Victorian Gas Emergency Management

Gas Emergency

A "gas emergency" can be broadly defined as a large or complex emergency involving gas, which has the potential to cause loss of life, extensive damage or significant economic cost.

A gas emergency can occur due to a natural hazard, accident, power disruption, industrial dispute, equipment failure or gas quality issue.

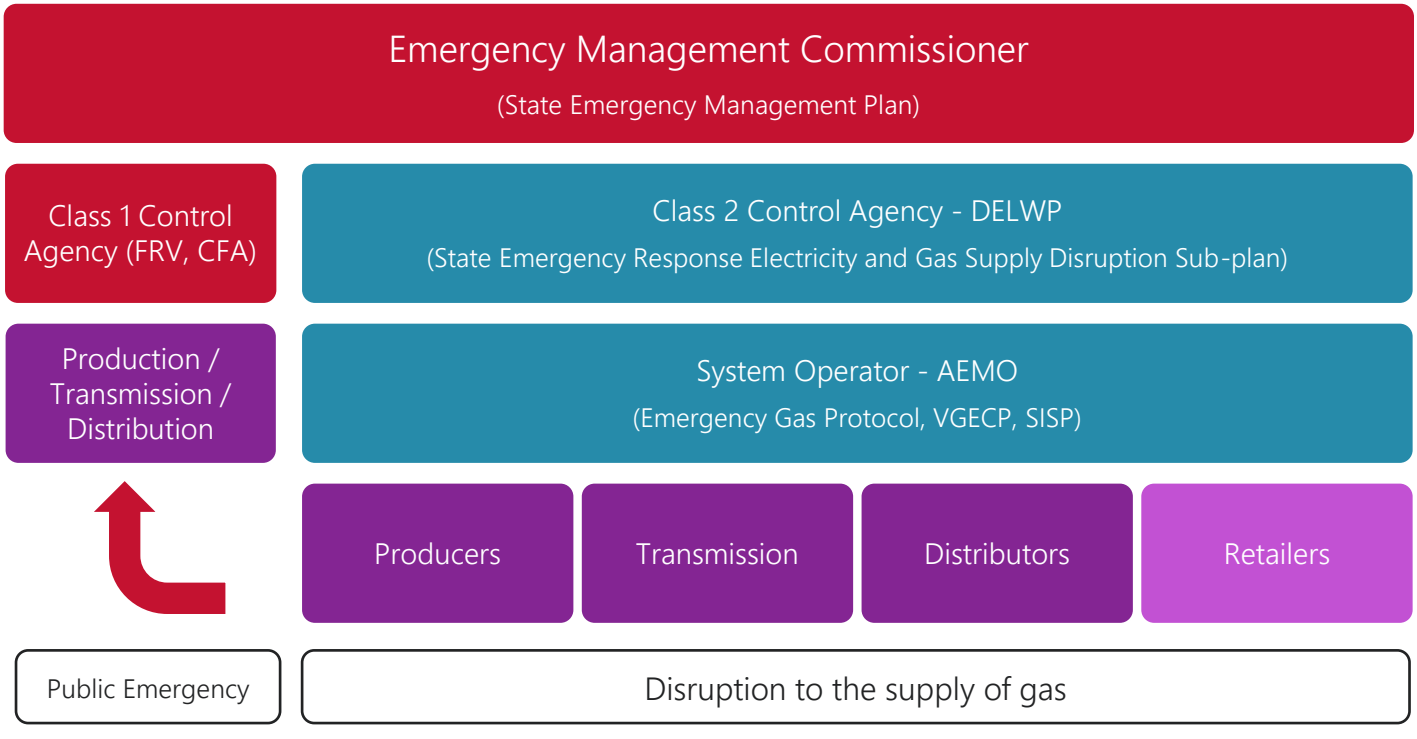
Subsequently, the State's legislative framework imposes regulatory obligations on the supply chain to prevent, prepare and respond to the whole spectrum of cause and consequence.

Command, Control & Coordination

The legislative requirement and commercial imperative to respond as effectively as possible to disruption has created a holistic framework for managing gas emergencies, which are tied together under the auspices of Victoria's emergency management framework. This approach recognises the mutual benefit in a coordinated response.

A cohesive response is predicated on the concept of command, control and coordination. Command is defined as the direct management of responses, control is the direction of activities, and coordination is the bringing of internal and/or external resources together to be greater than the sum of the parts.

Each organisation within the supply chain incorporates an element of command, control and coordination within their own response to an emergency, but as an emergency increases in complexity, so does the requirement for greater levels of resourcing, coordination and an overarching control structure. These sets of arrangements are referenced in various plans such as safety cases, emergency management plans or state emergency management plans – as referenced below.



Victorian Gas Emergency Management

At a Government level

Under Victoria's emergency management framework, the Emergency Management Commissioner has the overarching responsibility of ensuring that each and every state-level response is systematic and coordinated. The Emergency Management Commissioner does this by implementing the final layer of coordination by convening the State Emergency Management Team.[1] This team's goal is minimising and responding to the risk of broader societal impact.

The Control Agency for a gas emergency (a Class 2 emergency) is the Department of Environment, Land, Water and Planning (DELWP). Control Agencies are entrusted with the responsibility to respond to a specific emergency by implementing an effective control structure. Control Agencies can either implement and resource a control structure themselves or in collaboration with other agencies and/or industry.

