

Dear [Redacted]

Proposed Petroleum Regulations 2021

Like many others involved in the oil and gas industry in Victoria, we at [Redacted] acknowledge the importance of the commencement of the *Petroleum Act* reforms on July 1 and the Petroleum Regulations 2021, heralding the restart of the onshore conventional gas industry. We look forward to continuing to play our part in a sustainable and thriving industry to create jobs and ensure Victorians have secure energy supplies into the future.

Thank you for the invitation to respond and provide our views on the proposed Petroleum Regulations 2021 and Regulatory Impact Statement. We have also uploaded this letter and attachment via the Engage Victoria website.

In our response, we have concentrated on reviewing and providing feedback on the proposed regulations. Overall, we believe the Regulations will achieve the objectives of the Petroleum Act and work to support the relevant legislative processes. We have, however, identified that as currently drafted there are aspects which may not support appropriate further development of Victoria's onshore gas resources. In addition, there are a number of provisions or Code elements which would benefit from clarification and further consideration as to wording to ensure the objectives of the legislative regime are met and provide a clear framework for industry. Further, these Regulations and the Code should be consistent and, where possible, incorporate relevant elements from other onshore jurisdictions.

In the attached (uploaded) file: *Draft 2021 Petroleum Regulations – [Redacted], [Redacted]* have tabulated our responses to the proposed Regulations and Code of Practice. We have provided comment on the Observation or Issue and made suggestions for change or clarification. The final column identifies the impact on the stated objectives of the regulations.

Changes

Where we have indicated we support a change, we consider that these matters either raise a concern about our ability to comply with the regulations and /or don't support the objectives of the legislation.

Clarifications

We have identified many clauses or code elements which we consider require clarification. We suggest that these matters may be able to be addressed through further consideration of the drafting or Regulator guidance papers to supplement the regulations.

In addition to the more detailed attachment, we provide the below summary table of our key areas of concern:

Area of concern	Comments
Requirement for relief well plan	<p>The Code of Practice requires a relief well plan. The extent of this requirement is not entirely clear. We would be concerned if this were to be interpreted to mean that Proponents would need to prepare another drill pad and have additional materials and even alternate rigs, this would be a significant cost addition for Proponents. Such additional costs would be a deterrent to gas exploration, development and gas storage in Victoria. For, example for [Redacted], the imposition of such requirements would be a significant impediment to proposed expansion of Iona to meet projected future capacity shortfall.</p> <p>If the requirement was for an alternate drill pad to be established ahead of drilling for a relief well, this would also be a considerable burden on landholders, the community and the environment through requiring additional land, and civil construction works.</p> <p>It should be noted that this is not a requirement in other onshore jurisdictions in Australia.</p>
Aquifer definitions and ground water monitoring	<p>The aquifer definitions within the Code of Practice need to differentiate between beneficial and non-beneficial aquifers such that different and appropriate requirements are implemented. Without this differentiation the ability to use synthetic based fluids, which may be required, for example on extended reach wells would appear to be effectively eliminated. The use of extended reach wells can be very important in lowering impacts on the environment, landholders and community.</p> <p>Further it is suggested that a number of Code elements related to these issues would benefit from further consideration to ensure they reflect the desired outcome and are drafted in such a way as to be practicable to implement. Refer to Code of Practice elements - 4.5.2, 4.9.2 and 4.14.2</p>
	<p>Further guidance on ground water monitoring would be appropriate. The sub clauses within the Regulations -33 (k) (iii), (iv) & (v) in many circumstances will be difficult and costly to comply with, quite possibly to the extent of limiting further onshore gas exploration or development. For instance, if there are no nearby water bores or they don't access deeper beneficial aquifers, additional water bores may not be practicable and are expensive.</p>

Unclear/impracticable integrity requirements	A number of well maintenance/testing activities are specified within the Code of Practice which, as written, are unclear as to their scope, and their required frequency. Depending on interpretation, some of these requirements may add significant additional costs or be impracticable. Refer to Code of Practice elements - 4.2.3, 4.5.2 Table 4, 4.11.2, 4.11.3 and 4.15.2
HSE reporting requirements	The HSE reporting requirements appear to be inconsistent with other key Acts/Regulations applying to operators in Victoria. Specifically, the OH&S and EPA Acts and Regulations. We have made a number of comments in terms of the practicality of the requirements for reporting timelines particularly where root cause analysis is required. Such investigations need to be completed thoroughly and sufficient time needs to be allowed for this work following an incident.

