

# General Environmental Duty – Managing Environmental Risks

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## 1 Environment Protection Amendment Act 2018

In Victoria, the Environment Protection Amendment Act 2018 (which will take effect from 1 July 2021) will require organisations to take reasonable steps to eliminate or reduce risks of harm to human health and the environment from their operations. This change is a preventative risk management approach, that puts the onus on organisations to demonstrate that all their environmental risks have been identified, are being managed effectively and are continuously being reduced so far as reasonably practicable (SFARP). Under this new 'General Environmental Duty' (GED), the environmental regulator, the Environmental Protection Agency (EPA), can act against organisations deemed to have inadequate environmental risk management systems, without any environmental harm being done.

## 2 Risk Management and Monitoring Plan

Organisations will be required to develop and document a Risk Management and Monitoring Plan (RMMP). This document must outline the identified environmental risks, the risk management strategies, the environmental performance objectives of the site and the monitoring processes to achieve those objectives. Organisations that already comply with *ISO 14001 Environmental Management Systems*, will have a basic risk assessment approach that may be used as part of the RMMP. However, for organisations with environmental aspects posing a high risk to the environment, a more thorough risk management approach, and demonstration of the adequacy of controls, is required.

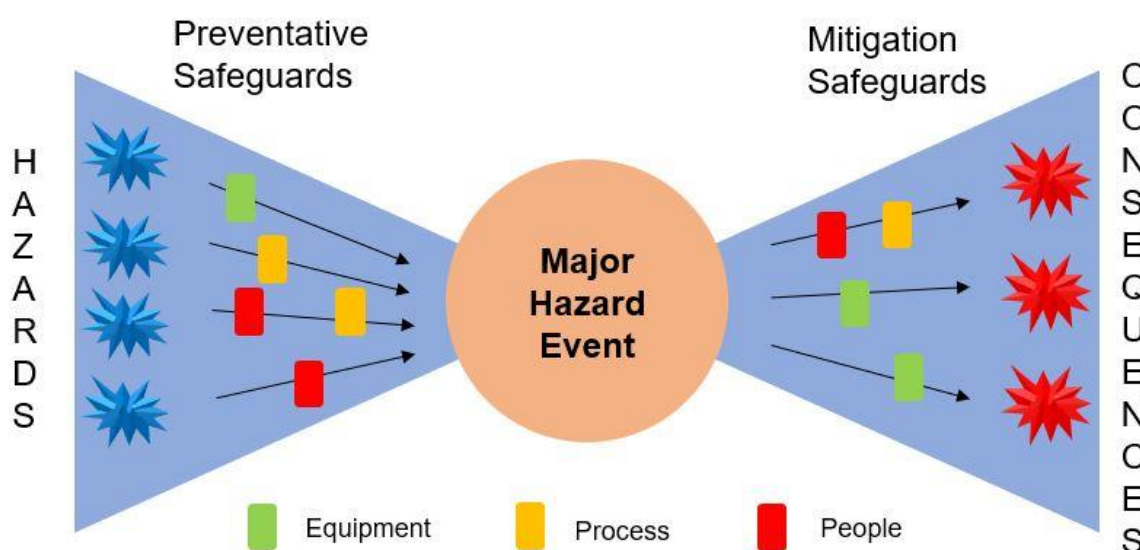
## 2.1 Development of Risk Management and Monitoring Plan

In process risk management, structured Hazard Identification (HAZID) studies and the Layers of Protection approach are mature techniques that are commonly used. These enable a thorough understanding of hazards and the linkages to controls to be demonstrated. Through the risk assessment process, the adequacy of the controls in place to reduce the risk can also be demonstrated, and that the risks have been reduced SFARP. R4Risk recommends that these techniques be used in the development of the RMMP for environmental hazards.

Structured HAZIDs are the first step in identifying the potential environmental incidents that could occur. These studies are undertaken with a multi-disciplinary team in a workshop and use guidewords to identify hazards that are present.

The identified hazards are subsequently analysed using the Layers of Protection approach, linking relevant controls. Consideration is given to the overall risk, to decide how much 'protection' is required to adequately reduce the risk of an incident, and to demonstrate that the risk controls in place are effective and will adequately prevent the unwanted event from occurring. In assessing what risk controls may be appropriate, consideration is given to the hierarchy of controls.

Bowtie diagrams can be developed from the Layers of Protection approach as a visual representation. These are particularly useful, as they can be readily understood by personnel from all parts of an organisation. The Bowtie diagram clearly shows the links between potential causes and the respective consequences, along with the preventative and mitigative controls for each causal pathway. Within this process, controls can be readily documented, together with identification of potential additional controls (or improvements to existing controls) to demonstrate ongoing risk reduction and enable the reduction of risk SFARP to be demonstrated.



The second part of the RMMP requires environmental performance objectives be defined, based on the risk level of the hazards identified. For these objectives to be met, the organisation must ensure that the identified risk controls act effectively. This can be achieved by specifying performance indicators for controls and developing associated performance standards, with these being tracked as part of a regular audit program.

To ensure that the risk is continually being monitored and reduced SFARP, a continual review program should be established and documented as part of the RMMP. The risks and the performance of the controls should be reviewed periodically to ensure that any new risks are identified and that the existing risks continue to be appropriately managed.

### 3 Preparing the Risk Management and Monitoring Plan

The EPA has expressed that the concepts being introduced in the Act may be new to some operators and that the preparation of the RMMP may seem daunting. Hence, the EPA is encouraging operators to prepare their RMMP in conjunction with “suitably experienced persons”. At this early stage, specific experience in the application of the new Act is yet to be developed. However, legislation for operators to demonstrate that workplace health and safety risks are identified, managed effectively and are reduced SFARP has been in place for many years and is specifically in place for operators of Major Hazard Facilities. The operators of these facilities are required to demonstrate this through the preparation of a ‘Safety Case’. The Safety Case is a detailed document that describes the operator’s ability to run these facilities safely. R4Risk has extensive experience in assisting clients at every stage of the Safety Case preparation process. R4Risk has also recently begun applying aspects of these processes to the management of clients’ environmental risks.

For more information or to discuss these approaches further, please contact the R4Risk team on 03 9268 9700 or email [solutions@r4risk.com.au](mailto:solutions@r4risk.com.au).