to operate at full capacity throughout this event and there were no recorded asset loss.

#### **Community Profile**

Latrobe City Council is the local government authority in the Gippsland region which covers the areas incorporating the power stations and the impacted communities. Latrobe is an urban and rural area with the majority of the population living in the urban areas of Traralgon (pop: 25,597), Mow (pop: 9,310), Morwell (pop: 13,942) and Churchill (pop: 4,588). Besides being a significant energy provider for Victoria, the region is used mainly for dairy farming, general farming and plantation forestry.

#### 1.2 Current Situation

The Hazelwood mine fire is controlled and expected to be declared safe by 25 March 2014. On 19 March 2014 part of the Northern batters (alpha) was transferred back to the mine operator to manage. Progress continues to be made on the other batters. Crews are preparing to commence work to extinguish a fire in the northern batters known as 'Old Faithful". This fire is not related to the February 9 fire which potted into the mine. The Old Faithful fire currently does not pose any risk to the community or surrounding infrastructure however fire services are taking the opportunity to dig out the fire which has been smouldering in an un-used section of the mine for several years.

The Hazelwood Coal Mine Hazmat/Fire event is in transition to recovery and this will be the final Plan of this event as the Gippsland Recovery Plan will replace it.

### 2. Intent

The State Controller's 'Strategic Control Priorities' outlined in the Emergency Management Manual Victoria are being utilised to ensure planning is focused and strategic. The 'Strategic Control Priorities' for the 2013/14 Bushfire period are:

□ Protection and preservation of life is paramount. This includes:

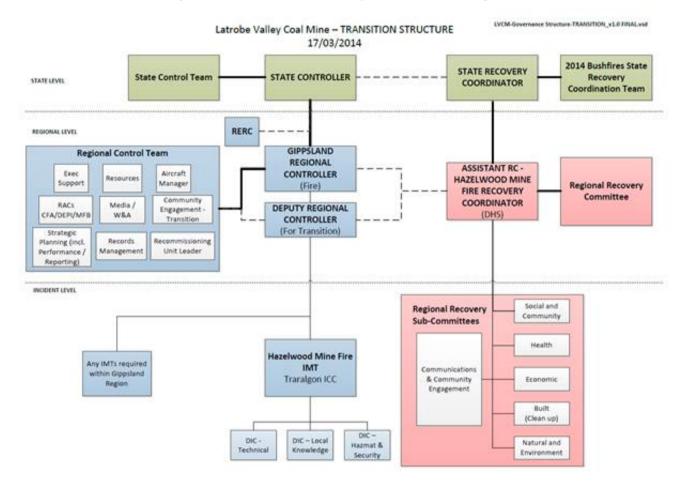
- Safety of emergency services personnel, and;
- Safety of community members including vulnerable community members and visitors/tourists located within the incident area;
- □ Issuing of community information and community warnings detailing incident information that is timely, relevant and tailored to assist community members make informed decisions about their safety;
- □ Protection of critical infrastructure and community assets that support community resilience;
- □ Protection of residential property as a place of primary residence;
- □ Protection of assets supporting individual livelihoods and economic production that supports individual and community financial sustainability; and
- □ Protection of environmental and conservation assets that considers the cultural, biodiversity, and social values of the environment.

This HazMat / Fire is a State significant priority second only to priority of life.

# 3. Integrated Execution

### 3.1 Governance Arrangements

To ensure sufficient oversight of the transition to recovery phase the following structure has been established.



### 3.2 Suppression and Extinguishment Strategy

The initial suppression and extinguishment strategy was focused on extinguishing surface fire utilising: aircraft, aerial pumpers, ground crews, building fixed infrastructure for water and fixed sprinklers monitoring.

A Suppression Strategy Options paper was developed and an Expert Reference Group was assembled to review and provide advice to the State Controller on the soundness of the approach and other options for consideration.

