



**COAL MINE EMERGENCY MANAGEMENT TASKFORCE – WORKPLAN
TASKFORCE INITIATIVES STATUS REPORT – FIRE PREPAREDNESS - 30 September 2015**

CD14/497853 v10

No. Rec No. Timeline	Issue	Action	Status	Comment Action	Status
1. R 2.2 (&R4.10 & R4.16) 31 Oct 15 31 Oct 16	Surveillance / Monitoring of hot spots within the Hazelwood and other coal mines – Establish a systematic rigorous program of surveillance / monitoring of hot spots across the Hazelwood Mine, in particular the area of the mine that was involved in the February / March 2014. This will assist timely decision making on the management of hot spots across the mine area. The mine operators have the primary responsibility to manage hot spots in the mines which includes detection systems to be established should be maintained. Therefore, there is a requirement to work closely with the mines to achieve proactive management of hot spots as a part of a systematic approach to mitigate any potential risk of fire	CFA,GDF SUEZ and DEDJTR – To achieve this will require additional thermal imaging camera technology that is hand held, infrastructure mounted and aircraft mounted. To address this issue will require CFA, GDF SUEZ and DEDJTR to collaborate to agree to the technology and implement. the thermal imaging camera data will need to be accessed from an open secure source to allow all authorised user's access	CFA – Aerial FLIR Monitoring Flights conducted over mines and fire impacted areas from February fires during September and early October 2014	Scheduled flights to be recommended during FDP <ul style="list-style-type: none"> Detailed records to be maintained. Clarification to be provided re hotspots/areas of interest definitions. Geotechnical issues regarding impacts of rainfall, ground movement and oxygen impregnation to be further defined. 	Completed
			Flights discontinued upon all “areas of interest” being investigated.	To be re-instigated during 2015/16 fire season in accordance with identified risk	Ongoing
			Thermal imaging camera technology available on primary response vehicles.		Established
			Hazelwood – GDF SUEZ Trailer mounted FLIR cameras permanently located. One on Northern batters to monitor Southern batters and one on Southern batters to monitor Northern batters. TIC skilled personnel are available to provide follow up monitoring for areas of concern.		Established
			Permanent CCTV cameras installed in the mine and monitored by control centre staff.		Established
			Yallourn – Energy Australia Permanent CCTV cameras in place to cover mine and monitored by mine control centre staff.		Established
			Number of portable monitoring cameras		Established

			also utilised with adequate resources rostered to relocate and maintain as required		
			Loy Yang – AGL Permanent CCTV monitoring in place at top of mine to provide coverage of mine and surrounds		Established
			Multiple cameras continually monitoring mine and replayed in Management Centre and ICC.		Established
			Control room operates 24/7 which is responsible for monitoring and despatching of Emergency Response		Established
			Anglesea – Alcoa Mine closed as at 31 august 2015 and actions of reopened mine fire Inquiry hearing of 30 & 31 July 2015 actions completed Alcoa have completed coverage of exposed coal to the satisfaction of regulators and responders. EMV to maintain monitoring role. Alcoa have instigated mine security and surveillance program.		Established
			Regular housekeeping checks performed to include areas of built up coal fines and other locations where spontaneous combustion is more likely to occur	Investigate the use of thermal imaging camera technology at the appropriate level e.g. hand held units Further review risk/requirement as part of overall risk assessment	Established / Ongoing
2.	Control / Management of hot spots and fires - .	CFA and GDF SUEZ -	CFA		
R2.2	Rigorous data collection regime required the fire suppression plan to assist in management of related fires. This to underpin the operational decision making and ultimately the success of	The Hazelwood ICC be established for the management on hot spots and fire outbreaks. The Hazelwood ICC contain the fire management plan used during the mine fire that sectorised and provide management areas over the entire mine area	FLIR data from flights conducted provided to GDF SUEZ mine management to enable any identified hot spots to be mapped for appropriate follow up action and treatment		Ongoing
31 Oct 15 31 Oct 16			Hazelwood – GDF SUEZ Generator installed for backup power supply to provide uninhibited command centre capacity.		Completed

