



## Morwell Mine Fire Community Briefing February Update

**GDF SVEZ**

BY PEOPLE FOR PEOPLE

# Morwell Mine Fire Community Briefing Overview

- Overview and introductions
- Inquiry Outcomes
  - 17 actions which GDF SUEZ voluntarily agreed to undertake, which were affirmed by the Board of Inquiry in its final report (“**affirmations**”)
  - Six recommendations made to GDF SUEZ by the Board of Inquiry in its final report (“**recommendations**”)
- Government appointed Implementation Monitor
  - Mr Neil Comrie AO APM has been appointed Implementation Monitor with respect to the 2014 Hazelwood Mine Fire Inquiry
  - As Implementation Monitor, Mr Comrie is tasked with monitoring the implementation of the affirmations and recommendations made to the State of Victoria and GDF SUEZ in the Board of Inquiry’s final report, and must provide a written report to government every October for a period of three years
  - Mr Comrie and his support team have visited Hazelwood. GDF SUEZ is working co-operatively with the Implementation Monitor, providing updates as to progress, and evidence of works completed
- Where we are today – GDF SUEZ progress on the affirmations and recommendations



## Coal Mine Fire Taskforce



# Coal Mine Fire Taskforce

## ■ Coal Mine Emergency Management Taskforce Update:

- Taskforce status
- Strong commitment by membership
- Taskforce Status Report to 31 December 2014
- Communications
- Input to Standards and Protocol documents
- Future direction

# Hazelwood Mine - Overview



# HAZELWOOD MINE FIRE INQUIRY RECOMMENDATIONS AUGUST 2014



Hazelwood  
Mine Fire  
Inquiry

## Inquiry Outcomes

## Affirmation of actions intended to be taken by GDF SUEZ

### 17 Affirmations of which 14 are completed

- Nominate a group of staff to be trained in the Phoenix Rapid fire modelling tool prior to the 2014/2015 fire season.
  - **STATUS: COMPLETED: Training conducted by the CFA for 9 GDF SUEZ employees.**
- 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.
  - **STATUS: COMPLETED: Training for emergency service agencies has been completed.**
  - GDF SUEZ's emergency command personnel have completed an external Incident Controllers Course.**
- Establish an emergency command structure at the mine to deal with Extreme Fire Danger Days.
  - **STATUS: COMPLETED: GDF SUEZ's Emergency Response Plan and Mine Fire Instructions have been updated to reflect new command structures devised for Extreme Fire Danger Days within the Mine.**
- Notify CFA of the identity and contact details of those personnel holding these roles.
  - **STATUS: COMPLETED. CFA will be advised of these details on each Extreme Fire Danger day. Ongoing obligation for each Extreme Fire Danger Day**

## Affirmation of actions intended to be taken by GDF SUEZ

- On Extreme Fire Danger Days, GDF SUEZ ensure more personnel are rostered on and additional contractors are available for dedicated fire protection duties.
  - **STATUS: COMPLETED.** GDF SUEZ's Emergency Response Plan and Mine Fire Instructions have been substantially revised in order to include a requirement for additional personnel with fire protection duties on Extreme Fire Danger Days.



# GDF SUEZ Hazelwood Mine Fire Readiness Plan

GDF SUEZ Hazelwood	Guidelines For Season & Period Specific Fire Preparedness & Mitigation Planning
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**1. GDF SUEZ Hazelwood Mine Fire Readiness Plan**

PERSONNEL TO REPORT ALL FIRES TO 03 5135 3333

Date Mine Fire Readiness Plan For:	03 / 01 / 2015
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Forecast:									
Temperature	40°C	Wind Speed	30 KPH	Wind Direction	NNW	Peak Wind Gust Speed	45KPH	Humidity	13%

NOTE: Wind change due 17:00 – 21:00 (SW at 20-30 Km/h) issued at 16:31 at 31/12/2014

**Mine Readiness Level:**  
(As per GDF SUEZ Hazelwood Readiness Trigger Level Matrix – Appendix 4 of Mine Fire Instructions)

Severe	
Extreme	EXTREME: Total Fire Ban declared for the ENTIRE state of Victoria

Forecast:	

Control Centre Attendant to DIAL 000 for ALL fires on Extreme Days

Mine maintenance activities may be ceased prior to fire alert being called.

