

General Environmental Duty – Managing Environmental Risks

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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, being managed effectively and are continuously being reduced so far as reasonably practicable (SFARP). Under this new 'General Environmental Duty' (GED) the EPA can take action against organisations deemed to have inadequate environmental risk management systems, without any environmental harm being done.

Organisations will be required to develop and document a Risk Management and Monitoring Plan (RMMP). This document outlines 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 adequacy of controls is required.

In process risk management, structured Hazard Identification studies (HAZID) and Layers of Protection approach are mature techniques used to demonstrate a thorough understanding of hazards, controls and the risk assessment process undertaken to validate the adequacy of the controls in place to reduce the risk. R4Risk recommends that these techniques are used to develop the RMMP for environmental hazards.

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

The findings of the HAZID are used in the Layers of Protection approach to determine how much 'protection' is required to adequately reduce the risk of an incident and demonstrate that the risk controls in place, are effective and will adequately prevent an unwanted incident from occurring. In determining 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 that can be easily understood by personnel. The Bowtie diagram shows the links between potential causes to the respective consequences along with the preventative and mitigative controls for each causal pathway. Within this process, identification of controls can be readily documented, together with potential additional controls to demonstrate continual risk reduction.

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 needs to ensure the

controls identified act effectively. This can be achieved by developing performance standards for the controls and measuring these as part of a regular audit program.

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

The EPA understands that the concepts being introduced in the Act may be new to some operators and the preparation of the RMMP can seem daunting. Hence, the EPA is encouraging operators to prepare their RMMP in conjunction with "suitably experienced persons". At this early stage, 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 continuously being reduced SFARP has been in place for many years and more recently for operators of Major Hazard Facilities. The operators of these facilities are required to demonstrate this through the submission of a safety case. The safety case is a detailed document that describes the operator's ability to run these facilities safely. R4Risk have extensive experience in assisting our clients at every stage of the safety case preparation process and more recently at applying aspects within this process to environmental risk management.

For more information please contact R4Risk on 03 9268 9700, or visit our website r4risk.com.au for more information regarding our services and expert team.