LATROBE VALLEY COAL MINES FIRES

STRATEGIC PLAN

Version 1

Date: 11th February 2014

Time: 1800 hours

This strategy was developed with input from Fire Agencies, Mine Owners including Central Gippsland Essential Industries Group. A range of options were considered based on the understanding that unlimited resources would be available. Due to the current risks it was considered that a phased planned strategy is required rather than rapid influx of significant resources.

Current Situation

Hazelwood Mine

It is estimated that 40% of the mine batter and 20% of the mine floor is currently involved in fire.

- One conveyor destroyed.
- One powerline still out of service.
- No loss of dredges.

Contingency Plans have been developed for the supply of coal to Energy Brix due to the loss of a conveyor line. Other triggers have been developed to initiate additional fixed sprays in the event of breach of the containment lines.

Engineers and support staff from GDF Suez are currently completing the development of a detailed plan to enact the identified strategies. Any further requests for resources will be forwarded as they are completed.

Yallourn Mine

TBA

Objective: To prevent the loss of power supply to Victoria through the impact of fire at critical infrastructure facilities located at Hazelwood and Yallourn Mines. The timeframe to complete the objective of the developing containment of the fire is 48 hours. The timeframe to complete the extinguishment is 2 weeks (conservative).

Key Risks

1. Potential risks to emergency response crews and contractors on the incident sites through exposure to toxic gases, particulates and direct exposure from fire, radiant heat or heat related illness, slips and falls and risk of batters collapsing.

2. Potential toxic emissions from the fire area impacting on local community and personnel using road networks.

3. Loss of power to water pumping stations for fire water and dewatering which will result in stability issues for the Hazelwood mine. This includes the power supply attached to poles located on the northern batter of the Hazelwood mine to the mine bed.

4. Loss of power to the mine excavating equipment resulting in loss of coal supply to the power station and loss generation of power to the grid.

5. Impact of fire on working area infrastructure of the mine will result in loss of coal supply to power station.

6. Limited water supply due to current pump capacity.

7. Maintenance of the dewatering system at Hazelwood to ensure the stability of the mine. Cracks are appearing on the northern batters.

8. Fire escaping the mine areas.

Strategic Control Priorities

1. Protection and preservation of life is paramount

   ### Risks

   Potential risks to emergency response crews and contractors on the incident sites through exposure to toxic gases, particulates and direct exposure from fire, radiant heat or heat related illness, slips and falls and risk of batters collapsing.

   Maintain a safe working environment for all personnel at incident sites.

   - The provision of CO monitoring to all crews exposed to fire gases.
   - The provision of Health monitoring and crew rotations to minimise the risk of acute effects of exposure to toxic gases.
   - The provision of particulate P2 respirators to all personnel exposed to particulates.
   - Use of Breathing Apparatus for critical tasks due to high levels of toxic gases.
   - Hazelwood and Yallourn Mine Emergency Plans identify site evacuations if required.

Safety of members of the community

- EPA conducting air monitoring in the Morwell and environments.

2. 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.

Risks

Inadequate information provided to the community.

- Public Information is being prepared at the ICC.

3. Protection of critical infrastructure and community assets that support community resilience

Risks:

- Loss of power to water pumping stations for fire water and dewatering which will result in stability issues for the Hazelwood mine. This includes the power supply attached to poles located on the northern batter of the Hazelwood mine to the mine bed.
- Loss of power to the mine excavating equipment resulting in loss of coal supply to the power station and failure of power to the grid.
- Impact of fire on working area infrastructure of the mine will result in loss of coal supply to power station.

Strategies:

In the immediate period secure the power supply to the pump stations and operational area of the mine sites by;

Phase 1

- Application of large quantities of water delivered by spray systems and mobile firefighting resources currently on scene.
- Apply a clay cap to areas around the base of power poles.

Phase 2

- Enhance the pumping capacity at Hazelwood by the provision of an additional large pump (currently being determined by On site Engineers)
- Increase the contract labour to weld a permanent 300 mm steel main to provide a permanent firefighting capacity to the northern batters.
- In the interim increase the water available through additional lay flat hose and firegfighting boosting capacity.
- Utilise additional monitors from the lay flat and permanent main.