Is there a TOTAL FIRE BAN in this region? YES  YES  NO

External Fires: None at time of issue  Currently a fire burning

NOTE: If you have placed an X in the "Currently a fire burning" box please provide fire details below:

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Machine Positions:		
Dredger D25	Positioned at:	North Batters – Maint site
Dredger D10	Positioned at:	M520 Top side – Midway along conveyor
Dredger D9	Positioned at:	M720 Bottom side – Midway along conveyor
Dredger D11	Positioned at:	M820 Tail End Gullet
Dredger D24	Positioned at:	M620 Tail end – Bottom side
Mobile Slew S94	Positioned at:	At M620 Tail end
Mobile Slew S96	Positioned at:	At Dredger 11
TS2 Stacker	Positioned at:	M308 – Topside – Midway along conveyor

**Readiness for Fire:**

Critical assets to be protected – All Dredgers, Travelling Stack 2 (TS2), Mobile Slews S94 & S96, TP5, TP8, Hazelwood Slot Bunker, Trunk Conveyors, Electrical Supply Cables & Sub-Stations.

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GDF SUEZ Hazelwood	Guidelines For Season & Period Specific Fire Preparedness & Mitigation Planning
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All personnel on HIGH alert.

All unmanned machines are to be fully hosed up.

NIGHT SHIFT – 2x12 Operations (night prior to the weather event)	
Activation of the 20 series conveyor sprays	YES X

**DAY SHIFT – 1x7 Services Group supported by Earthworks Group and others**  
Severe: 07:00 to 17:00\*  
Extreme: 07:00 to 19:00\*

Severe Readiness Level		Extreme Readiness Level (in addition to all severe level control measures)	
3 x Spray Teams for operational areas (20, 40 & 60 series conveyors)	YES X	Hot Work activities to cease	YES X
Activate TP5, TP8 & HSB sprays (if deemed necessary)	YES X	2x12 Electrician to be available	YES X
2 x Water Tankers manned (>½ filled)	YES X	Increased day shift working hours to 19:00	YES X
Fire Services Lookout manned	YES X	Intermittent spraying of non-operational / worked out areas	YES X 2 crews
Additional Control Centre Attendant nominated	YES X	1 x Crane Monitor installed (manned with operator and assistant)	YES X
1 x Mobile Patrol	YES X	Fire alert activated by 09:00	YES X
Personnel for Equipment Checks	YES X	ECC opened, manned, functional and emergency generator checked	YES X

Emergency Command Structure:			
		Severe (onsite within one hour)	Extreme (onsite 0800 - 1900)
Nominated EC:	David Shanahan	YES <input type="checkbox"/> NA	YES X
Nominated ESLO:	Chris Morley	YES <input type="checkbox"/> NA	YES X

DAY SHIFT – 2X12 Operations	
If Mine Dredgers or Conveyors have stopped, patrols are to be conducted every hour afterwards, checking for signs of fire.	

NIGHT SHIFT – 2X12 Operations (in the event the risks remain beyond 19:00hrs)	
Activation of the 20 series conveyor sprays	YES X
SEVERE: 1 x Mobile Patrol	YES NA
EXTREME: 2 x Mobile Patrols	YES X

Additional Manning and Available Resources:	
Fire Tanker Availability:	Diamond Protection (D/P)
Earthworks Group:	Pat Quinn: (M) 0412 842 236
1X7 Services:	
Fuel and Mobile Plant Workshops (Delta Rent):	Wayne Jeffery (M) 0439 454 178

**Radio Communications:**  
Fire emergency radio communications onsite to be via Mine radio channel 5 (1x7 Services).

- In the event of a Fire Alert being issued:**
- Fire watch duties patrols will be directed by the 1x7 Services Supervisor
  - Non operations personnel and vehicles to leave coal faces
  - Maintenance activities to cease on coal levels
  - All vehicles to be washed underneath after leaving the Mine and before entering again