A number of our detailed comments relate to the clarity of the Regulations and Code. If the Regulations or Code elements are unclear, when made, this will have a detrimental impact on operators and regulators alike. Lack of clarity will lead to uncertainty and impact the ability of the industry to efficiently and effectively comply with the regulations and for the Regulator to assess, enforce and administer. This then impacts community confidence through potentially inconsistent application or interpretation and has the potential to increase risk to the environment and public safety and ultimately, discourage onshore petroleum activity.

Our team at **[Redacted]**, are available to further assist and clarify any of the information we have provided. In the meantime, please do not hesitate to contact me by email at **[Redacted]**.

[Redacted] Response to Draft 2021 Petroleum Regulations Date:				[Redacted]				
No.	Document	Section/Clause	Means of compliance (MOC) / Good Industry Practice (GIP)	Requirement	Comment/Observation/Issue	Change / Clarify	Suggested Change (if any)	Impact of currently drafted clause/code on Objectives of the Regulations
1	Regs - Part 1	1 (1) (a) 1 (1) (b)		(a) to provide for the elimination and minimisation, so far as is reasonably practicable, of the environmental, public amenity and safety hazards and risks involved in undertaking petroleum operations over the life of those operations; and (b) to provide for the elimination and minimisation, so far as is reasonably practicable, of impacts from petroleum operations on local communities	Use of "elimination" is impracticable and not supported by the Petroleum Act	Change	Remove "elimination"	Discourage petroleum activities in Victoria
2	Regs-Part 4 Div 2 Petroleum production development plans	13 & 14		13 Matters to be included in petroleum production 14 Storage development plan	Once a gas field has converted to a gas storage field, the requirements of a Petroleum production development plan become a repetition of the requirements of 14 Storage development plan	Change	Specify only a Storage development plan is required for gas storage fields	Discourage petroleum activities in Victoria Lack of clear definition complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
3	Regs - Part 7 Div 1 Operation Plan	22 (1) (a) (i) 22 (1) (a) (ii)		development plan	Use of "comprehensive" is too open to interpretation	Change	Remove "comprehensive" or provide definition of what must be included	Discourage petroleum activities in Victoria Lack of clear definition complicates Regulator and Proponents ability to efficiently and effectively administer or comply with
4	Regs - Part 7 Div 1 Operation Plan	23 (e)		(e) a statement, in a form approved by the Minister, setting out the function and purpose of an operation plan;	The Notice of operations is required to be issued prior to submission of the Operation Plan. What is the "form"? When does the Minister approve? The Operator needs to know this prior to submitting the Operation Plan for approval	Change	Remove requirement or provide the "statement form" and align with Operation plan submission timing	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
5	Regs - Part 7 Div 1 Operation Plan	24 (1) (a) 24 (1) (b)		(1) For the purposes of section 161(1D) of the Act, the following are prescribed factors— (a) whether the Minister is satisfied that the holder of the authority will implement effective rehabilitation measures for the petroleum operation; (b) whether the Minister is satisfied that the holder of the authority will consult effectively with the relevant person or organisation over the life of the petroleum operation;	For these prescribed factors there are no objective criteria for the Minister to be satisfied with	Change	Provide Objective criteria	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
6	Regs - Part 7 Div 1 Operation Plan	26 (e)		For the purposes of section 163(5)(c) of the Act the following is prescribed information— (e) a statement, in a form approved by the Minister, setting out the function and purpose of an operation plan;	Form approved by the minister	Change	Remove "in a form approved by the minister" or provide "form"	
7	Regs - Part 7 Div 1 Operation Plan	28 (2) (e)		(2) An application for consent under subregulation (1) must include a plan setting out— (a) the equipment to be used; and (b) the timeframe for the testing; and (c) how 2 verified well barriers will be maintained in the well at all times or, if this cannot be achieved, the alternative measures that will be in place to maintain well integrity; and (d) the controls that will be in place to manage any potential well integrity hazards; and (e) details regarding the suitably qualified or experienced person who designed the well testing and will be onsite to supervise the testing.	(e) The person who designed the well testing may not be the same person who is onsite to supervise the testing. At the time of submitting the ops plan, the onsite supervisor may not be known.	Change	Remove this requirement	clause (e) is not needed to improve outcomes for the environment or public safety Clause too prescriptive to efficiently administer or comply with
8	Regs - Part 7 Div 2 EMP	33 (b)		An environment management plan must contain an implementation strategy that— (b) Specifies why the controls, specific systems, practices and procedures to eliminate or minimise risks and impacts have been adopted, whether other measures were considered but not adopted and the reasons why; and	Legacy risk assessments do not record reasoning behind measures that were not adopted and reasons why. There are no objective criteria for not adopting certain measures.	Clarify	Provide guidance paper Eg. Does DJPR consider it acceptable for a company to state that there were no measures considered and not adopted?	Clarification required to ensure improvement in outcomes for the environment. The process of risk assessment identifies actions to reduce residual risk to ALARP through focussing on actions to reduce probability and/or consequence. There may be a number of low value actions that have not been implemented, but listing these complicate Regulator and Proponents ability to efficiently and effectively administer or comply with the regulations.
9	Regs - Part 7 Div 2 EMP	33 (k)		An environment management plan must contain an implementation strategy that— (k) in relation to groundwater impacts of the petroleum operation— (i) assesses the risks and impacts to the groundwater environment from the petroleum operation; and (ii) identifies how these risks and impacts to groundwater will be mitigated; and (iii) if a well is to be drilled, identifies the method by which the holder of the authority will establish the baseline water quality before drilling commences; and (iv) identifies the groundwater monitoring methodology, including the frequency of the monitoring and the parameters to be monitored prior to and during the petroleum operation; and (v) identifies a reporting schedule for the holder of the authority to report to the Minister in relation to any monitoring identified in subparagraph (iv).	If there are not existing water bores in the area, this clause requirements (iii), (iv) & (v) will be difficult and costly to comply with	Clarify	What are the expectations? Provide guidance paper	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Impact on objective of improving environmental outcomes Lack of clear definition/clarity/guidance complicates the Regulator's ability to efficiently and effectively administer and the Proponents ability to comply

