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Health and Safety Policy Unit
Ministry of Business, Innovation and Employment
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New Zealand

PEPANZ Submission: Review of the Health and Safety in Employment (Petroleum Exploration and Extraction) Regulations 1999

Introduction

This document constitutes the Petroleum Exploration and Production Association of New Zealand's ("PEPANZ" or "the Association") submission in respect of PEPANZ Submission on *Review of the Health and Safety in Employment (Petroleum Exploration and Extraction) Regulations 1999* (the "discussion document").

PEPANZ represents private sector companies which hold petroleum exploration and mining permits, service companies and individuals working in the industry. PEPANZ members account for over 95% of New Zealand's annual hydrocarbon production.

The Association supports the objectives of the review and welcomes the opportunity to comment on the proposals outlined in the discussion document. We also appreciate the substantial extension to the deadline for submissions that was provided.

We are aware that the Department of Labour was merged into the new Ministry of Business, Innovation and Employment on 1 July 2012. To avoid any confusion associated with this change we refer in this submission to "the regulator", by which we mean whatever government organisation is responsible for the administration of the *Health and Safety in Employment (Petroleum Exploration and Extraction) Regulations* ("the regulations").

The Association and its members would welcome the opportunity to be involved in the development of detailed aspects of the regulations following consideration of submissions. We would also appreciate the opportunity to comment on an early draft of the regulations before they are brought into force.

We would like the contents of this submission to be made a matter of public record.

Some overarching comments

The diversity of activities and facilities needs to be reflected in the substance and drafting of new regulations

There are many different types of sites and facilities operated by the upstream petroleum industry in New Zealand. These vary substantially in terms of location (onshore/offshore), scale, nature (temporary exploration/permanent production) and in the numbers of onsite staff (unmanned to those with substantial workforces). This diversity needs to be appropriately reflected in the new regulations, both in terms of substance and style.

The nature of a facility can have a significant effect on the type and degree of regulation which is appropriate. For example under the current regulations all offshore installations (whether manned or not) are subject to the same requirements with regard to escape routes and life-saving equipment, which have different implications for these different types of installation. The regulations do not for instance currently recognise the different rules applied under the International Convention for the Safety of Life at Sea (SOLAS).

Given the diversity of activities and the proposed extensions to the scope of the regulations (e.g. applying to onshore production facilities) we consider it may be necessary to reflect this by dividing the regulations into sections for different types of activity (e.g. onshore/offshore or exploration/production/workover operations) or perhaps even by issuing multiple sets of regulations. It is common overseas for similar regulations to be fairly specific, for example the United Kingdom (“UK”) has one set of regulations relating to offshore safety cases and another for the design and construction of installations and wells.

The Association does not have a strong view on the best arrangement of provisions within the regulations but would prefer enhancing clarity through greater precision (for example providing for Mobile Offshore Drilling Units (MODU’s) and offshore production installations as two defined terms rather than both being covered by “installation”) even if this means longer, or multiple, regulations.

Role of guidance material

The discussion document clearly indicates that the proposed changes to the regulations, particularly those relating to offshore activity, are modelled on the relevant regimes applying in the UK and Australia. The regulators in those jurisdictions (NOPSEMA and HSE) provide formal written guidance to supplement and expand on the provisions of their regulations, for example the HSE’s “Guidance on Risk Assessment for Offshore Installations”¹, NOPSEMA’s guidance note on ALARP² (“as low as reasonably practical”) and a similar approach under the proposed Irish regime for petroleum safety. There is also industry guidance available, for example the International Association of Drilling Contractors’ (IADC) *Health, Safety and Environment Case Guidelines for MODUs*.

Given the general similarity of these regimes, and the reliance on some key concepts such as ALARP, the development of this additional guidance is something that we consider has an important role in the New Zealand regulatory regime.