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# GDF SUEZ Hazelwood Mine Fire Readiness Plan

GDF SUEZ Hazelwood	Guidelines For Season & Period Specific Fire Preparedness & Mitigation Planning
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- All spare personnel to be on fire watch and available patrols
- Fire Services to notify Diamond Protection to have their Fire Tanker on Standby
- All vehicles are to report to Fire Services prior to entering coal levels
- Mine personnel to patrol along internal perimeter road as required

#### Response:

- Safety of personnel is paramount
- Under no circumstances are personnel to take undue risks "THINK BEFORE YOU ACT"
- Control Centre Attendant to call CFA immediately of any sign of fire, no matter how small
- All personnel that attend, take note of probable cause and minimise spread

Issue Date:	01/01/2015
Issue Time:	16:00 hours
Issued By: (name and title)	David Shanahan Services Superintendent

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## Affirmation of actions intended to be taken by GDF SUEZ

- Upgrade signage within the mine to make orientation easier for non-mine personnel.
  - **STATUS: COMPLETED. Signage has been installed.**

# GDF SUEZ Hazelwood Mine Emergency Plan Reference Grid



## Affirmation of actions intended to be taken by GDF SUEZ

- Negotiate with SP AusNet regarding a feasibility study to upgrade the MHO substation from temporary to permanent standard.
  - **STATUS: In progress. SP AusNet feasibility study expected to be completed by the end of Q1 (March) 2015.**
- Initiate a program for reducing vegetation in the worked out areas of the northern batters to reduce fire risk commencing in the areas closest to Morwell.
  - **STATUS: COMPLETED. Primary vegetation removal has been completed from the northern batters and grass levels above the Mine. A program for small residual areas, which are more difficult to access, has been developed.**
- 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.
  - **STATUS: COMPLETED and operational.**
- Conduct a review of the current pipework and condition in the areas of the mine other than the eastern section of the northern batters.
  - **STATUS: SUBSTANTIALLY COMPLETED. A detailed review conducted by an external consultant is currently being reviewed by GDF SUEZ.**
- On Extreme Fire Danger Days GDF SUEZ instigate wetting down of non-operational areas.
  - **STATUS: COMPLETED. GDF SUEZ's Mine Fire Instructions have been updated to include this requirement.**

## Affirmation of actions intended to be taken by GDF SUEZ

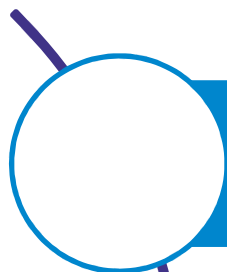
- Nominate a representative to attend the meetings of the Municipal Fire Prevention Committee convened by Latrobe City Council.
  - **STATUS: COMPLETED.** Names of relevant GDF SUEZ personnel provided to Latrobe City.
- Nominate designated people to be in attendance at the CFA Incident Control Centre during an emergency which threatens the mine.
  - **STATUS : COMPLETED.** Names of relevant GDF SUEZ personnel provided to CFA.
- 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.
  - **STATUS: COMPLETED.** GDF SUEZ has revised its communications protocols applicable to Hazelwood, and in future will engage with all Incident Controller briefings and media.
- Work with Victorian WorkCover Authority (**VWA**) to review its Safety Assessment and Safety Management System in light of regulations 5.3.21 and 5.3.23 of the *Occupational Health and Safety Regulations 2007* (Vic).
  - **STATUS: In progress.** VWA has completed a verification review, and GDF SUEZ has submitted an action plan to address the audit findings, which it is actively progressing.

## Affirmation of actions intended to be taken by 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.
  - **STATUS: COMPLETED.** GDF SUEZ has substantially adopted the '*CFA District 10 Standard Operating Procedure Open Cut Mine Fire (Brown Coal) – Responding to fire procedure*'. GDF SUEZ has raised with the CFA several aspects of the Standard Operating Procedure which are not operationally suitable for Hazelwood personnel to follow. GDF SUEZ's comments will be considered by the CFA and other government representatives at a Taskforce level.
  
- 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.
  - **STATUS: COMPLETED.** Clay capping and rehabilitation works of the nominated 9 hectare area has been carried out.