10	Regs - Part 7 Div 2 EMP	35 (1) g)		(1) For the purposes of regulation 34(d), the environment management plan must— (g) provide for, and set out the mechanism for, consultation, during the life of the petroleum operation, regarding the holder of the authority's environmental performance— (i) with any relevant Commonwealth and Victorian Government agencies; and (ii) other relevant person or organisations.	Repeat of 33(h)	Change	Remove clause	
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11	Regs - Part 7 Div 3 WOMP	36 (2) (j)		(2) The well operation management plan must include the following material, unless the Minister gives the holder of the authority written permission to not include any material specified in that permission— (j) how the holder of the authority is to ensure the design of the well is overseen and supervised by a person suitably qualified or experienced to verify the well design;	Suitably qualified or experienced is not defined.	Clarify	Confirm that the operator is to define suitably qualified or experienced	Discourage petroleum activities in Victoria Lack of clear definition/clarity/guidance complicates the Regulator's ability to efficiently and effectively administer and the Proponents ability to comply
12	Regs - Part 7 Div 3 WOMP	36 (2) (k)		(2) The well operation management plan must include the following material, unless the Minister gives the holder of the authority written permission to not include any material specified in that permission— (k) how the holder of the authority is to ensure the construction of the well is supervised by a person suitably qualified or experienced to verify that the well construction— (i) is completed in accordance with the approved design; and (ii) complies with any relevant requirements and standards;	Suitably qualified or experienced is not defined.	Clarify	Confirm that the operator is to define suitably qualified or experienced or provide further clarity	As above
13	Regs - Part 7 Div 3 WOMP	36 (2) (l)		(2) The well operation management plan must include the following material, unless the Minister gives the holder of the authority written permission to not include any material specified in that permission— (l) how the holder of the authority is to ensure the decommissioning of the well is supervised by a person suitably qualified or experienced to verify that the well decommissioning— (i) is completed in accordance with the approved design; and (ii) complies with any relevant requirements and standards;	Suitably qualified or experienced is not defined.	Clarify	Confirm that the operator is to define suitably qualified or experienced or provide further clarity	As above
14	Regs - Part 8 Division 2	40 (1)		(1) For the purposes of section 179(c) of the Act, the holder of a production licence must, every 6 months, give to the Minister within 30 days of the end of that period, a report of any petroleum production carried out under the licence.		Clarify	Does this change monthly production well reporting to 6 monthly?	Clarification
15	Regs - Part 8 Division 2	40 (2)		(2) The report must include— (a) details of the amount of hydrocarbons, water and other substances produced from, or injected into, each well in the licence area during the 6 month period to which the report relates; and (b) petroleum reserves in the licence area expressed in billion cubic feet as assessed at the end of that 6 month period	Is the definition of reserves consistent with the PRMS guidelines? If not please provide the definition.	Clarify	Clarify the petroleum reserve standard to use	Discourage petroleum activities in Victoria Lack of clear definition/clarity/guidance complicates the Regulator's ability to efficiently and effectively administer and the Proponents ability to comply
16	Regs - Part 8 Division 3	45(2)		(2) The holder of an authority under which a petroleum operation is carried out must notify the Minister of a reportable incident within 2 hours—	Not aligned with OHS requirements which allows for "without reasonable excuse" to allow for such things not safe to do so, eg. dealing with incident.	Change	Use 2011 Petroleum Regulation wording "as soon as practicable"	Not required to improve public safety outcomes or build community confidence. Impractical for Proponent.
17	Regs - Part 8 Division 3	45 (3)		(3) A notification under subregulation (2) must— (a) be given orally; and (b) contain any information that is available at the time of the notification regarding— (i) the material facts and circumstances, including any likely root cause, of the reportable incident that the holder of the authority knows or is able, by reasonable search or enquiry, to find out; and (ii) any action taken by the holder of the authority to avoid or mitigate any impacts to individuals, public safety, public amenity or the environment of the reportable incident; and (iii) any immediate corrective action taken, or proposed to be taken, by the holder of the authority to stop, control or remedy the reportable incident.	Providing a root cause within 2 hours is not practicable and has the potential to be misleading and possibly self-incriminate an individual or company	Change	Remove requirement for "root cause"	Not required to improve public safety outcomes or build community confidence. Impractical for Proponent.
18	Regs - Part 8 Division 3	45 (4)		(4) Within 3 days after the holder of an authority has notified the Minister of a reportable incident under subregulation (2), the holder must submit a written report to the Minister containing the information specified in subregulation (3)(b).	A report submitted within 3 days should be considered preliminary	Change	Change to "submit a preliminary written report"	Impractical for Proponent.
19	Regs - Part 8 Division 4	46 (1)		(1) The holder of an authority who undertakes drilling in the authority area must give the Minister a daily drilling report, prepared by a suitably qualified or experienced person, before 12p.m. on the day after the day to which the report relates.	Allow for weekends	Change	Change to before 12pm on the next business day after the day to which the report relates	
20	Regs - Part 8 Division 4	46 (2) (o)		(2) A daily drilling report under subregulation (1) must include - (o) details of any changes from the operation plan that have been implemented setting out the reasons for it, what the risks were and how the risks were eliminated or minimised;	This is not a daily drilling report item.	Change	Remove this from the requirements for a daily drilling report	
21	Regs - Part 8 Division 4	46 (2) (p)		(2) A daily drilling report under subregulation (1) must include - (p) the estimated daily and cumulative well costs.	What is the reason for reporting daily and cumulative costs to the minister? If required this could be submitted at the end of the program	Change	Remove this from the required daily report information to be submitted to the minister	Not required to meet objectives of the regulations

