

CFA Submission to the Dangerous Goods Act and Regulations Review - 2021





Contents

1.	Context of CFA's Response to Review	3
1.1	Introduction	3
1.2	About CFA	3
1.3	CFA's Regulatory Obligations for Dangerous Goods	3
1.4	CFA's Methodology in Providing Written Advice	4
2.	CFA's Experience and Recommendations	5
2.1	Emergency Planning at Explosives Facilities	5
2.2	Closing the Loop on Written Advice	5
2.3	Building Compliance and Dangerous Goods Storage and Handling	6
2.4	Bushfire Emergency Planning	7
2.5	Notification Triggers	8
2.6	Location-Based Suppression and Prevention	9
2.7	Transport of Prescribed Industrial Waste	9
2.8	WorkSafe Guidance	10
2.9	Risk Management and Dangerous Goods Storage and Handling	11
3.	Appendix: List of Review Questions	13
4.	References	16

1. Context of CFA's Response to Review

1.1 Introduction

CFA welcomes the opportunity to provide this submission into the independent review of the *Dangerous Goods Act 1985 (Vic)* (**DG Act**) and the associated regulations. CFA provides this response as an ongoing critical stakeholder in emergency response and prevention activities related to dangerous goods within Victoria, to support necessary changes in the dangerous goods legislation towards an increased focus on prevention, risk management and firefighter and community safety.

1.2 About CFA

The Country Fire Authority (**CFA**) is a community and volunteer-based emergency service agency with fire suppression and prevention responsibilities for the country area of Victoria (**CAoV**) under the *CFA Act 1958 (Vic)* (**CFA Act**). CFA is directly responsible for 54,000 of the state's firefighters (over 80%), and for emergency response for over two-thirds of Victoria by area.

CFA specialises in the prevention and suppression of fires in the CAoV, but also supports the community through a wide range of emergency events. In addition to responding to structure, grass and bushfires, CFA also responds to road accidents, medical emergencies and hazardous materials incidents, supports the Victoria State Emergency Service in preparing and responding to flood and severe weather events and provides incident management support to all major incidents throughout the year¹.

CFA has additional obligations for emergency prevention and preparedness within the CAoV under various Victorian legislation, including those with respect to built environment, land use planning, occupational health and safety and dangerous goods.

As of 1 July 2020, CFA's response area encompasses approximately a third of the dangerous goods facilities over notifiable quantities, and thirteen Major Hazard Facilities (as defined in the Occupational Health and Safety Regulations 2017 (Vic); **OHS Regulations**), within the CAoV.

1.3 CFA's Regulatory Obligations for Dangerous Goods

Victoria's emergency services agencies have responsibilities within the dangerous goods legislation. These responsibilities are specified within the Dangerous Goods (Storage and Handling) Regulations 2012 (Vic) (**DGSHR12**) and the Dangerous Goods (Explosives) Regulations 2011 (Vic) (**DGER11**).

Under DGER11, where the storage and handling of explosives meets specific conditions, an emergency management plan is to be developed in conjunction with the relevant fire authority for (a) manufacturing of explosives pursuant to regulation 38(2), and (b) the handling of explosives in port areas pursuant to regulation 171.

DGER11 also places requirements on explosives licensees to notify the relevant fire authority in relation to the status of licences as they relate to explosives manufacturing (regulation 41) and storage of explosives above prescribed quantities (regulation 96). These notifications are for the action of the relevant fire authority for pre-planning purposes.

Under DGSHR12, where dangerous goods exceed specified quantities as per Schedule 2, the relevant emergency services authority is responsible for providing written advice on fire protection systems and emergency planning, or agreeing to the placement of placards,

¹ *CFA Strategy and Outcomes Framework 2020-2030*, Country Fire Authority, 2020.

following a request from the occupier of a dangerous goods facility, pursuant to regulations 49, 54 and 55.

DGSHR12 and DGER11 specify that the obligations of emergency services authorities (under DGSHR12) or fire authorities (under DGER11) are with either CFA or Fire Rescue Victoria (**FRV**) depending on the location of the dangerous goods facility. CFA has fulfilled these obligations within the CAoV since the commencement of the Dangerous Goods (Storage and Handling) Regulations 1989 (**DGSHR89**).

Since the inception of DGSHR89, CFA has developed relationships with, and provided written advice to over 2,500 dangerous goods facilities of all sizes and complexities within the CAoV - from service stations to chemical manufacturers to Major Hazard Facilities. The observations and recommendations provided in this submission reflect the extensive knowledge and experience of CFA in this space.