The optimal suppression and extinguishment methodology for this HazMat/Fire has been an aggressive focused weight of attack. The main suppression and extinguishment strategy involves four parts:

- 1. Manage protection of critical mine infrastructure including working mine face
- 2. Hold areas already extinguished and manage breakouts
- 3. Smoke (ash and carbon monoxide) management in areas not yet extinguished
- 4. Intensive weight of attack in small incremental sections of the northern batter from both ends.

The Expert Reference Group identified three overarching principles that must underpin successful operational suppression planning:

- 1. Safety of personnel and community
- Efficient resourcing
- 3. Effective management structures.

In addition to the three overarching principles, the Group identified the following operational actions underpinned by suggested approaches to these that should be considered when determining the suppression and extinguishment activities:

- $\hfill \square$  Continue to reduce smoke and products of combustion
- □ Continue to protect critical assets within the mine
- □ Continue to extinguish the fire
- ☐ Use a balanced water strategy
- □ Employ an aggressive focused weight of attack
- □ Continue to monitor and analyse critical aspects of the incident (eg. Geotech).

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The Latrobe Valley Coal Mine Hazmat/Fire Operational Plan details the adopted approach.

#### **Reference Documentation:**

Latrobe Valley Coal Mine HazMat/Fire Suppression Strategy Options. Version 2; 17 February 2014 **Attachment 1** Latrobe Valley Coal Mine HazMat/Fire Operational Plan



Latrobe Valley Coal Mine HazMat/Fire Operational Plan

### 3.3 Air/Water Analysis and Monitoring Strategy

The DH LVT Carbon Monoxide Response Protocol was developed with EPA to support the Regional Control and Incident management to acquire air quality data, and to translate into information and provide in a timely manner to inform operational and consequence decision making.

The strategic operational priorities for EPA are;

- ☐ Maximise the information value of available assets;
- ☐ Maximise the automation/real time availability of the data/information;
- □ Match product with the needs of the stakeholders but balance granularity of data with value for better decisions:
- □ Support a streamlined and clearly understood decision making process with other agencies from the analysis of the data;
- □ Continuously re-evaluate against stakeholder needs and upgrade/amend if necessary.

Water testing was undertaken 15 February 2014 and a schedule for regular water testing was developed.

Air quality analysis and monitoring for Carbon Monoxide (CO) within the community has been carried out since 14 February 2014 and from the 19 February 2014 Sulfur Dioxide (SO2) has also been monitored for the purpose of managing the health impact and advice information to the community.

The Chief Health Officer lifted the advice for temporary relocation of vulnerable groups in the southern parts of Morwell on Monday 17 March 2014. This advice is based on an improvement in air quality as monitored by EPA. EPA will continue to monitor the air quality and have established a Plan detailing the monitoring regime.

#### **Reference Documentation:**

DH Latrobe Valley Coal Mines HazMat/Fires Carbon Monoxide Response Plan – Draft 21 February 2014

Attachment 2 EPA Monitoring Strategy – Transition Version 4: 14 March 2014



**EPA Monitoring Strategy – Transition** 

### 3.4 Water Quality and River Health Plan

DEPI have developed a Water Quality and River Health Plan which details the approach to manage any potential water quality and river health risks relating to the LYV Hazelwood Hazmat/Fire event. The focus is on the longer term outlook and focuses on two potential risks: emergency discharge of mine water to Morwell River and Latrobe River systems, and diffuse run-off events to ash to waterways following a rainfall event. The Plan will be triggered if a rainfall event leads to ash from Hazelwood mine impacts on water quality and the river system which affects the irrigation community, the environment, tourism and industry.

## 3.5 Health Impacts

### 3.5.1 Community Health

The DH Health Incident Action Plan – Health Impacts for the Latrobe Valley HazMat/ Fires was developed to manage and clarify the health protection needs of the Latrobe Valley community impacted by the smoke from the Hazelwood mine. The key focus is on the community of Morwell which adjoins the Hazelwood mine. The plan has been established by the Department of Health in its role as a support agency under the EMMV. This incident was described as a fire with a HazMat overlay. Now that the fire within the mine is controlled and the Chief Health Officer has lifted the temporary relocation advice the focus is now on supporting the Morwell community to clean-up homes and workplaces with assistance and information available through the Department of Human Services and the City of Latrobe. While the ash is not a health concern, clean up activities can potentially stir up ash material. Ash particles although too big to be breathed into the lungs, are a nuisance and may irritate the eyes, nose or throat. Ash is also mildy irritating to the skin.