Where a gas emergency involves a significant loss of containment and/or fire (a Class 1 emergency), the responsibility to manage the incident rests with the most applicable Control Agency such as Fire Rescue Victoria or the Country Fire Authority. These Control Agencies work with the affected asset operator and other industry and Government agencies to manage and contain the incident.

Where a Gas Emergency impacts on safety and welfare of the community, Energy Safe Victoria as the technical safety regulator may also be involved to utilise additional public safety powers under the Gas Safety Act.

At an industry level

Industry maintains responsibility for managing an incident/emergency in accordance with their relevant legislation. This implies that in the first instance the affected business responds utilising their own approved safety cases and emergency response plans. If the event exceeds their resourcing, control is then transferred to the relevant Control Agency.

Where a gas incident impacts the operations of the gas system, AEMO has authority to direct Registered Participants to improve the security of the declared transmission system. Consequently, during such events AEMO has control over all system operations and associated supply chain behaviour.[2]

At a community level

Curtailment is the strategy of last resort, where all other system and market-led strategies are either exhausted or insufficient for the issue at hand. There are three deliberate strategies of curtailment:

- AEMO directions under the National Gas Law compelling Registered Participants to stop or reduce the level of gas consumption or the consumption of their customers.
- A public appeal for voluntary gas reduction made by the Victorian Government through DELWP.
- Mandatory restrictions on gas use imposed by the Victorian Government under the Gas Industry Act (led by DELWP and where time permits), or the Gas Safety Act (led by Chairperson of ESV).

[1] All Government agencies are represented on the State Emergency Management Team

[2] 91BC National Gas Law

Victorian Gas Emergency Management

Emergency Levels

Level	Description	Response
1	Site asset-based incident	Responded by local resources, and in the context of an industry emergency is relatively "business as usual".
2	Operational response – single industry participant	A little more complex, likely to have some interruption to continuity of supply and involve adverse publicity.
3	Operational and Management Response – Single Industry Participant	Generally a lot more serious and requires internal emergency teams to be activated. In instances, this may require activation of a crisis management team (or equivalent) & involve emergency services resources.
4	Impacts Multiple Industry Participants	This is an emergency that has escalated to the extent that the impacts of the emergency are beyond a single distribution company or a transmission company. AEMO is activating its emergency protocols at this stage.
5	System Wide Threat, Public Safety issue or Powers Invoked by Energy Safe Victoria or the Governor in Council	This meets the definition of an emergency under legislation and requires access to all available resources to manage. At this level, curtailment is likely.

Tools & Resources

As highlighted, there are numerous supporting plans and procedures that coordinate the response to an emergency, which range from incident management (SOPs and safety cases) to strategic oversight (SEMP).

At the top of the pyramid is the State Emergency Management Plan (SEMP) which provides the overarching framework for responding to all types of emergencies and makes the provision for sub-plans, such as the DELWP-administered State Emergency Response Electricity and Gas Supply Disruption Sub-plan.

This sub-plan outlines how the various mutually aligned arrangements come together in a coordinated manner, to ensure effective control over an event or incident.

At a system level, AEMO maintains several legislative documents, such as the Emergency Gas Protocol, which describe how AEMO will respond to a system emergency. To support the coordination of AEMO and industry actions, the Victorian Gas Emergency Communication Protocol (VGECP) and the Single Industry Spokesperson Protocol (SISP) also activate. These protocols, focused solely on communication, are important platforms supporting the response, by which AEMO, Government and Registered participants maintain situational awareness.

Gas Emergency Management Consultative Forum

To support the Victorian Government and the gas industry in their preparations for a gas emergency, the Gas Emergency Consultative Forum (GEMCF) was created. The GEMCF is a forum to share ideas on good practice emergency management, identify opportunities to enhance existing response frameworks and undertake an annual exercise to test readiness. Registered Participants and organisations with a gas safety case are eligible to participate in the forum.

Victorian Gas Emergency Management

What's industry's role in the framework?

Everyone has a role to play, from ensuring currency of safety cases, participating in the GEMCF or being active in a response to a gas emergency.

Retailers	Retailers are the direct link to the customer and play an important role in changing user behaviour and facilitating two-way communication with gas consumers. Directions or key messages will be provided to Retailers by either AEMO, ESV or DELWP either directly or via the VGECP teleconference.
Distributors	Distributors have the primary responsibility for ensuring the safety of the gas distribution network and responding to any gas related concerns. While safety case legislation mandates that public safety risks are, and remain, managed, Distributors also must operate their network in accordance with approved pipeline specifications. In an emergency, Distributors work closely with AEMO to manage system pressure issues. They also work with FRV/CFA & ESV to manage any overt public safety risk.
Transmission / System	Transmission operators have the responsibility of ensuring the integrity of the gas transmission network. Transmission pipelines operate under immense pressure exponentially increasing the public safety risk. As such they need to respond quickly to any situation in accordance with their own safety case regime. The System Operator (AEMO) has the prime directive of ensuring that the transmission system operates safely and securely. AEMO has significant legislative powers, but in most instances will seek a market resolution through collaboration.
Production/ Storage	Producers / Storage operate under Dangerous Goods legislation, which implements a similar safety/risk management system by requiring emergency plans. These emergency plans are implemented during any event involving safety. Producers also work with System Operators to ensure that the system has the necessary supply to meet the consumer demand, increasing or decreasing as required.