	the fire suppression strategy. To supplement this level of planning is the pre determined Division and Sector plans (including maps) as standard products that are available to fire crews as they enter the mine in the response phase. This level of pre planning should be established and utilised in the management of hot spots and any out break of fire in the mine. Therefore a proactive joint approach from GDF SUEZ and CFA is required to achieve this and should be actioned immediately.		Signage in mine to be upgraded to better direct responders.		Completed
			Maps to be made available at entry points for responders		Completed
			Yallourn – Energy Australia Control room maintains constant mine monitoring via CCTV.		Established
			Permanent 24/7 fire crews on shift at fire station.		Established
			Ongoing intensive management regime in place for areas of interest		Established
			Regular TIC monitoring in place		Established
			Loy Yang – AGL Permanent 24/7 fire crews on shift		Established
			Daily monitoring of hot spots		Established
			Technical monitoring of hot spots		Established
			Civil engineering strategy and well established access points to ensure timely response to emergencies.		Established
			Anglesea – Alcoa Mine Hot Coal SWI in place		Established
			Current CFA Pre Incident Plan (PIP)		Established
			Alcoa Emergency Response Plan		Established
3.	Development of Compressed Air Foam Systems (CAFS) - Compressed Air Foam Systems (CAFS) proved overwhelmingly successful during he February 2014 fire. The 'high volume' Tasmania Fire Service CAFS appliance operated in the Hazelwood coal mine and was supported by on board technology including thermal imaging cameras. There is a need to progress the planning for such an appliance to be established in the Latrobe	CFA – to provide details and timelines on when CFA will commission a CAFS appliance that will be stationed in the Latrobe Valley, to support this plan is a contingency plan that considers if a new CAFS appliance was not able to be delivered prior to December 2014	CFA Two concept tankers being retrofitted with CAFS capability. First unit is due for delivery during December 2014 and the second due early in 2015	Commissioned and training program completed	Complete
R2.2			Further ongoing research being conducted into the most appropriate unit to be developed for mine fire response.		Pending
31 Oct 15			Redundancy and ongoing capacity provided over summer period by way of helicopter with 2650ltr water capacity and fixed wing aircraft to be located at Latrobe Valley.		Completed
31 Oct 16			Loy Yang – AGL Full CAFS unit on order from Tasmania and due for delivery in February 2015.	Launch flyer attached (Attach #1)	Completed
			Planned to purchase a second appliance late 2015.		In Progress

	Valley. .'		Familiarisation awareness and techniques underway for response crews		Completed
			Anglesea - Alcoa Further review risk/requirement as part of overall risk assessment	Further review risk/requirement as part of overall risk assessment	Ongoing
4. R 2.5 31 Oct 15 31 Oct 16 31 Oct 17	Integration of GDF SUEZ into the Incident Management structure - Integrated Incident Management is a key issue identified during the Hazelwood Mine Fire Inquiry.	CFA and GDF SUEZ – Therefore there is a need to develop an integrated industry Incident Management structure that integrates GDF SUEZ into the regional multiagency incident management team structure	Hazelwood – GDF SUEZ Emergency Commanders and identified staff have been trained in AIIMS ICS.		Completed
			Additional training in AIIMS has been completed		Completed
			Designated GDF SUEZ personnel to attend Regional ICC during incidents that have potential to impact the mine.		Ongoing
			GDF SUEZ to engage in all relevant Incident Controller and media briefings.		Established
			Yallourn – Energy Australia Level one Incident Control Centre established for extreme fire danger days		Established
			7 qualified Level 2 ICs.		Established
			16 AIIMS trained personnel.		Established
			Expanding training to all AIIMS related positions within incident management structure		In Progress
			Introduction to AIIMS specific to mining industry.		In Progress
			Loy Yang – AGL Well established and equipped ICC on site.		Established
			Integrated training conducted with CFA regularly.		Ongoing
			Staff trained in AIIMS.		Established
			Emergency Manager chairs CGEIG.		Ongoing
			18 nationally accredited L2 IC's on site		Established
Pre incident response mechanisms and plans in place to ensure timely activation appropriate appliances 4x4 mines, pumpers power station.		Established			
Activation is automated		Established			
5.	Capability to respond and	Build improved practices to enhance	CFA		In Progress

R 2.2 31 Oct 15 31 Oct 16	manage fires in the coal mines	fire response and management capabilities in line with shortfalls identified within the Hazelwood Mine Fire Inquiry outcomes	District 27 to be established for all brigades in Latrobe City to be coordinated via a single district structure.	REMT – Work required on integrating industry into structure without over complicating situation	
			Aerial pumper permanently deployed to Morwell Fire Station.		Established
			CAFS units see section 3 above.		In Progress
			A fixed wing aircraft and helicopter with 2650ltr capacity located at Latrobe Valley over FDP. To be activated on FDI of 12+. Deployment protocols to be defined for mines.		Completed
			District 10 SOP 10.01 Open Cut Coal mines (Brown Coal) – Management of firefighter safety has been developed, endorsed and distributed to brigades. In District 9&10.	District 27 draft SOP attached (Attach #2)	Established
			Project currently underway to review existing brown coal and open cut training packages.	Training package documents attached (Attach #3, #4 & #5)	In Progress
			An initial review of current Brigade Response Tables has been undertaken.		Completed
			A review of CFA's vehicle typology for response into open cut mine environments is currently underway.	Being reviewed	Pending
			Traralgon ICC to be the immediate and defined ICC for this season		Established
			GDF SUEZ – Hazelwood Signage in mine to be upgraded to better direct responders.		Completed
			Maps to be made available at entry points for responders.		Completed
			Wetting down of non-operational areas of mine on extreme fire danger days.		Established
			GDF to be present in CFA ICC during times of incidents that may threaten the mine.		Completed
			Additional pipe work installed on non-operational batters to provide greater wetting down and firefighting capacity		Completed
			Yallourn – Energy Australia		Established