1.4 CFA's Methodology in Providing Written Advice

The current regulatory obligations have provided CFA with the opportunity to address gaps, and work with facility occupiers to:

- ensure that the safety and needs of emergency responders are considered in emergency planning by facility occupiers;
- provide critical risk information and recommendations for control measures to facility occupiers regarding fire ;
- provide critical risk information to CFA emergency responders regarding the hazards, and adequacy of fire protection systems and emergency management planning, to support brigade pre-planning; and
- provide critical risk information to the Victorian WorkCover Authority (**WorkSafe**), as the authority under the relevant legislation and regulations, in relation to fire protection and emergency planning as consequence mitigation measures to support assessments of the effective control of risks.

Where DGSHR12 specifies that requests for written advice pertain to placarding, fire protection systems and emergency planning, the approach taken by CFA has been broad, comprehensive and risk-based. This has allowed CFA to adopt a risk management framework in the provision of written advice that recognises the fire protection system and emergency planning as integrated elements of the risk management/safety management system for a facility, and as such should not be considered in isolation from other control measures (or lack thereof).

CFA's assessment and subsequent written advice has been developed through a process that included site inspection(s), discussions with site personnel and review of documents related to the dangerous goods and their storage arrangements, performance of the fire protection system, and emergency planning. CFA's advice has been based on ensuring the adequacy of fire protection systems and emergency planning arrangements, specifically that they:

- meet defined minimum requirements in applicable codes of practice and/or Australian Standards;
- are appropriate to the risk, infrastructure and operations at the facility; and
- provide for the safety of site personnel, the community, and CFA responders.

CFA's written advice is provided within a 'Fire Protection Report', submitted by email to the occupier (or their delegate), any named WorkSafe inspector or analyst with recent involvement at the facility, and to WorkSafe's Dangerous Goods Unit.

2. CFA's Experience and Recommendations

2.1 Emergency Planning at Explosives Facilities

DGER11 requires an emergency management plan (**EMP**) to be developed by an occupier in conjunction with the relevant fire authority for both the manufacturing of explosives and the handling of explosives in port areas, where specific conditions are met.

These are very high-risk activities that warrant the involvement of the relevant fire authority in the development of emergency management plans. However, the storage of explosives in magazines also poses special hazards for firefighters when responding to incidents that require the involvement of the fire services in relation to signage and placarding, the design of fire protection systems and emergency planning. The risk to firefighters and the community is heightened further where these facilities are located in Bushfire Prone Areas (as designated under section 192A of the *Building Act 1993* (Vic)), as they predominantly are.

This provides a unique bushfire risk for explosive magazines in that the majority tend to be in large areas of land, which requires the vegetation to be managed during the annual bushfire season. The relevant fire authority, therefore, needs to have an expert understanding of bushfire behaviour and how to reduce this risk insofar as is reasonably practicable during the bushfire season.

Recommendation: That DGER11 be amended to explicitly require licence holders for explosives magazines to request, and have regard to, the written advice of the relevant fire authority in relation to placarding, fire protection, and emergency planning.

Recommendation: That DGER11 be amended to explicitly require licence holders for explosives magazines located within Bushfire Prone Areas to request, and have regard to, the written advice of the relevant fire authority in relation to bushfire emergency planning.

CFA's experience is that the wording 'in conjunction with' is confusing and unclear for both licence holders and CFA, as it is currently not defined. Over the last ten years, CFA has approached the requests for EMP development under DGER11 by applying the same risk/safety management assessment process described in section 1.4 above; as the fire safety and emergency response principles are identical to those for other dangerous goods.

Recommendation: That the wording within DGER11 and DGSHR12 pertaining to the involvement of fire authorities or emergency services authorities (as the case may be) in developing emergency plans be made consistent. For example, 'in conjunction with' from DGER11 should be amended to 'seek the written advice', and that licence holders/operators (as appropriate) are to 'have regard to that written advice', in line with the wording of regulations 54 and 55 of DGSHR12. Where this advice is not implemented then the licence holder/operator needs to justify their approach.

2.2 Closing the Loop on Written Advice

(Question 47: Should occupiers be required to implement the advice given by emergency services authorities, rather than simply "have regard to" it?)

DGSHR12 regulations 54 and 55 requires dangerous goods facility occupiers to 'have regard to' the written advice of the emergency services authority. CFA considers this an appropriate mechanism that provides occupiers with the option of implementing the advice as written or negotiating with CFA and WorkSafe on control measures that provide an equivalent level of fire safety.

In 2015, CFA implemented a process to 'check in' with occupiers 30 days after they received written advice from CFA. This process is supplementary to the regulatory requirements and was developed for the purposes of supporting and determining progress on implementation. This process demonstrated that occupiers overwhelmingly implemented the written advice, strengthened relationships between facilities and CFA and it also triggered the development of a standard notification process with WorkSafe to follow-up on non-critical safety issues identified by CFA.