22	Regs - Part 8 Division 4	47 (1)	(1) For the purposes of section 179(c) of the Act, the holder of an authority who undertakes drilling activities in the authority area must give the Minister a well completion report as soon as reasonably practicable, but no later than 12 months after the rig release date.	No distinction is made between a basic well completion report and an interpretive well completion report	Change	Distinction to be made between Initial and Final WCR's, e.g.: 1. Initial (Basic) Well Completion Report: Due within 6 months of rig release date. This report to be made public (Uploaded to website) two years after rig release date. 2. Final (Interpretive) Well Completion Report. Due within 12 months of rig release date. This report to be made public (Uploaded to website) five years after rig release date. refer to attached note	Helps to encourage gas edevelopment in Victoria by releasing basic information earlier
23	Regs - Part 8 Division 4	47 (4) (n)	(4) A well completion report under subregulation (1) must include the following information— (n) the water depth at the well;	Only useful if drilling on a lake, dam or river.	Change	Water depth at the well should be removed, onshore drilling	
24	Regs - Part 11 Division 6	50 (2) (b) Table Item 4	Either - (a) if the core, cutting or sample is collected during the drilling of a well—the day that is 6 months after the rig release date; or (b) if the core, cutting or sample is collected during a test on a completed well—the day that is 2 months after the collection of the sample	Suggested change improves practicality of requirement	Change	Remove (a) and (b) and replace with : As soon as practicable after completion of the test during which the sample is collected	