- Engage additional resources including aerial appliances, ground monitors on the northern and south eastern batters of the Hazelwood mine.
- Engage Loy Yang mine resources to assist with design and implementation of the fire main plan.
- Source large scale earth moving and water tankers (30 tonne and above) to support this strategy.
- Engage Geotech staff to assess the stability of the mine batters at Hazelwood.
- Provide Line Scan and Ground Observers to plot fire development and successes.

4. Protection of residential property as a place of primary residence

   Risks: Fire escaping the mine areas.

   Strategies:

   - Engage additional earth moving to assist in providing fire breaks above and within the Hazelwood mine.
   - Conduct regular patrols.

5. Protection of assets supporting individual livelihoods and economic production that supports individual and community financial sustainability.

   Refer Point 4.

6. Protection of the environment and conservation assets that considers the cultural, biodiversity, and social values of the environment.

   Risks:

   Potential toxic emissions from the fire area impacting on local community and personnel using road networks.

   Strategies:

   - All fire water is contained within and recirculated with the Hazelwood mine.
   - Carbon monoxide emissions will be monitored around the mine sites conducted by EPA.
   - Fugitive dust will monitored through visual assessment.

Detailed Strategies - Hazelwood

Northern Batters

- Construct a mineral at ground level near the top of the batter to protect the 66 KV power supply.

- 500 metres of Lay Flat hose to be deployed to provide water for monitors
- Provide monitors as a fall back line in the north western corner of the mine.
- Deepen the wet lines on the western edge of the contained area on the northern batter.
- Improve coverage for protection of the power lines from the northern side of the Hazelwood mine into the mine area.
- To patrol the ground level to prevent the spread of fire from the mine.
- Engineer and lay 300 mm main feeder line
- Fire main to be constructed on 3 batters
- Reinstatement of existing decommissioned main on the northern batter. Suppression activities needed with 30 tonnes tankers while work is progress.
- Complete extinguishment of the fire burning on all batter levels using handlines, aerial appliances, ground, crane, vehicle mounted and trailer monitors using the recommissioned and installed main with pumpers to boost the water supply as required.

Southern Batter sector

- Protection of mine control room, power lines, conveyor and other critical infrastructure.
- To contain the batter fire to prevent a westerly spread.
- Construct a mineral earth break through overburden.
- Enhance wet line containment through the use of aerial appliance and crane mounted equipment.
- To maintain spray protection over the conveyors for protection and fall back
- Utilise long line buckets drops from aircraft to assist in flare ups and asset protection.
- Complete extinguishment of the fire burning on all batter levels using handlines, aerial appliances, ground, crane, vehicle mounted and trailer monitors using a hose lay of 90 and /or 100mm lay flat hose with pumpers to boost the water supply.

Mine Floor Sector

- Continue use of large capacity water tankers, fighting tankers for asset protection in the powerlines and pumping station.
- Use of plant equipment and large capacity water tankers to contain and suppress vegetation fires in the overburden.
- To patrol and suppress spot fires and fire burning on coal areas on the mine floor.
- Provide a fallback wet line wet line to protect the conveyor and dredging infrastructure from north to south to the western working face of the mine (1.5kms)
- Provide resources if required for contingency planning in the event of escape of containment or new fire outbreaks.
- Aircraft are only suitable in clear air.

Working Face Sector

To provide resources to enable a fall-back strategy if required.

Resources

100 x Ground monitors
2 x Trailer monitors
2 x lengths of hose per monitor (minimum)
50 Y pieces and Storz CFA adapters
1 x 4WD Strike Team Pumper/Tankers
1 x Strike Team Pumpers
1 x Strike Team Pumper/Tankers
6 x Telebooms
1 x 4WD Strike Team
Health monitoring crews - Increase size of crews to five persons, required day and night, must have capability to conduct co monitoring of individuals.
20 x CO monitors

Additional IMT Staff

4 x Sector commanders D/N
Div Commander – Night Shift
1 x Weather analyst
1x Mapping Officer D/N
1 x Radio operator

4 day rotation for all resources listed.