CFA supports maintaining the status quo in relation to the obligation for occupiers to 'have regard to' the written advice of the emergency services authority. This process, as opposed to mandatory implementation, ensures that WorkSafe as the regulatory authority, maintains responsibility for arbitrating and enforcing the advice where necessary. It also supports a collaborative and holistic risk management approach, as WorkSafe can legally obtain additional risk information from facility occupiers and other duty holders and where it is challenged, assess the emergency services authority's advice within the context of controlling risks so far as is reasonably practicable.

Recommendation: *That measures be implemented to ensure that any critical risk information pertaining to the status of WorkSafe provisional improvement notices and actions undertaken by WorkSafe at dangerous goods facilities in response to the emergency services authority's written advice (or identified deficiencies in fire protection systems) are promptly communicated to the relevant emergency services authority.*

2.3 Building Compliance and Dangerous Goods Storage and Handling

(Question 46: Should ESM compliance be a condition of operating a dangerous goods site or facility?)

Essential Safety Measures (**ESM**) compliance provides a useful indicator of the operability of active and passive fire protection systems within a building and it is critical that these measures are maintained to the required standard and/or the manufacturer's requirements. Compliance with ESM maintenance and performance standards is an existing requirement under the National Construction Code and is also implicit in the obligation for dangerous goods facilities occupiers to effectively control risks.

Presumably, consideration of ESM compliance is also a factor in any due diligence assessment of effective control of risks by WorkSafe as the regulatory authority, where the active and passive fire protection is commensurate with the risk.

An issue of considerably greater significance to occupant and firefighter safety is the inadequacy of fire protection systems. Historically, CFA has found many fire protection systems, as designed, were not fit-for-purpose for the hazards and risks of dangerous goods storage and handling within buildings and sites. CFA supports requirements for occupiers to demonstrate understanding of risk, and implement controls to manage it, as a condition of operating a dangerous goods site or facility.

Where the active and passive fire protection is commensurate with the risk, it is critical that these ESM are maintained to the required standard and/or manufacturers specifications. This will ensure that the systems installed operate as designed.

In many cases, the inadequacy of fire protection systems is due to a facility not having been designed for the storage or handling of dangerous goods, or where the system was once suitable to the size of the facility, but over time the facility has outgrown the system due to expanded storage of dangerous goods, additional plant and/or operational practices.

Regulation 54 of DGSHR12 attempts to address this issue by requiring occupiers to request the written advice of the emergency services authority where they intend to make modifications to

the facility, dangerous goods storages and plant or processes that require a review of risk control measures². This requirement provides an opportunity for fire risk controls to be considered throughout the building lifecycle, including at the design stage and when establishing new occupancies.

Unfortunately, CFA's experience is that in more than half of cases, designers of new dangerous goods facilities don't apply for CFA written advice until very late in the development process (such as at the completion of construction, or after commissioning), if at all. While late applications do not prevent CFA from providing advice, the process often results in confusion, delays and additional costs for designers/owners, installation of inadequate fire protection systems, and undue pressure placed on CFA for expediated responses.

For existing facilities, regulation 29 of DGSHR12 goes some way to addressing this issue in requiring occupiers of new³ premises (and plant, processes or systems of work) to ensure that those premises have been designed to eliminate or reduce risks so far as is reasonably practicable. CFA's experience is that risks associated with the suitability of facilities – including building design, site layout, and proximity to community or other hazardous occupancies – are rarely identified or addressed, placing emergency responders at increased risk.

Recommendation: *That the maintenance and demonstrated effectiveness of ESMs is included as a required risk control measure within all relevant guidance documents and dangerous goods legislation, where applicable.*

Recommendation: *That measures be implemented to support compliance with regulation 29 of DGSHR12, requiring occupiers to demonstrate understanding of risk for new tenancies and occupancies, and the implementation of controls to eliminate or reduce it so far as is reasonably practicable.*

Recommendation: *That measures be implemented to support compliance with regulation 54 of DGSHR12 in requesting the written advice of the emergency services authority prior to the finalisation of facility design, and at the establishment of a new tenancy or occupancy.*

Recommendation: *That The code of practice: The storage and handling of dangerous goods clarifies the triggers for requesting the written advice of the emergency services authority under regulation 54, including (a) prior to finalisation of new facility design, and (b) establishing new occupancies regardless of the age of the facility.*

2.4 Bushfire Emergency Planning

Regulation 55 of DGSHR12 requires occupiers of premises storing and handling quantities of dangerous goods that exceed 'manifest quantities' (per Schedule 2 of DGSHR12), to request the written advice of the emergency services authority in relation to the development and review of the emergency plan for the premises.