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25	Regs - Part 11 Division 6	50 (2) (b) Table Item 5		Either - (a) if the core, cutting or sample is collected during the drilling of a well—the day that is 6 months after the rig release date; or (b) if the core, cutting or sample is collected during a test on a completed well—the day that is 2 months after the collection of the sample	Suggested change improves practicality of requirement	Change	Replace with: Either - (a) if the sample is collected during the drilling of a well—the day 6 months after the rig release date; or (b) if the sample is collected during a test on a completed well—as soon as practicable after collection of the sample	
26	Regs - Part 11 Division 6	50 (2) (b) Table Item 6		The day that is 12 months after the rig release date	Suggested change improves practicality of requirement	Change	The day 18 months after the rig release date	Encourage onshore conventional gas Consistency with other sates/territories
27	Regs - Part 11 Division 6	50 (2) (b) Table Item 7		The day that is 12 months after the rig release date	Suggested change improves practicality of requirement	Change	The day 18 months after the rig release date	Encourage onshore conventional gas Consistency with other sates/territories
28	Code of Practice	1.5		This Code will be reviewed one year after commencement and from there on every two years, or as needed for reasons such as changes in legislation, regulations and industry standards.	Suggest that the current change and review process could have involved industry experts and stakeholders from the very earliest time of drafting in a working group. Some of the issues and elements of the code that appear impracticable could have been reiewed prior to draft release.		Future reviews to better incorporate industry representation through entire review/change process.	Effective method to meet all objectives
29	Code of Practice	2.4		An authority holder may seek approval for an Operation Plan that includes alternative means of compliance with the Petroleum Act and Regulations (i.e. different to the contents of this Code) where this will achieve a better outcome than the relevant measures in this Code.	This section covers approval of an operations plan with alternative means of compliance, however does not address requirements if an alternative means of compliance or change is identified/required during operations, which is not captured in the approved operations plan. The requirements for approving/changing an operations plan are not practical during well construction activities.	Clarify	Process for approval for operational change requirements to be better clarified/stated	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
30	Code of practice	2.5		Applying this code	No guidance provided for management of wells constructed prior to introduction of this code of practice.	Change	Guidance to be provided	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
31	Code of Practice	2.5		Applying this code: Means of Compliance vs Good industry practice	Request that the drafting of these terms be further considered. The code defines them as: Means of compliance: These are measures for meeting the objectives. Good industry practices: These provide additional methods and techniques to minimise risks. There does not appear to be statements/guidance as to which of these are mandatory, or preferred only E.g NT uses Mandatory/preferred requirements, and provides additional descriptions of same Qld code of practice uses means of compliance/good industry practice, and provides guidance re these (e.g. MOC must be complied with, GIP are should or may, and are ways to satisfy means of compliance	Change	Terms need to be more clearly defined; e.g. Means of compliance is mandatory (must/shall), Good industry practice is preferred (may/should).	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
32	Code of Practice	4.1.3	GIP	Well design is completed by suitably qualified and experienced personnel. Review and assurance of well design is completed by other competent person(s) independent from the design originator and their immediate line management, and independent from the team that has the responsibility for the actual construction of the well		Clarify	Does independent assessment need to be conducted before ops plan submission	Lack of clarity for Proponent.
33	Code of Practice	4.2.3	GIP	Axial collapse safety factor	term 'axial collapse' should be 'axial compression'	Change	Change to "axial compression"	
34	Code of Practice	4.2.3	GIP	Pressure tests to verify casing integrity to: (i) be greater than the maximum anticipated surface pressure if the well is voided to reservoir fluid, allowing for possible leak off at the previous casing shoe;	Wording appears difficult to follow - request drafting is revised	Change	Re-word	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
35	Code of Practice	4.2.3	GIP	Casing connection qualification testings are ISO 13679 based on intended service.	ISO 13679 (2019) now provides relatively limited information, but now acts as a supplement to API RP 5C5. Consider referencing API RP 5C5 here instead.	Change	Change reference.	

