

Input document 4: relevant regulatory obligations and best practice

Background

Examples of potentially relevant legislation

	Safety	Environment, Planning, Cultural Heritage	Transport and Pipelines
SA	<i>Work Health and Safety Act 2012</i> Work Health and Safety Regulations 2012 <i>Dangerous Substances Act 1979</i> Dangerous Substances (General) Regulations 2017 <i>Natural Gas Authority Act 1967</i>	<i>Hydrogen and Renewable Energy Bill 2023</i> <i>Environment Protection Act 1993</i> <i>Aboriginal Heritage Act 1988</i> <i>Planning, Development and Infrastructure Act 2016</i> <i>Landscape South Australia Act 2019</i> <i>Native Vegetation Act 1991</i>	<i>Petroleum and Geothermal Energy Act 2000</i> Petroleum and Geothermal Energy Regulations 2013 <i>Gas Act 1997</i> <i>Heavy Vehicle National Law (South Australia) Act 2013</i> <i>Rail Safety National Law (South Australia) Act 2012</i> Dangerous Substances (Dangerous Goods Transport) Regulations 2023
NT	<i>Work Health and Safety (National Uniform Legislation) Act 2011</i> National Work Health and Safety (NUL) Regulations 2011 <i>Dangerous Goods Act 1998</i> Dangerous Goods Regulations 1985	<i>Environment Protection Act 2019</i> <i>Waste Management and Pollution Control Act 1998</i> <i>Planning Act 1999</i> <i>Northern Territory Aboriginal Sacred Sites Act 1989</i> <i>Water Act 2001</i>	<i>Transport of Dangerous Goods by Road & Rail (NUL) Act 2010</i> Transport of Dangerous Goods by Road & Rail (NUL) Reg 2011 <i>Energy Pipelines Act 1981</i> <i>Petroleum Act 1984</i>
WA	<i>Work Health and Safety Act 2020</i> Work Health and Safety (General) Regulations 2022 <i>Dangerous Goods Safety Act 2004</i> Dangerous Goods Safety (Storage and Handling of Non-explosives) Regs 2007 Dangerous Goods Safety (Major Hazard Facilities) Regulations 2007 <i>Gas Standards Act 1972</i>	<i>Environmental Protection Act 1986</i> Environmental Protection Regulations 1987 Environmental Protection (Clearing of Native Vegetation) Regulations 2004 <i>Biodiversity Conservation Act 2016</i> <i>Planning and Development Act 2005</i>	Dangerous Goods Safety (Road and Rail Transport of Non-Explosives) Regulations 2007 Dangerous Goods Safety (General) Regulations 2007 <i>Petroleum Pipelines Act 1969</i> Petroleum Pipelines (Environment) Regulations 2012
TAS	<i>Work Health and Safety Act 2012</i> Work Health and Safety Regulations 2022 <i>Gas Safety Act 2019</i> Gas Safety Regulations 2021	<i>Environmental Management and Pollution Control Act 1994</i> <i>Land Use Planning and Approvals Act 1993</i> <i>Building Act 2016</i> <i>Aboriginal Heritage Act 1975</i>	<i>Gas Industry Act 2019</i> <i>Dangerous Goods (Road and Rail Transport) Act 2010</i> Dangerous Goods (Road and Rail Transport) Regulations 2021
VIC	<i>Occupational Health and Safety Act 2004</i> Occupational Health and Safety regulations 2017 <i>Dangerous Goods Act 1985</i> Dangerous Goods (storage and handling) Regulations 2022 <i>Gas Industry Act 2001</i> <i>Gas Safety Act 1997</i> <i>Electricity Safety Act 1988</i>	<i>Planning and Environment Act 1987</i> <i>Environment Effects Act 1978</i> <i>Environment Protection Act 2017</i> Environment Protection Regulations 2021 <i>Aboriginal Heritage Act 2006</i> <i>Building Act 1993</i> Building Regulations 2018	Dangerous Goods (Transport by Road or Rail) Regulations 2018 <i>Pipelines Act 2005</i> Pipelines Regulations 2017
NSW	<i>Work Health and Safety Act 2011</i> Work Health and Safety Regulation 2017 <i>Gas Supply Act 1996</i> Gas Supply (Safety and Network Management) Regulation 2022 <i>Gas and Electricity (Consumer Safety) Act 2017</i>	<i>Environmental Planning and Assessment Act 1979</i> <i>Protection of the Environment Operations Act 1997</i>	<i>Dangerous Goods (Road and Rail Transport) Act 2008</i> Dangerous Goods (Road and Rail Transport) Regulation 2022 <i>Pipelines Act 1967</i>
QLD	<i>Work Health and Safety Act 2011</i> Work Health and Safety Regulation 2011 <i>Petroleum and Gas (Production and Safety) Act 2004</i> Petroleum and Gas (General Provisions) Regulation 2017 Petroleum and Gas (Safety) Regulation 2018	<i>Environmental Protection Act 1994</i> Environmental Protection Regulation 2019 <i>Planning Act 2016</i> <i>Economic Development Act 2012</i>	<i>Transport Operations (Road Use Management) Act 1995</i> Transport Operations (Road Use Management—Dangerous Goods) Regulation 2018
ACT	<i>Work Health and Safety Act 2011</i> Work Health and Safety Regulation 2011	<i>Planning and Development Act 2008</i> <i>Environment Protection Act 1997</i> <i>Water Resources Act 2007</i> <i>Building Act 2004</i>	<i>Dangerous Goods (Road Transport) Act 2009</i> Dangerous Goods (Road Transport) Regulation 2010