Bushfire is a hazard common to all dangerous goods facilities located within designated Bushfire Prone Areas. *AS 3745-2010: Planning for Emergencies in Facilities*, as well as holistic approaches to risk management, requires occupiers to consider bushfire in their emergency planning where it may affect people in a facility⁴. In fulfilling the obligations under regulation 55 of DGSHR12, CFA has considered and advised on bushfire emergency planning in the context of dangerous goods storage and handling, specific to each facility.

Bushfires are very high-risk, devastating, long-duration events for firefighters, communities and

² Regulation 54 also requires occupiers to request written advice where they intend to establish a fire protection system for the premises or alter the installed fire protection system.

³ 'New' includes newly constructed, commissioned or established or not, as per Regulation 29(3).

⁴ Clause 3.2(a) of AS 3745-2010, Amd 2.

the state. Climate change has increased the frequency, severity and timing of dangerous bushfire weather conditions, particularly in southern and eastern Australia⁵, and when they do occur, bushfires are increasing in size and frequency within Victoria⁶.

Tailored, effective emergency planning and preparedness for bushfire is essential in every industry, and none more so than the dangerous goods industry, where the consequences of bushfire both impacting a facility, or propagating from a fire emanating from a facility, are greatly heightened. There is a critical need for emergency plans to be considered with a focus that includes both dangerous goods and bushfire.

CFA has responsibility for the prevention of and response to bushfire within the CAoV, and is an emergency services authority with the expertise to effectively advise and support the dangerous goods industry in relation to bushfires.

Recommendation: *That DGSHR12 be amended to explicitly require occupiers of dangerous goods facilities (over manifest quantity) to request, and have regard to, the written advice of the relevant bushfire emergency service authority in relation to bushfire emergency planning where the facility is located in a Bushfire Prone Area.*

2.5 Notification Triggers

(Question 13: Are the triggers for notification appropriate?)

CFA recommends aligning notifications to on-site modifications that require a review of risk control measures under regulation 27(3) of DGSHR12. This approach would provide consistency with WorkSafe's objective in applying a risk-based approach to notification, while aligning with existing regulations of DGSHR12 whereby the outcomes of a risk-based assessment determine occupier requirements (e.g., regulation 54, that requires occupiers to seek the written advice of the emergency services authority).

Risk assessment information provided by the occupier potentially provides WorkSafe with greater insight into how risk management of dangerous goods is understood and applied at the facility, and therefore provides a substantial starting point for further investigations by WorkSafe inspectors where the risk assessment output reveals absent or insufficient risk controls.

Recommendation: *Notification triggers are aligned to on-site modifications that require a review of risk control measures under regulation 27(3) of DGSHR12.*

(Question 14: What types of information should be notified?)

CFA supports the provision of a manifest compliant with the requirements of Schedule 3 of DGSHR12 in addition to the information currently required to be notified. A manifest is already required to be generated for dangerous goods facilities over notifiable quantities and encompasses much of the information already required to be provided in notifications, with the benefit of additional detail, uniformity of format and structure.

In addition to the manifest, CFA supports the inclusion of information in the notification pertaining to:

- incidents and near-misses at the facility since the previous notification; and
- a list of identified risks (associated with the dangerous goods) and their control measures.

The provision of risk assessment information supports the risk profile in a more substantive way

⁵ CFA Strategy and Outcomes Framework 2020-2030, Country Fire Authority, 2020.

⁶ <https://www.anu.edu.au/news/all-news/study-shows-wildfires-increasing-in-size-and-frequency>

than just outlining the hazards. The requirement for occupiers to manage risk already exists within DGSHR12; the provision of a summary at notification supports compliance with this requirement as well as a trigger for risk to be (further) identified, assessed and managed by occupiers at a point of potential increase in risk.

CFA proposes that this information takes the form of a brief list whereby occupiers identify:

- hazards and risks associated with the storage, and
- the appropriate controls,

in the context of the specific storage arrangements, the site layout/arrangement, and the operations/activities and other hazards on-site. This would be limited to the actions/measures for controlling risk as the output of a risk assessment process, but absent any arbitrary, non-practical output such as the generation of a risk rating from a matrix.

Recommendation: Information requirements at notification under regulation 66 should include the manifest, and a list of identified risks and their control measures pertaining to the storage and handling of dangerous goods.

2.6 Location-Based Suppression and Prevention

The incident response jurisdictions for CFA are determined by the CFA Act 1958 (Vic).

It is vital that Victoria's fire services, including CFA remain a stakeholder in relation to dangerous goods facilities, as the responsibility for fire suppression of dangerous goods incidents within the State lies with the relevant fire service.