36	Code of Practice	4.5.2	MOC	To prevent interconnection between zones of differing pressure and water quality: (iii) Where cement is not brought to surface during well construction, two adjacent cement barriers across all aquifers are provided during well decommissioning, as detailed in the well decommissioning section of this Code.	This wording appears to allow 2 x annulus cement jobs across an aquifer to be considered as sufficient or required for permanent abandonment barriers. This does not necessarily meet the intent of "restoring the caprock" as per Figure 2. If the two adjacent cement barriers are annulus cement additional plugs inside casing may still be required; Plugs across impermeable formations above and below the aquifer, rather than across the aquifer, actually provide the isolation required.	Change	Re-word	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
37	Code of Practice	4.5.2	MOC	Table 4	This table is difficult to follow and appears to contain errors (examples below). The table lists: Completion type, verification criteria, and Contingency. - Items in the completion type column (e.g. "Plug floats hold after bumping") are not actually a completion type - Verification criteria don't necessarily appear to match "completion type" (E.g. "proper centralisation has been used" is given as a verification criteria for plug floats holding after bumping, however proper centralisation does not verify whether floats have held) - For the "requirements which cover both casings and liner completions" the contingency appears to be a verification criteria	Change	Table to be revised	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
38	Code of practice	4.5.2	MOC	To prevent interconnection between zones of differing pressure and water quality, where cement is not returned to surface, wire-line logging or pressure testing is performed and recorded, to verify isolation of the casing/casing annulus has occurred, after the cement has reached a compressive strength of 500 psi at surface conditions. In wells in which it will take greater than 36 hours to reach a compressive strength of 500 psi at surface conditions, then 36 hours wait time can be used.	Is this planned as a contingency for a job where cement is planned to be brought to surface but isn't, or is it also intended to cover cement jobs where cement isn't planned to be brought to surface?	Clarify	Consider changing wording around Wireline logging, e.g. to allow for LWD evaluation. Consider use of alternative means of verification; e.g. final displacement pressures, integrity testing on drill out.	