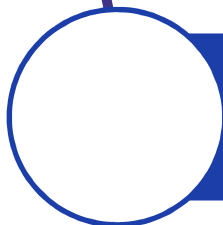
## Recommendations to GDF SUEZ made by the Board of Inquiry

6 Recommendations of which 4 are completed



### Recommendation 13

- Revise Emergency Response Plan



### Recommendation 14

- Establish back-up power supply

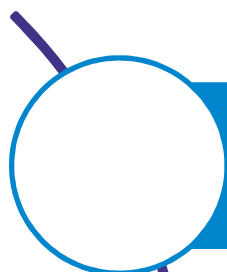


### Recommendation 15

- Conduct Risk Assessment and Risk Implementation

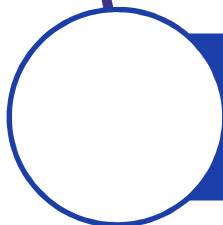


## Recommendations to GDF SUEZ made by the Board of Inquiry – Cont'd.



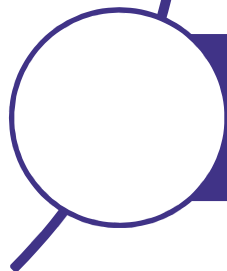
### Recommendation 16

- Fire Service Policy and Code of Practice



### Recommendation 17

- Adopt Carbon Monoxide Protocol



### Recommendation 18

- Improve Crisis Communications Strategy

## Recommendation 13

- Revise Emergency Response Plan



GDF SUEZ revise its Emergency Response Plan, to:

- require an increased state of readiness on days of Total Fire Ban;
  - require pre-establishment of an Emergency Command Centre;
  - require pre-positioning of an accredited Incident Controller as Emergency Commander;
  - 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.
- **COMPLETED.** GDF SUEZ's Emergency Response Plan has been substantially revised in order to address each of these elements. The revised procedures within the *Emergency Response Plan* and *Mine Fire Instructions* and are being practised as part of the Mine's operations.

## Recommendation 14

- Established back-up power supply



GDF SUEZ establish enhanced back-up power supply arrangements that do not depend wholly on mains power, to:

- ensure that the Emergency Command Centre can continue to operate if mains power is lost.
  - **COMPLETED:** A diesel generator has been positioned at the ECC.
- ensure that the reticulated fire services water system can operate with minimal disruption if mains power is lost.
  - **SUBSTANTIALLY COMPLETED:** AusNet Services has installed 66KV switches on several of the mains power supplies within the Mine at GDF SUEZ's request.
  - Additional power lines and isolating switches have been installed, and certain wooden poles replaced with concrete, to reduce the risk, and potential impact, of fire damage to mains power supplies.
  - Electricity supply has been established directly from the Power Station to pump house 50, with further supply to pump house 53 expected to be completed by the end of Q1 March 2015. Both of these pumps supply water to the fire service system within the Mine.
  - These measures provide for significant additional power redundancy within the Mine perimeter, and back up power to the water supply pump houses in the event of loss of mains power.

## Recommendation 15

- Conduct Risk Assessment and Risk Implementation



### GDF SUEZ:

- 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 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
  - **In progress.** Risk assessment workshops were conducted in January assisted by an independent consultant.

## Recommendation 16

- Fire Service Policy and Code of Practice



### GDF SUEZ:

- 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
  - **In progress:** GDF SUEZ's review of its *Mine Fire Service Policy and Code of Practice* is well advanced, and in the process of being finalised. External consultants retained by GDF SUEZ will subsequently review the revised Mine Fire Service Policy and Code of Practice, and provide input regarding industry best practice. There has been significant engagement with CFA, DSDBI and VWA on this issue.
- incorporate the revised 'Mine Fire Service Policy and Code of Practice' into the approved work plan for the Hazelwood mine.
  - Further discussions required with DSDBI regarding a Work Plan Variation, to be initiated following completion of the above work item.