CFA's responsibility for incident response in the CAoV comes the elevated risk to its firefighters inherent to performing that activity at dangerous goods facilities. Being aware of and understanding the risk at a particular facility is essential to the safe and effective management of incidents; and ensuring that the associated dangerous goods regulations retain provisions that enable CFA to access and be promptly notified of hazard and risk information is critical.

Recommendation: That the DGSHR12 and DGER11 retain provision for the involvement of the responding emergency service authority in accessing and being notified of relevant risk information pertaining to dangerous goods storage and handling, and transport.

2.7 Transport of Prescribed Industrial Waste

(Question 42: Should DG Act and Transport Regulations apply to the transport of prescribed industrial waste?)

CFA supports additional requirements from the Dangerous Goods (Transport by Road and Rail) Regulations 2018 (Vic) (**DGTR18**) being applied to the transport of prescribed industrial waste that is also dangerous goods, where these requirements directly support the safety of emergency responders.

Regulation 15 of the Environment Protection (Industrial Waste Resource) Regulations 2009 (Vic) requires the provision of class labels and emergency information panels on vehicles transporting prescribed industrial waste that is also dangerous goods. However, the priority and focus of these Regulations and the Act from which they are made is environment protection rather than safety.

Safety must be the priority in the transport of dangerous goods, regardless of classifications under other regulatory schemes. DGTR18 specifically addresses safety, including in a stated objective to reduce so far as is reasonably practicable, the risk of personal injury, death,

property damage and environmental harm in the transport of dangerous goods⁷.

The risk to community and emergency responders is not lessened by the dual classification, and the protections afforded to the community and emergency responders through DGTR18 must also be provided where dangerous goods are also classified as waste. DGTR18 places obligations on multiple parties in the transport chain of responsibility that provide for the safety of the community and emergency responders, including but not limited to:

- Part 6: Safety standards (in relation to vehicle compliance with the ADG Code);
- Part 9: Segregation (in relation to risk management);
- Part 10: Bulk transfer of dangerous goods (in relation to leaks, spills or accidental escapes during bulk transfer);
- Part 11: Documentation (in relation to emergency plans);
- Part 12: Safety equipment (in relation to the provision of fire protection equipment);
- Part 13: Procedures during transport (in relation to ignition source control); and
- Part 14: Emergencies (in relation to notifications, and emergency plans).

Recommendation: *That the DG Act and DGTR18 apply to the transport of prescribed industrial waste, including but not limited to parts relevant to the safety of emergency responders.*

2.8 WorkSafe Guidance

(Question 8: Do you have any suggestions about how the codes and guidance material issued by WorkSafe could be improved?)

CFA's experience is that the codes and guidance material issued by WorkSafe are essential in supporting understanding of the DG Act and associated regulations in the community. *The Code of Practice: The storage and handling of dangerous goods* specifically has been an immensely useful document to provide to dangerous goods facility occupiers as a comprehensive resource on complying with DGSHR12, and as a training resource for CFA personnel.

CFA offers the following suggestions for improvements to codes and guidance material in the future:

- That any codes and guidance are developed with the involvement of other authorities, including the Environment Protection Authority and the emergency services authorities. This will ensure that any examples or diagrams are compliant with parallel legislation and consistent with existing guidance and practices.
- That more examples are provided within codes and guidance materials to demonstrate compliance, and that these include complex situations and storage arrangements as well as straightforward arrangements. Additional diagrams and photos would also be beneficial.
- That as dangerous goods are often incidental to business operations rather than the focus, that one to two A4 page (or website equivalent) 'extracts' of key guidance is provided to this audience in relation to, for example, the storage and handling of liquefied petroleum gas (**LPG**) cylinders for forklifts; the storage and handling of small quantities of fuel; managing dangerous goods in laboratories; and retail sale of products

⁷ Dangerous Goods (Transport by Road and Rail) Regulations 2018, Regulation 1(b).

that are packaged dangerous goods (e.g., hydrochloric acid solutions, granular pool chlorine, acetone, barbecue LPG cylinders, etc.).

- That co-located hazards, such as facility solar installations with and without battery storage or hazardous waste, are identified within codes and guidance materials in the context of risk and emergency management for dangerous goods storage and handling. For example, updating the requirements for emergency planning in relation these systems.

While the importance of WorkSafe's codes and guidance material cannot be overstated, CFA's experience is that facility occupiers have greatly benefited from the opportunity to discuss their specific dangerous goods storage and handling arrangements, fire protection systems and emergency planning with interested, knowledgeable officers. As the regulatory authority, WorkSafe is in a unique position to expand this critical activity by ensuring that all inspectors have a functional level of knowledge in relation to dangerous goods, for improved compliance and safety outcomes.