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39	Code of Practice	4.8.2	MOC	A relief well plan is in place	Scope of wording unspecified and too broad. -Not typically a requirement for onshore wells and not in Qld or NT Code of Practice. -For the relatively small exploration and known fields in onshore Victoria the petroleum would be depleted before a relief well could be drilled. -Dependant on scope (e.g. plan only vs all infrastructure etc, e.g. preparation of alternative wellsite in advance has significant cost impact and impact on landholders). The cost impact of this requirement could prevent any further exploration or other petroleum development in Victoria.	Change	Remove requirement or provide guidance on the scope	Discourage petroleum activities in Victoria through addition of significant cost. Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment and may result in unnecessary work to prepare additional hardstand area. Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
40	Code of Practice	4.9.2	MOC	When drilling through local aquifers, and until these aquifers are isolated by a minimum of two verified barriers, then: only air, water or water-based drilling fluids are used; and chemicals or other substances that could leave a residual toxic effect in the aquifer are not added to the drilling fluid.	Aquifers is defined in in the code as "water bearing geological formation where the water can be saline or fresh". There doesn't appear to be a distinction here between shallow freshwater aquifers with "beneficial use" vs deeper saline aquifers. This will effectively eliminate the ability to use synthetic based fluids, which may be required, for example on extended reach wells. Definition of "residual toxic effect" not provided.	Clarify	- Distinction to be made between shallow/freshwater aquifers and deep/saline aquifers. - residual toxic effect requires clarification	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
41	Code of Practice	4.9.3	GIP	A minimum stock of contingency barite on location for exploration and production wells must be specified	Other weighting agents are available, but are not allowed for with this clause.	Change	Reword to "A minimum stock of contingency barite (or other weighting agents) to be kept on location, or a readily accessible off-site location, for exploration and production wells must be specified	
42	Code of practice	4.11.2	MOC	A well integrity and validation program is established for all wells, that includes a. Subsurface integrity testing (SIT);	Is an SIT intended to be a "routine" requirement, or a diagnostic tool/requirement?		Clarify whether an SIT is a mandated routine operation, or whether plan/program can include this as a diagnostic tool only where required.	
43	Code of practice	4.11.3	GIP	f) Mechanical integrity testing, geophysical logging and pressure testing, and leak and corrosion inspections are carried out every 5 years.	This suggests a requirement for all of these items to be completed every 5 years. What geophysical logging is intended here, is it caliper/wall thickness logging, or other?	Clarify	Reword to allow for a timeframe for logging/testing based on operator experience with wells in the area. Clarify what is meant by Geophysical logging in this context and what is it trying to achieve?	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
44	Code of practice	4.11.3	GIP	Conduct annular casing pressure management in accordance with API recommended Practice 90-2 Annular Casing Pressure Management for Offshore Wells	Incorrect reference API RP 90-2 is for onshore wells	Change	Change "offshore" to "onshore"	
45	Code of Practice	4.13.3	GIP	Wells which have been shut-in for 2 years are suspended with temporary packers and/or bridge plugs at the appropriate depths	A shut in well may be used for monitoring purposes. Installation of downhole plugs would eliminate the ability to use wells for monitoring purposes.	Clarify	Re-word to distinguish between shut in production wells, vs shut in monitoring wells.	
46	Code of practice	4.14.2	MOC	All aquifers are isolated from each other and any permeable hydrocarbon bearing zones by a minimum of two barriers (as defined in section 4.1)	Clause is a "Means of compliance" but is not always practicable. One barrier between aquifers is often specified (e.g. NT Code of practice).	Change	Move to "Good industry practice". Consider using "Where possible" to start the sentence. Include a specific reference back to section 4.1.2 (m) which provides for this. Consider changing requirement to one barrier between aquifers.	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with

47	Code of practice	4.14.2	MOC	There is a continuous cement barrier with a minimum 50 m length adjacent to the impermeable formation (cap rock) overlying the uppermost hydrocarbon zone	It may not be possible to have 50m of cement adjacent to impermeable formation where the impermeable formation is less than 50m thick.	Clarify	Confirm if the requirement is a 50m plug regardless of formation thickness. i.e. if the impermeable formation is less than 50m thick will this requirement be satisfied?	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
48	Code of practice	4.14.2	MOC	Cement plug requirements and verification methods of this Code also consider the following: (i) Where practicable cement the inner casing string to surface while noting the recommended maximum plug length and include a surface cement plug.	This appears to have been brought across from original CSG requirements from QLD and from NSW. Not practical for deeper conventional wells. This is a means of compliance (Meaning mandatory?) but the wording is then where practicable. How is practicable defined in this instance?	Change	Move to Good Industry Practice or remove	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
49	Code of Practice	4.15.2	MOC	Wellheads are tested every 6 months	No specific detail. Is this gas testing, valve testing or full internal void testing If latter, frequency to be at least 12 months	Change	Specify test scope is for external monitoring/gas test only	Discourage petroleum activities in Victoria Lower community confidence in the sector and Regulator Doesn't improve outcomes for the environment or public safety Lack of clear definition/clarity complicate Regulator and Proponents ability to efficiently and effectively administer or comply with
50	Code of Practice	4.15.2	MOC	Wellheads are tested within 48 hours of a major maintenance	Major maintenance is not defined As above	Change	Specify test scope is for external monitoring/gas test only	As above
51	Code of Practice	4.15.3	GIP	Sections a, b, c	Why are US requirements referred to in this instance?	Clarify	Remove and make consistent with Victorian EPA requirements.	Inconsistency with local laws doesn't improve the outcome for the environment
52	Code of practice	Appendix 2	Additional guidance	ISO 16530-2	This is an obsolete reference, the standard is withdrawn	Change	Remove reference	
53	Code of practice	Appendix 2	Additional guidance	API RP59	Reference to API RP59 is repeated twice	Change	Correct	