## Recommendation 17

- Adopt Carbon Monoxide Protocol



### GDF SUEZ:

- adopt and apply the firefighter carbon monoxide response protocol.
  - **COMPLETED.** GDF SUEZ Hazelwood has substantially adopted the '*CFA District 10 Standard Operating Procedure Open Cut Mine Fire (Brown Coal) – Responding to fire procedure*'. GDF SUEZ has raised with the CFA several aspects of the Standard Operating Procedure which are not operationally suitable for Hazelwood personnel to follow. GDF SUEZ's comments will be considered by the CFA and other government representatives at a Taskforce level.

## Recommendation 18

- Improve Crisis Communications Strategy



### GDF SUEZ:

- improve its crisis management communication strategy for the Hazelwood mine in line with international best practice.
  - **COMPLETED.** GDF SUEZ has revised its communications protocols applicable to Hazelwood, and in future will engage with all Incident Controller briefings and media.

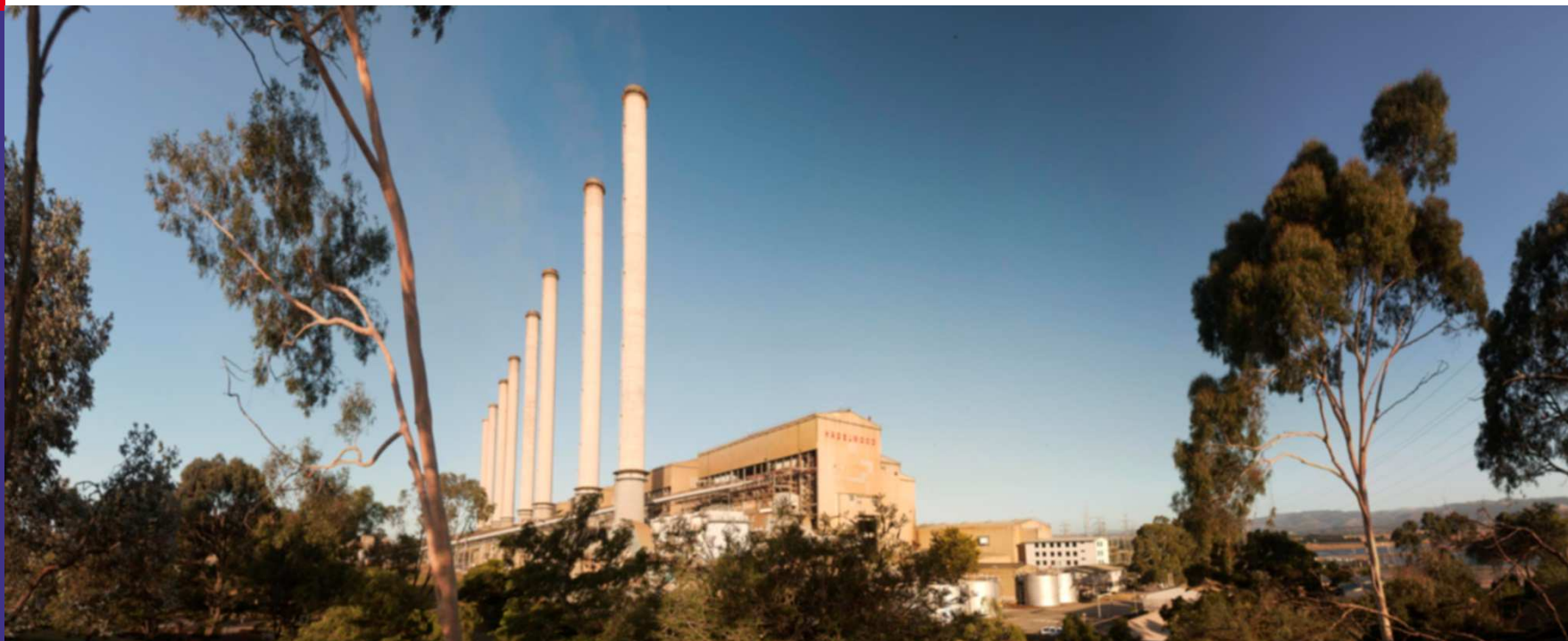


## Hazelwood Mine Works Update – Video footage





## Local CFA Update



# Closing