Transitional arrangements

The discussion document outlines at paragraph 166 the proposed timeline for bringing onshore production facilities into the regime, but does not discuss the proposed approach to transition more generally. The industry needs transitional provisions to be put in place to cover a range of situations including existing installations already with safety cases, provide for new rigs and facilities now required to have safety cases and provide for any activities occurring or about to occur at the time the new regulations come into force.

Given the potential implications of the transition for operators we would expect to engage further with the regulator on how this will occur in practice before the regulations are finalised.

Depending on how it is approached the transition could also have major resourcing implications for the regulator if for instance it is required to process a large number of safety cases simultaneously. Accordingly options for staggering the processing load for the regulator should be considered.

¹ Offshore Information Sheet No. 3/2006

² www.nopsema.gov.au/safety/safety-case-guidance-note-project/alarp-as-low-as-reasonably-practicable/

Response to Individual Discussion Document Questions

Chapter 2: Duties of operators

Q1. Do you agree with the proposed general and specific duties for the operator? Why / why not?

Subject to our comments below the Association supports the proposed transfer of responsibilities from the “employer” to the “operator”.

Definition of “operator”

We note that the “operator” could in different circumstances be either the operating permit holder in terms of the Crown Minerals Act 1991 (an oil company) or a service company that owns and/or operates a drilling rig, and who is a contractor to the companies that hold the permit. There could also be situations with potentially multiple “operators” in the same facility – e.g. onshore rig operating on the site of an existing production facility. In these situations there must be appropriate bridging documents in place, which is not addressed specifically in the discussion document.

Accordingly as well as the “operator” we consider there may need to be provision for the “duty holder” or similar. For production facilities this is often one and the same, so no issue, but for drilling rigs (both offshore and onshore) the differentiation is important. Internationally the rig contractor is generally responsible for the rigs functioning while the operator is responsible for the overall operation. The status and responsibilities of each needs to be clear for situations such as a jack-up rig cantilevered over a wellhead platform or a permit-holder owned workover rig managed by a 3rd party service company.

Where the activities undertaken by a contractor (rather than a permit holder) have long term responsibilities, such as abandonment of a well, it is important that clear processes are in place to enable the transfer of duties and responsibilities from the operator who manages day-to-day activities on the site for a temporary period (i.e. the contractor) to those with long term responsibilities (i.e. the permit holder/s).

We also note the potential for confusion with the use of the word “operator” for the purposes of this regime as it has a different meaning to the use of the same word under the Crown Minerals Act. In many cases the “operator” will be the same company under both regimes but in some cases they will be different. We note that under the Australian *Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulations 2011* the more specific term “rig operator” is used. Under the UK’s *Offshore Installations and Wells (Design and Construction, etc.) Regulations 1996* the “duty holder” and “well-operator” are separately defined.

Notwithstanding the preceding comments, in the interests of simplicity, we refer throughout this document simply to the “operator”.

General duties for operators

We support the principle that responsible parties take all practicable steps to safeguard the safety of persons, facilities and the environment.

We have a concern with the language used to describe the general duties of the operator in the bullets at paragraph 70 of the discussion document. Whilst paragraph 70 itself contains the phrase “all practicable steps” the unqualified use of “without risk” in the bullets below paragraph 70 seems inconsistent with the

rest of the discussion document and out of step with comparable regimes (refer “risks... are as low as reasonable practicable”, regulation 13 of the UK’s *Offshore Installations and Wells Regulations 1996* and take all “reasonably practical steps to ensure that... without risk”, clause 2.20 of the Australian *Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations*).

Chapter 3: Improving the regulation of wells

Q2. Do you agree with the proposal to replace the existing provisions of Part 2 (duties relating to well drilling operations) with goal setting regulations, supplemented by an approved code of practice? Why / why not?

Goal setting regulations

The Association supports the adoption of goal setting regulations for well drilling obligations.