#### **Reference Documentation:**

Attachment 3 DH Health Incident Action Plan - Health Impacts



**DH Health Incident Action Plan - Health Impacts** 

#### 3.5.2 Health Assessment Centre

The Community Health Assessment Centre established on 21 February 2014 will continue to operate until the end of March 2014 however, at reduced operating hours as presentations to the Centre have declined significantly. The Centre is located at the Ambulance Victoria Gippsland Regional Office, 2 Saskia Way, Morwell adjacent to the Mid-Valley Shopping Centre. The Centre offers basic primary health assessments such as blood pressure, heart rate, temperature and basic respiratory checks such as chest sounds and respiratory rates. Should anyone require medical care, they will be referred to their own doctor or to Latrobe Regional Hospital. People visiting the Centre will also be provided with current health and other community information about the health impacts of the Hazmat/Fire event.

### 3.5.3 Emergency Services and Personnel on the Fire-Ground

The Health Management and Decontamination Plan for Latrobe Valley Coal Mine HazMat/Fire has been developed to manage the health and safety of all personnel on the fire-ground at both Hazelwood and Yallourn Mines. The Plan covers the health, safety and welfare arrangements in relation to:

- ☐ General health and Crew Selection requirements for the deployment to Hot Zones
- ☐ The health monitoring process for personnel that have been deployed to the mine fire due to the risk posed by elevated levels of Carbon Monoxide
- ☐ The management of Personal Protective Clothing and Equipment used in the Hot Zones.

### **Reference Documentation:**

**Attachment 4** Health Management and Decontamination Plan – Latrobe Valley Coal Mines HazMat Fire Version 5; 4 March 2014



**Health Management and Decontamination Plan** 

# 4. Transition to Recovery

The Hazelwood Coal Mine Hazmat/Fire event is in the transition from response, relief to recovery phase. Therefore this Plan reflects these transition arrangements. Version 7 of the Plan contained additional detailed information about such strategies as community and business engagement. These plans now form part of the overall Gippsland Recovery Plan which contains several sub plans to support the community post the hazmat/fire event. Refer to <a href="https://www.recovery.vic.gov.au">www.recovery.vic.gov.au</a>

A Community Information and Recovery Centre has been opened at 22 Hazelwood Road, Morwell and will operate between 9.00am – 6.00pm for support and information.

# 5. Latrobe Valley Hazmat/Fire Plan

As documented given the event is in transition from response, relief and respite to recovery, this will be the final report and it is important to provide an overview of the status of the many plans that have been developed during the course of this operation.

Several of these plans are referenced in this document. The other plans that will continue to support the response

aspect are:-
□ Strategic Plan for Gippsland
□ Strategic Risk and Consequence Plan (developed by Regional Control)
□ Strategic Resource Plan Intent
□ Community Engagement Strategic Plan
<ul> <li>Infrastructure Monitoring (concludes Friday 21 March 2014 and will be done on a daily basis between the mine operator, DSDBI and Incident Controller)</li> </ul>
□ Carbon Monoxide Protocol
The following plans will be transitioned and part of the Recovery Plan:-
□ Department of Health Incident Action Plan
□ Community Engagement Strategic Plan
□ Air/Water Quality Monitoring
■ EPA Community Transition to Recovery
■ PM 2.5 Protocol
□ Business Engagement Strategy.
The following plans have no further application due to the status of the Hazelwood event:-
□ Performance Monitoring Framework
□ Evacuation Plan
□ Transition to Recovery Plan
□ Relief and Respite Plan.