2.9 Risk Management and Dangerous Goods Storage and Handling

(Question 4: How could the DG Act and associated regulations be enhanced to be more risk-based and prevention focused?)

(Question 5: Should dangerous goods legislation include a broad, general principle-based duty to minimise risk of harm to persons and property?)

The DG Act and associated regulations could be enhanced to be more risk-based and prevention focused through the inclusion of a broad, general principle-based duty to minimise the risk of harm to persons; and in adopting measures that support integrated risk and safety management across organisations.

The introduction of a general principle-based duty would align dangerous goods legislation with other hazard-based legislation in Victoria, including the *Occupational Health and Safety Act 2004* (Vic) and the OHS Regulations (which already encompass hazardous substances), and the *Environment Protection Act 2017* (Vic). Like these Acts and regulations, a principle-based duty would appropriately centre around the 'protection of people', including emergency responders, within risk management approaches.

The current duty for occupiers to control risks⁸ under DGSHR12, frames risk management broadly, where it can be interpreted that compliance with prescriptive requirements (such as regulations, codes of practice or Australian Standards) equates to managing risks so far as is reasonably practicable. In CFA's experience, compliance has often been incorrectly assumed by occupiers to mean that no further understanding or control of risks was necessary.

A general duty that requires 'minimising the risk of harm to persons' achieves three primary objectives:

- it sets a higher standard for managing risk that goes beyond prescriptive compliance, to actively consider what, how and why all control measures provide protection to people in the management of dangerous goods;
- it embeds a key tenet of the risk management approach prescribed in *AS/ISO 31000:2018, Risk Management – Guidelines*, that defines risk as 'the effect of uncertainty on objectives'⁹, for which 'minimising the risk of harm to persons' becomes

⁸ Dangerous Goods (Storage and Handling) Regulations 2012, Part 4: Duties of occupier, Division 3: Risk control – general duty, Regulation 27.

⁹ AS/ISO 31000-2018: Risk Management – Guidelines, Sect. 3.1: Risk (definition).

the objective; and

- it provides a clear benchmark to which duty holders, authorities and courts can assess the management of risks so far as is reasonably practicable in relation to dangerous goods.

This review and the existing dangerous goods regulations recognise that risk is inherent to the management of dangerous goods, and that at least a rudimentary understanding of hazards and risk management is required. In evolving the dangerous goods legislation to being risk-based and prevention-focused, a necessary level of understanding and competence in relation to risk management must be determined and embedded in any new instruments and guidance.

CFA supports measures that promote holistic, systematic risk management, such the establishment and implementation of a safety management system (**SMS**) for facilities storing and/or handling dangerous goods over Fire Protection Quantities (per DGSHR12). An SMS facilitates the embedding of risk and opportunity management thinking within all aspects of an organisation through:

- organisational structures that are developed, implemented and continually adjusted as the organisation changes;
- management practice that considers risk in all decision-making;
- recognising and responding to interdependencies between organisational functions; and
- an organisational culture that values the process and outcomes of overall risk and opportunity management.

Requirements to establish and implement SMSs are not new in the regulation of dangerous goods within Victoria. Currently duty holders for very high-risk activities such as the manufacturing of explosives¹⁰ and the operation of Major Hazard Facilities¹¹ are subject to this requirement, acknowledging the complexity and risk of interdependencies between storage quantity and process. This interdependency is no less prevalent, no less likely to result in harm, and no less in need of oversight and systematic management at facilities with 'lower quantities' of dangerous goods; to protect site personnel, emergency responders and the wider community.

Recommendation: *That a requirement be put in place for occupiers of facilities storing and handling over Fire Protection Quantities of dangerous goods, to establish and implement an SMS.*

¹⁰ Dangerous Goods (Explosives) Regulations 2011 – Regulation 37: Safety management system.

¹¹ Occupational Health and Safety Regulations 2017 – Regulation 372: Safety management system.

3. Appendix: List of Review Questions

The following questions were provided within the Consultation Paper for this review; those in italics have been specifically addressed within this document.

The extent to which the DG Act and associated regulations promote the safety of persons and property and the effective management of dangerous goods

Question 1: To what extent does Victoria's dangerous goods legislation promote the safety of persons and property?

Question 2: To what extent does it promote the effective management of dangerous goods?

Question 3: How could it be improved so that it better promotes these objectives?

How the DG Act and associated regulations could be enhanced to be more risk-based and prevention focused?

***Question 4:** How could the DG Act and associated regulations be enhanced to be more risk-based and prevention focused?*

***Question 5:** Should dangerous goods legislation include a broad, general principle-based duty to minimise risks of harm to persons and property?*

Question 6: Broadly speaking, do the Storage and Handling, Explosives, HCDG and Transport Regulations impose the right combination of the different kinds of duties?