			2 additional 300 litre fire response ute tank/pumps		
			New fire service pumping system installed 1,600L/sec dual power supply.		Established
			2 X diesel standby pumps permanently installed in system.		Established
			Latrobe River pumps, direct supply into Fire Service system. Pipe work upgraded November 2014.		Completed
			Refurbished mine response trailer.		Established
			2 x crane mounted spray nozzles		Established
			Large volume lay flat hose 6" diameter		Established
			5 additional portable spray units purchased, now 20 in total.		Completed
			Additional steel pipe purchased for Township Field for installation of permanent droppers to lower levels.		Completed
			CO Health Monitor in First Aid Centre.		Established
			20 additional portable CO monitors procured		Completed
			Additional manning resources – overburden T&S operations over summer.		Established
			Maps depicting all mine water points located at gatehouse for distribution to all responding appliances		Established
			Loy Yang – AGL Additional fire fighting equipment placed online.		Established
			External contractors engaged for additional resource capacity.		Established
			Quick attack plans in place to enhance fast knock down capability.		Established
			Fire response plans structured with defined trigger points which are exercised.		Established
			Crew step ups activated in accordance with defined trigger points		Established
			Anglesea – Alcoa Onsite mine equipment including dozers and excavators to be retained for ongoing security of old mine site.		Established

			60,000 litre watercart to be retained		Established
			Trained ERT (Emergency Response Team) members within mining team	Investigate additional coal fire training for senior mine operators.	Established / Ongoing
			Currently have 2 CO gas detectors	Investigate the acquisition of 4 CO monitors (ex Pt. Henry)	Complete
6.	Operational Improvement plan (local) -	CFA –	CFA –		
R 3.5		operational improvement plan for District 9, District 10 and predetermined support brigades in District 8 and other areas.	Planning commenced on the Operational Improvement Plan including key themes around, training and preparedness, Industry relationships, Welfare and Staging Areas		In progress
31 Oct 15			Industry familiarisation sessions, including tours of the open cut mines, are being arranged for all brigades and groups within District 9 and 10 who are first responders or those who are responded when fires & incidents are escalated.		On going
31 Oct 16			Several integrated operational exercises are planned to take place within the industry.		In progress
31 Oct 17			Latrobe City Councils Municipal Fire Prevention Officer is now on CGEIG.		Established
			Latrobe City Council Property inspections completed, 1669 Fire Prevention Notices issued.		Completed
			Monthly meetings with Energy Australia.		Ongoing
			Major industry inspections to take place with mines, APM &HPV.		Completed
			Mapping being produced to identify risk areas VFRR process in use.	CFA Industry Risk Management Mapping Project outcomes to be included in the Municipal Fire Management Plan	In Progress
			Hazelwood – GDF SUEZ Update of Emergency Response Plan and Mine Fire Instructions is being finalised to include additional personnel for the fire	Mine Fire Instructions incorporates additional personnel for the fire protection duties on Extreme	Completed

			protection duties on Extreme fire danger days.	fire danger days.	
			Review communications protocol to ensure that during the response to a fire which is capable of impacting the community, it is able to communicate messages to the community via any protocol adopted following a review by all agencies.		Completed
			Outcomes of VWA verification process being actioned by GDF SUEZ personnel and external consultants for implementation.		Completed
			Yallourn – Energy Australia Enhanced operational capability incorporated in capability to respond section above.		Established
			Monthly bushfire mitigation program meetings conducted with CFA and Latrobe City Council		Ongoing
			Loy Yang – AGL Emergency Response Plan updated annually		Established
			Joint training ongoing (CFA and other mines).		Ongoing
			Joint inspections and familiarisation tours completed regularly.		Ongoing
			Standardisation of equipment.		Ongoing
			Anglesea – Alcoa		
			Emergency Management Plan and CFA PIP		Established
			Direct 2-way radio communication between Anglesea CFA and Alcoa Power Station Control Room.	TARP/Communication Strategy for Anglesea Alcoa	Established / Ongoing
7.	Training and preparedness	District 10 Suggested Action 3:	CFA		
R2.2	- There was extensive discussions regarding training and preparedness.	That a package or audio visual aids are produced regarding brown coal fires, safety ad tactics that can be distributed to all Brigades for training.	Training video to be produced with CFA input to provide experienced direction on approach to mine fire fighting.	http://youtu.be/HvoksvnQCJ0	Completed
31 Oct 15 31 Oct 16	Discussion was about improving firefighter safety through partnering with the	Action 4 - That, at least annually, Brigades and Groups in District 9	Safety aspects to align with CO protocols and SOPs.		In Progress
			Induction program for relieving officers on	Coal Mine training package	In progress