Initial (Basic) Well completion report:-

Due 6 within months after rig release date

Item	Information required
1	The name of the well
2	The name of the title area in which the well is located
3	The location of the well, in the form of: (a) latitude and longitude;
4	If the well is a sidetrack—the name of the parent well
5	The names of the rig contractor and rig operator
6	The name of the rig drilling the well
7	The rig's make and model
8	The names of the contractors for: (a) cementing; and (b) wireline logging; and (c) measurements while drilling (MWD); and (d) logging while drilling (LWD); and (e) mudlogging
9	Names of MWD and LWD tools used
10	List of log runs for wireline logging and velocity surveys
11	The purpose of the well (for example development, appraisal, exploration or stratigraphy)
12	The outcome of the well operation (for example completion of the well as a producer, suspension or abandonment)
13	Raw pressure-time listings for any formation fluid sample tests and production tests
14	The spud date
15	The rig release date
16	What is being used as the depth reference for the well (for example the rig floor)
17	The height of the depth reference above sea level
18	The measured depth of the well
19	The true vertical depth of the well
20	If applicable, the depth of perforation in the petroleum reservoir
21	The date on which the total depth was reached

22	If the well is deviated or horizontal: (a) the surveyed path of the well; and (b) the coordinates of the bottom of the well bore; and (c) if applicable, the coordinates and true vertical depth of the intersection of the well with the reservoir horizon
23	Particulars of equipment and casing installed on or in the well, including schematics
24	If applicable, information on cementing operations and schematics of abandonment
25	Bit records
26	Drilling fluids used
27	Drilling fluid losses
28	List of cores, cuttings and samples taken, and their depths and intervals

Final (Interpretive) Well completion report:-

Due within 12 months after rig release date

Item	Information required
1	The name of the well
2	The name of the title area in which the well is located
3	The location of the well, in the form of: (a) latitude and longitude
4	If the well is a sidetrack—the name of the parent well
5	The names of the rig contractor and rig operator
6	The name of the rig drilling the well
7	The rig's make and model
8	The names of the contractors for: (a) cementing; and (b) wireline logging; and (c) measurements while drilling (MWD); and (d) logging while drilling (LWD); and (e) mudlogging
9	The purpose of the well (for example development, appraisal, exploration or stratigraphy)
10	The outcome of the well operation (for example completion of the well as a producer, suspension or abandonment)
11	Raw pressure-time listings for any formation fluid sample tests and production tests
12	The spud date

13	The rig release date
14	What is being used as the depth reference for the well (for example the rig floor)
15	The height of the depth reference above sea level
16	The measured depth of the well
17	The true vertical depth of the well
18	If applicable, the depth of perforation in the petroleum reservoir
19	The date on which the total depth was reached
20	If the well is deviated or horizontal: (a) the surveyed path of the well; and (b) the coordinates of the bottom of the well bore; and (c) if applicable, the coordinates and true vertical depth of the intersection of the well with the reservoir horizon
21	Particulars of equipment and casing installed on or in the well, including schematics
22	Bit records
23	Drilling fluids used
24	Drilling fluid losses
25	List of cores, cuttings and samples taken, and their depths and intervals
26	List of logs acquired
27	Details of any hydrocarbon indications
28	The measured depth and true vertical depth of marker horizons or formation tops
Item Information required	
29	Geological interpretations of the observations made as a result of drilling the well, including: (a) lithology; and (b) stratigraphy; and (c) reservoir properties and quality; and (d) geochemistry of source rocks if available; and (e) environment of deposition if available
30	Wireline formation test results
31	Production test results
32	Core analysis
33	If the well is an exploration well—the relevance of the observations and interpretations to the evaluation of the hydrocarbon potential of the area