Question 7: What role should codes and guidance material play in supporting the DG Act and associated regulations?

Question 8: Do you have any suggestions about how the codes and guidance material issued by WorkSafe could be improved?

Question 9: Should a permissioning framework be introduced for higher-risk sites and/or activities involving dangerous goods?

Question 10: What kinds of incidents involving dangerous goods should duty-holders be required to report to WorkSafe?

The efficacy of the DG Act and associated regulations in deterring non-compliance and illegal activity in relation to the management of dangerous goods

Question 11: How could the dangerous goods legislation be made more effective in deterring non-compliance and illegal activity in relation to the management of dangerous goods?

Question 12: What methods could WorkSafe use to identify unknown dangerous goods sites, and do those methods require additional legal powers?

***Question 13:** Are the triggers for notification appropriate?*

***Question 14:** What types of information should be notified?*

Question 15: What methods could WorkSafe use to monitor the dangerous goods market, and do those methods require additional legal powers?

Question 16: To what extent is the detection of unknown or illegal dangerous goods activity hampered by restrictions on information sharing by government agencies?

Question 17: What kind of information sharing should be permitted?

Question 18: What are the obstacles to the effective management of dangerous goods where the functions and powers of multiple agencies intersect and overlap?

Question 19: How could interagency coordination in relation to dangerous goods be improved?

Question 20: Should powers be delegated between agencies to improve coordination?

Question 21: Under what circumstances should a dangerous goods inspector be permitted to enter a place where dangerous goods might be stored?

Question 22: Should there be a power for inspectors to enter residential premises? What should the threshold for such a power be?

Question 23: Does WorkSafe need broader powers to intervene at non-compliant sites?

Question 24: If so, what powers does it need, and what should be the threshold to the exercise of those powers?

Question 25: Should WorkSafe have the power to redirect body corporate obligations to their officers and controlling entities?

Question 26: What costs should WorkSafe be able to recover, and from whom?

Question 27: Should WorkSafe be empowered to require entities engaging in dangerous goods activities to provide financial assurances, and if so, how should this be done?

Question 28: Should dangerous goods operators only be permitted to dispose of their waste to accredited waste providers?

Question 29: Alternatively, should dangerous goods operators have a duty to undertake due diligence in relation to the disposal of their waste?

Question 30: Should officer liability for dangerous goods offences be based on a due diligence test or duty?

The efficacy of the DG Act and associated regulations in deterring non-compliance and illegal activity in relation to the management of dangerous goods

Question 31: Should a civil penalty regime be introduced into the dangerous goods legislation, so that WorkSafe has the option of bringing a civil penalty proceeding in relation to a dangerous goods contravention, as an alternative to a criminal prosecution?

Question 32: Should an infringements scheme be introduced for dangerous goods offences and if so, which ones?

Question 33: Should maximum penalties be increased for (some or all) dangerous goods offences?

Whether any amendments to the DG Act and associated regulations are required to respond to emerging issues and challenges related to the management of dangerous goods?

Question 34: How has the dangerous goods industry changed from when the DG Act was first introduced?

Question 35: Are there any other emerging issues and challenges that Victoria's dangerous goods legislation should be responding to?

Question 36: What does the future of the dangerous goods industry look like?

Question 37: What are the main challenges in the disposal of chemical waste in Victoria?

Question 38: Are there new technologies being introduced into the dangerous goods industry that will change the way the industry operates? Will this create new risks?

Question 39: How does Victoria's dangerous goods legislation need to adapt and change in order to meet these issues and challenges?

Ways to streamline and modernise the DG Act and regulations

Question 40: Should a new DG Act adopt (as far as possible) the structure, order, language and conceptual framework of the OHS Act?

Question 41: Should dangerous goods legislation be incorporated within the OHS Act?

Question 42: Should DG Act and Transport Regulations apply to the transport of prescribed industrial waste?

Question 43: Should amendments to the ADG Code come into force automatically?

Question 44: Should the detailed regulations and offence provisions in the Transport Regulations be replaced by a single offence of failing to comply with the ADG Code?

Question 45: How can the way in which dangerous chemicals are classified and captured be streamlined?

Question 46: *Should ESM compliance be a condition of operating a dangerous goods site or facility?*

Question 47: *Should occupiers be required to implement the advice given by*

emergency services authorities, rather than simply “have regard to” it?

Question 48: Should Victoria recognise interstate dangerous goods licences?

Question 49: Should ammonium nitrate be regulated by the Explosives Regulations?