<p>industry operators to improve our members' skills and knowledge. E.g. (1) Characteristics of fires involving Brown Coal, (2) Specific Open Cut mine risks and (3) Potential fires and risks within power stations and associated production equipment (eg) switching yards, conveyers etc).</p>	<p>(&D10) that are likely to attend a fire in the mines review training materials/videos</p>	stations in Latrobe Valley	attached (Attach #3, #4 & #5)	
		Familiarisation training for brigades in District 9 & 10 that are likely to respond to the mines.	Coal Mine training package attached (Attach #3, #4 & #5)	In progress
		Hazelwood – GDF SUEZ Phoenix Rapidfire training conducted for mine staff to best understand predictive fire spread modelling to enable enhance mine emergency management planning in times of fire threat from outside the mine.		Completed
		Training by GDF SUEZ for emergency responders to the mine.		Ongoing
		Additional Pheonix training planned for completion 2015		In progress
		Yallourn – Energy Australia Extensive training program conducted for all relevant staff		Completed
		Training in Pheonix Rapid Fire modelling completed		Completed
		Loy Yang – AGL Regular integrated training sessions with CFA.		Ongoing
		18 level 2 IC's and 9 ESLO's trained.		Established
		Exercising conducted annually to conform with Part 6 Terrorism, Community Protection Act 2003		Established
		Additional Pheonix training planned for completion 2015		In progress
		Anglesea – Alcoa Joint training exercises with local CFA		Ongoing
		Trained Emergency Response Team members embedded within mine operations group and senior earthmoving equipment operators experienced in coal combustion elimination practices.	CFA currently reviewing Anglesea Emergency Management Plan and PIP	Established
		Safe Work Instructions (SWIs) targeting hot coal procedures	TARP/Communication Strategy for Anglesea Alcoa	Established
	Further review	Established		

				risk/requirements as part of overall assessment.	
				Joint training exercises with local CFA that focus on coal fires. To be arranged following the completion of the Anglesea Emergency Management Plan and PIP review and used as an exercise to familiarise and test activities against these documents.	Ongoing
8.	Industry Relationship -		ALL Responsibility of all taskforce member agencies and industry facilitated through Taskforce meetings, workshops and field visits.	CFA/Latrobe Industry meeting group formed. First meeting 25 June 2015. Minutes attached (Attach #6)	Ongoing
			Attendance and engagement of Taskforce members an indication of relationship strengths.		Established
			CGEIG membership and involvement.		Established
			Regular meeting of industry and sub groups		Ongoing
			Anglesea – Alcoa Responsibility of all taskforce member agencies and industry facilitated through Taskforce meetings, workshops and field visits.	Continue to build through Task Force and other opportunities	Complete

			Attendance and engagement of Taskforce members an indication of relationship strengths		
					Complete
9.	Welfare / Staging Areas - There was extensive discussion regarding the inability of Firefighters to get access to refreshment or use of toilets at the staging area without disrobing or considerable inconvenience.	Action 7 - that a 'dirty welfare area" be incorporated in any large staging area at future incidents, This aspect of be incorporated in future plans, guidelines and check lists. Action 8 - In discussions with the industry, investigate the ability for mine operators to sponsor the supply of additional CO Monitors for distribution to CFA members (one or two per crew) who respond to fires involving coal. Ensuring these CO Monitors are similar in operation as those already allocated and in service to selected Brigades.	Establishment of "dirty" welfare area within established Staging Areas will be incorporated at future incidents. This will ensure operational responders coming off the fireground for a break have ready access to welfare and refreshment facilities.		In Progress
			Anglesea – Alcoa Outcome from the Hazelwood Mine fire which can be incorporated into Alcoa and CFA procedures	Suggest use of Mine Workshop as 'dirty' welfare area at Anglesea and if agreed, ensure aspect written into revised PIP and Emergency Management Plan.	Ongoing
10.	Incident Naming - Again, extensive discussion occurred on this matter. The	Action 9 - The Chief Officers need to consider a new incident type messaging convention and incident	Anglesea – Alcoa Will be guided by external emergency services.		Complete

			maps.		
			Grading program (Nov/Dec) for mine perimeter, worked out areas of Township field and Witts Gully bush area.		Completed
			Loy Yang – AGL Fire prevention management plan completed for management of land surrounding the mine for management of vegetation types and fuel reduction.		Completed
			Slashing ongoing.		Ongoing
			Grazing program in place.		Established
			Mineral earth works ongoing.		Ongoing
12.	Others				