Part 1 Safety

Example legislation

<p>Work Health and Safety Regulations 2012 (SA)</p> <p>Chapt 9 MHF – regulation 530 - This Chapter does not apply in relation to— (a) a temporary port storage facility controlled and managed by a port operator within the meaning of the Harbors and Navigation Act 1993; or (b) a pipeline— (i) that forms part of a distribution system within the meaning of the Gas Act 1997; or (ii) that is a transmission pipeline, or part of a transmission pipeline, to which a pipeline licence under the Petroleum and Geothermal Energy Act 2000 relates; or (iii) to which a pipeline licence under the Petroleum (Submerged Lands) Act 1982 relates</p>	<p>Work Health and Safety Regulations 2012 (SA)</p> <p>Regulation 541 - Determination in relation to facility, on inquiry (1) This regulation applies if an inquiry discloses that the quantity of Schedule 15 chemicals present or likely to be present at a facility or proposed facility exceeds 10% of their threshold quantity, but does not exceed their threshold quantity. Work Health and Safety Regulations 2012—1.7.2017 Chapter 9—Major hazard facilities Part 2—Determinations about major hazard facilities The regulator may determine the facility or proposed facility to be a major hazard facility if the regulator considers that there is a potential for a major incident to occur at the facility or proposed facility having regard to all relevant matters, including— (a) the quantity and combination of Schedule 15 chemicals present or likely to be present at the facility; and (b) the type of activity at the facility that involves the Schedule 15 chemicals; and (c) land use and other activities in the surrounding area.</p>	<p><i>Dangerous Substances Act 1979 (SA)</i></p> <p>Division 2—Licences to keep dangerous substances 13—Prescribed dangerous substance for the purposes of this Division In this Division— prescribed dangerous substance means a dangerous substance for the time being declared by regulation to be a prescribed dangerous substance for the purposes of this Division. 14—Offence to keep dangerous substances without a licence (1) A person must not keep a prescribed dangerous substance in any premises unless the person is the holder of a licence under this Division. 15—Licence to keep dangerous substances (1) A Competent Authority may, subject to this Act, in his or her discretion, on application in the prescribed form and payment of the prescribed fee, grant a licence to any person to keep any prescribed dangerous substance in any premises.</p>
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In addition to completing the regulatory approval table below, please consider the following key questions:

<p><i>Some of the main thresholds for hydrogen production and refuelling facility regulation are based on volume thresholds. For example, a major hazard facility applies to facilities with capacity greater than 50,000kg with notification required at 10% of the threshold.</i></p> <p><i>How do these volume thresholds relate to projects you are aware?</i></p>	
<p><i>Are you aware of any upfront approvals for projects under 50,000kg storage capacity?</i></p>	
<p><i>What are your thoughts of the safety risks of the existing legislative volume thresholds? For example, are these thresholds appropriate for the emerging hydrogen industry with refuelling stations or other storage close to sensitive areas?</i></p>	

Input Table

<div>Relevant regulatory obligations</div> <div><ul style="list-style-type: none">What are the regulatory obligations relevant to hydrogen projects of which you are aware?What was unique or different about applying this obligation to a hydrogen project compared to another project?What are your experiences, challenges or lessons learned applying this obligation to your hydrogen activities?</div>	<div>Best practice</div> <div><ul style="list-style-type: none">What standards have you identified as relevant to complying with this obligation (e.g. assessing and mitigating risks associated with the hydrogen project hazards)?Were there instances where you relied on evidence other than recognised standards to demonstrate risk assessment processes or mitigation measures?Do you have safety cases, processes that you have developed that you can share in this instance?</div>
For example: Approvals for hydrogen production in gas safety legislation, Major hazard facilities approvals/licensing (e.g. WHS model regulations, Chapter 9), approval for facilities storing greater than 50,000kg or equivalent for derivatives (other than Major Hazard Facilities), approval for facilities storing more than 5,000kg but less than 50,000kg (or equivalent for derivatives), other hazardous chemicals approvals or regulation Risk assessments, safety case or other safety documentation supporting facility approvals, Hazardous atmospheres (e.g. WHS model regulations, Part 3.2 Division 8)	
For example: Approval of gas appliances / equipment, Approval of electrical appliances / equipment, Approval of operation of appliances (installation, operation and repair), Licence required to perform work on gas appliances, Electrical safety and energised electrical work (e.g. WHS model regulations, Part 4.7)	
Approval for facilities storing greater than 50,000kg (triggering major hazard facilities approvals):	
Approval for facilities storing more than 5,000kg but less than 50,000kg (triggering WHS notification and potential MHF determination at the 10%):	

<p>Relevant regulatory obligations</p> <ul style="list-style-type: none">• <i>What are the regulatory obligations relevant to hydrogen projects of which you are aware?</i>• <i>What was unique or different about applying this obligation to a hydrogen project compared to another project?</i>• <i>What are your experiences, challenges or lessons learned applying this obligation to your hydrogen activities?</i>	<p>Best practice</p> <ul style="list-style-type: none">• <i>What standards have you identified as relevant to complying with this obligation (e.g. assessing and mitigating risks associated with the hydrogen project hazards)?</i>• <i>Were there instances where you relied on evidence other than recognised standards to demonstrate risk assessment processes or mitigation measures?</i>• <i>Do you have safety cases, processes that you have developed that you can share in this instance?</i>
<p>Approvals for facilities storing less than 5,000kg (for example, less than the 10% of the MHF threshold)</p>	
<p>Other safety regulatory approvals/obligations</p>	

Pipeline Safety

Input Table

<div>Relevant regulatory obligations</div> <div><ul style="list-style-type: none">What are the regulatory obligations relevant to hydrogen projects of which you are aware?What was unique or different about applying this obligation to a hydrogen project compared to another project?What are your experiences, challenges or lessons learned applying this obligation to your hydrogen activities?</div>	<div>Best practice</div> <div><ul style="list-style-type: none">What standards have you identified as relevant to complying with this obligation (e.g. assessing and mitigating risks associated with the hydrogen project hazards)?Were there instances where you relied on evidence other than recognised standards to demonstrate risk assessment processes or mitigation measures?Do you have safety cases, processes that you have developed that you can share in this instance?</div>
For example: Licence to operate or construct a hydrogen pipeline, Risk assessments, safety case or other safety documentation supporting production facility approvals (where connected to a pipeline establishes connection with production facility regulation), General pipeline safety obligations that are not clear for hydrogen. Distribution or transmission licence	

Part 2- Environment, planning, development and building and transport.