Under a goal setting regime the operator has to demonstrate to the regulator, and society, that the risks are ALARP, which can include risk assessment as well as compliance with relevant standards. Goal setting also allows flexibility in the achievement of safety, which allows new technology to be used when it becomes available. However this flexibility also allows judgements to be made either by the operator or regulator, potentially leading to a debate on the judgements. This can be beneficial if carried out by sufficiently proficient personnel on both sides, but can be a source of frustration if one is not fully understanding of the goal setting approach. Overseas experience of goal setting regulation has generally found that over time both operators and regulators favour the goal setting approach, however, the burden of technical expertise can be challenging for smaller operators.

We note that within a goal-setting regime there can still be benefits in a level of prescription and there is a balance to be made between prescription and goal setting. We note this balance differs globally with for example the UK regime being less prescriptive, whereas in Canada there is greater reference to standards in regulation. Different regulators give different amounts of guidance in relation to goal-setting. In the UK, there is extensive guidance on many topics that affectively aid the operator in deciding whether a risk is ALARP. However, in countries with smaller industries and corresponding smaller regulators there is often less guidance provided, or a reliance on guidance from other (larger) jurisdictions.

Proposed code of practice

We do not support the adoption of a code of practice. We consider that given the risks inherent in drilling activity it is important that compliance with recognised New Zealand or international standards is required to ensure rules are rigorous and explicit for all operators.

Based on experience with developing codes of practice for other industries we are also concerned it could involve reinventing the wheel, would likely take a substantial period of time to develop, and in the interim there would be a gap in certainty and guidance. There is also a risk that a code of practice results in highly prescriptive regulation by the back door rather than using established guidance and standards.

Use of standards

We consider that compliance with relevant standards from the American Petroleum Institute (API), International Organisation for Standardisation (ISO), NORSOK or with the Institute of Petroleum (IPL) Model

Code of Practice should be considered acceptable. Maritime industry standards developed by the International Maritime Organisation (IMO) will also be relevant in some circumstances. It would also seem appropriate for the regulator to be provided with the discretion to permit reliance on other equally stringent standards.

Q3. Do you have any comments to make in relation to the proposed obligations that would be placed on the operator or the particulars to be included in notifications and reports?

Pre-design assessment of sub-surface risk

We support the proposals relating to pre-design assessment of sub-surface risk. It would be useful however to refine what should be evaluated within a consideration of “worst case” conditions through the regulations or through formal guidance from the regulator.

Post-design stage assessment of risk

The Association supports the proposed approach to the post-design stage assessment of risk on the condition that the regulator is able to swiftly process approvals as this is vital to enable drilling programmes to be efficiently managed.

Definition of “well-operations”

We support in principle the proposed definition of “well-operations”. We note that as proposed, as well as drilling, this would seem to cover all workover operations. This definition would be an extension in the scope of the regulations as the current scope is limited to “well-drilling operations”. Although it is proposed that it would apply to all wells (paragraph 86 of the discussion document) we note the proposed definition seems focussed on offshore drilling (e.g. “plugging on the seabed”).

Well design risk management

The Association supports the proposed approach to well design risk management outlined in paragraphs 96 to 99 of the discussion document.

Suitable well control equipment

The Association supports the proposed approach to well control equipment and associated control systems.

Given these requirements would apply to initial drilling, and also to on-going production from a well, care will need to be taken regarding the drafting of these provisions within the regulations as many of the well specific provisions relate solely to the drilling phase. The same issue applies to well-examination schemes.

Well-examination scheme

The Association supports the proposed requirement for an operator to develop and put into effect a well examination scheme and for this to be reviewed and revised as appropriate. We agree that sufficient records should be kept to enable effective audit as proposed in paragraph 107 of the discussion document.

We also support the requirement to provide a copy of this to the regulator at least 20 days before commencement of any well-drilling operation (for the purposes of our submission we assume that here and elsewhere in the discussion document that “days” means calendar days and not working days). We assume

from the content of the discussion document that the regulator would not formally accept or reject the well-examination scheme, which is the approach under the relevant UK regulations.

Notification of well operations

The Association supports a written notification being submitted to the regulator prior to commencing well operations.