Other relevant matters

Question 50: *Are there any other relevant matters that the Review should consider?*

4. References

Australian National University 2020, *Study shows wildfires increasing in size and frequency*, Australian National University, accessed 23 October 2020, <<https://www.anu.edu.au/news/all-news/study-shows-wildfires-increasing-in-size-and-frequency>>

Country Fire Authority 2020, *CFA Strategy and Outcomes Framework 2020-2030*, Country Fire Authority, accessed 22 October 2020, <<https://www.cfa.vic.gov.au/documents/20143/114326/FINAL+CFA+Strategy+%26+Outcomes+Framework.pdf>>

Dangerous Goods Act 1985 (Victoria), Victorian Legislation Online, viewed 20 October 2020, <<https://content.legislation.vic.gov.au/sites/default/files/2020-07/85-10189aa105%20authorised.pdf>>

Dangerous Goods (Explosives) Regulations 2011 (Victoria), Victorian Legislation Online, viewed 18 October 2020, <https://content.legislation.vic.gov.au/sites/default/files/85cfd4c4-d79a-3845-9a7a-1cee66e73132_11-37sra014%20authorised.pdf>

Dangerous Goods (High Consequence Dangerous Goods) Regulations 2016 (Victoria), Victorian Legislation Online, viewed 25 October 2020, <https://content.legislation.vic.gov.au/sites/default/files/40a4842f-4f4d-3fc9-8763-752a694652f6_16-90sra001%20authorised.pdf>

Dangerous Goods (Storage and Handling) Regulations 2012 (Victoria), Victorian Legislation Online, viewed 18 October 2020, <https://content.legislation.vic.gov.au/sites/default/files/9d321c9a-bb94-3200-9d72-6a8a8a17893e_12-132sra006%20authorised.pdf>

Dangerous Goods (Transport by Road and Rail) Regulations 2018 (Victoria), Victorian Legislation Online, viewed 20 October 2020, <https://content.legislation.vic.gov.au/sites/default/files/b18df0b3-11fc-3184-b7d1-49a98392f06f_18-155sra001%20authorised.pdf>

Environment Protection (Industrial Waste Resource) Regulations 2009 (Victoria), Victorian Legislation Online, viewed 20 October 2020, <https://content.legislation.vic.gov.au/sites/default/files/cb69aa3a-8199-3b13-ae4a-a0de726720fa_09-77sra006%20authorised.pdf>

Environment Protection Act 2017 (Victoria), Victorian Legislation Online, viewed 20 October 2020, <https://content.legislation.vic.gov.au/sites/default/files/c14db06c-ee53-3924-8f92-6da83676aed2_17-51aa004%20authorised.pdf>

Environment Protection Amendment Act 2018 (Victoria), Victorian Legislation Online, viewed 20 October, <https://content.legislation.vic.gov.au/sites/default/files/79b87865-9bbe-376c-95fa-fc61b1b0d844_18-039aa%20authorised.pdf>

Occupational Health and Safety Act 2004 (Victoria), Victorian Legislation Online, viewed 21 October 2020, <<https://content.legislation.vic.gov.au/sites/default/files/2020-10/04-107aa034%20authorised.PDF>>

Occupational Health and Safety Regulations 2017 (Victoria), Victorian Legislation Online, viewed 21 October 2020, <https://content.legislation.vic.gov.au/sites/default/files/2020-09/17-22sra007%20authorised_0.pdf>

Palmer, Andrew 2020, *Independent Review of the Dangerous Goods Act 1985 and associated regulations*, Engage Victoria, viewed 2 October 2020, <https://s3.ap-southeast-2.amazonaws.com/hdp.au.prod.app.vic-engage.files/3416/0142/0287/Consultation_Paper_Independent_Review_Dangerous_Goods_Act_1985_and_associated_regulations.pdf>

Standards Australia 2010, AS 3745-2010: Planning for emergencies in facilities, Sydney NSW, in SAI Global, <https://infostore.saiglobal.com/en-au/Standards/AS-3745-2010-122637_SAIG_AS_AS_268393/>

Standards Australia 2018, AS ISO 31000-2018: Risk Management – Guidelines, Sydney NSW, in SAI Global, <[https://infostore.saiglobal.com/en-au/Standards/AS-ISO-31000-2018-1134720 SAIG AS AS 2680492/?source=predictive](https://infostore.saiglobal.com/en-au/Standards/AS-ISO-31000-2018-1134720_SAIG_AS_AS_2680492/?source=predictive)>

WorkSafe Victoria 2013, *Dangerous Goods Act 1985 – Code of Practice for the Storage and Handling of Dangerous Goods 2013*, WorkSafe Victoria, accessed 20 October 2020, <<https://content.api.worksafe.vic.gov.au/sites/default/files/2019-07/ISBN-Code-of-practice-for-the-storage-handling-dangerous-goods-2019-07.pdf>>