Environment, planning and building

Example legislation

<p><i>Planning, development and Infrastructure Act 2016 (SA)</i></p> <p>An Act to provide for matters that are relevant to the use, development and management of land and buildings, including by providing a planning system to regulate development within the State, rules with respect to the design, construction and use of buildings, and other initiatives to facilitate the development of infrastructure, facilities and environments that will benefit the community</p>	<p><i>Environment Protection Act 1993 (SA)</i></p> <p>An Act to provide for the protection of the environment; to establish the Environment Protection Authority</p>	<p><i>Hydrogen and Renewable Energy Bill 2023 (SA)</i></p> <p>An Act to facilitate and regulate the generation of hydrogen and renewable energy in the State and coastal waters of the State, to make related amendments to the Mining Act 1971, the Pastoral Land Management and Conservation Act 1989, the Petroleum and Geothermal Energy Act 2000 and the Planning, Development and Infrastructure Act 2016, and for other purposes</p>
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For example: Carrying out an activity that requires an environmental licence Approvals under the <i>Environment Protection and Biodiversity Conservation Act</i> (EPBC Act), waste management and pollution, water supply, obtaining planning and development approval prior to commencement of works, potential approvals relevant to the National Construction Code (NCC), construction or building certificates.	

Transport of hydrogen

Example legislation

SA Legislation	NT Legislation	WA Legislation
<i>Dangerous Substances Act 1979 (SA)</i> <ul style="list-style-type: none">Dangerous Substances (Dangerous Goods Transport) Regulations 2023 <i>(implements the ADGC)</i>	<i>Transport of Dangerous Goods by Road and Rail (National Uniform Legislation) Act 2010</i> <ul style="list-style-type: none">Transport of Dangerous Goods by Road and Rail (National Uniform Legislation) Regulations 2011 <i>Dangerous Goods Act 1998</i> <ul style="list-style-type: none">Dangerous Goods Regulations 1985	<i>Dangerous Goods Safety Act 2004.</i> <ul style="list-style-type: none">Dangerous Goods Safety (Storage and Handling of Non-Explosives) Regulations 2007Dangerous Goods Safety (Major Hazard Facilities) Regulations 2007Dangerous Goods Safety (Road and Rail Transport of Non-Explosives) Regulations 2007Dangerous Goods Safety (General) Regulations 2007.

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<p>Relevant regulatory obligations</p> <ul style="list-style-type: none"><i>What are the regulatory obligations relevant to hydrogen projects of which you are aware?</i><i>What was unique or different about applying this obligation to a hydrogen project compared to another project?</i><i>What are your experiences, challenges or lessons learned applying this obligation to your hydrogen activities?</i>	<p>Best practice</p> <ul style="list-style-type: none"><i>What standards have you identified as relevant to complying with this obligation (e.g. assessing and mitigating risks associated with the hydrogen project hazards)?</i><i>Were there instances where you relied on evidence other than recognised standards to demonstrate risk assessment processes or mitigation measures?</i><i>Do you have safety cases, processes that you have developed that you can share in this instance?</i>
<p>For example: Driver licensing, transport of dangerous goods by road or rail (compressed gas, refrigerated liquid, ammonia, methanol, fuel cell cartridges containing hydrogen in metal hydride).</p> <p>A vehicle is required to be licensed to transport dangerous goods when the vehicle is used to transport:</p> <ul style="list-style-type: none">dangerous goods in a receptacle with a capacity of more than 500L; ormore than 500kg of dangerous goods in a receptacle.	