We support the proposed default requirement for providing the written notification to the regulator of 20 days prior to commencing well drilling operations. We support the regulator having some discretion in this timing but are unclear as to whether the proposed “as such shorter period as the Secretary may specify” is envisaged as a case-by-case discretion or the setting of a general rule. We agree it is appropriate that the operator be required to notify the regulator of any material change to the particulars already provided should this occur.

Workover intervention operations (i.e. non-drilling well operations) are commonly routine operations and we consider a shorter period for notification, such as three business days, should be adequate for these. These typical operations occur frequently and so are familiar to the operator and associated service companies, and utilise standard equipment.

Our comments on the proposed notification particulars are outlined in the right hand column of the following table.

| Proposed particulars to be included in a notification of well operations (outlined on pages 25 -27 of the discussion document) | | PEPANZ Comments |
|---|--|---|
| 1 | The name and address of the operator | Support Please note our comments regarding the definition of the “operator” in response to question 2. |
| 2 | The name of the installation, where the well operation is to be carried out from, and the name and address of the installation operator (if different to the operator at paragraph 1). | Support |
| 3 | Particulars of the fluids and equipment, including down-hole pressure containing equipment and the pressure containing equipment on top of the well, that will be used to control the pressure of the well | Support |
| 4 | Particulars of any plant, not described in the current safety case for the installation, which is to be used in connection with the well operation | Support |
| 5 | Particulars of the type of well, its number, and the name of any field development of which it may be part | Support Further clarification of “type” would be useful. |

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| 6 | <p>A description of the well operation and a programme of work which includes —</p> <ul style="list-style-type: none"> • the date on which each well operation is expected to commence and finish; • the intended operational state of the well at the end of each well operation; and • details (test procedures and acceptance criteria) of any well integrity tests that are to be undertaken | Support |
| 7 | <p>A description of —</p> <ul style="list-style-type: none"> • any activities on or in connection with an installation during the well operation, described pursuant to paragraph 6, which may involve any hazards with the potential to cause a major accident; and • such hazards | Support |
| 8 | <p>In the case of a well which is to be drilled —</p> <ul style="list-style-type: none"> • particulars, with suitable diagrams, of — <ul style="list-style-type: none"> ○ the location of the top of the well; ○ the directional path of the well bore; ○ its terminal depth and location; and ○ its position and that of nearby wells, relative to each other; • particulars of the geological strata and formations, and of fluids within them, through which it may pass, and of any hazards with the potential to cause a major accident which they may contain; • the procedures for effectively monitoring the direction of the well bore, and for minimising the likelihood and effects of intersecting nearby wells; and • a description of the design of the well, including the safe limits on its safe operation and use. | <p>Support</p> <p>The detailed procedures for effectively monitoring the direction of the well bore may be of a proprietary/commercially sensitive nature. Suggest that instead the “methodology” be required, with the regulator able to audit the procedures if it feels this is necessary.</p> |
| 9 | <p>In the case of an existing well —</p> <ul style="list-style-type: none"> • a diagram of the well; • a summary of earlier operations in relation to it; • the purposes for which it has been used; • its current operational state; • its state of repair; • the physical conditions within it; and • its production capacity | Support |

| | | |
|----|---|---|
| 10 | <p>Where a well operation is to be carried out by means of a mobile installation —</p> <ul style="list-style-type: none"> • particulars of — <ul style="list-style-type: none"> ○ the meteorological and oceanographic conditions to which that installation may be foreseeably subjected; ○ the depth of the water; and ○ the properties of the sea bed and subsoil at the location at which the well operation will be carried out; and • a description of how the operator and any contractor involved in the well operation will coordinate their management systems so as to reduce the risks from a major accident. | <p>Support in principle.</p> <p>We assume the intent is that this requirement would be limited to MODUs and not include mobile workover units such as wireline/coil tubing/snubbing units, as these are intended to be temporarily installed onto an installation of which these particulars would already be known.</p> <p>It is unclear whether the requirements under the first bullet point are intended to require provision of a mooring analysis. This is not generally required in overseas jurisdictions, for example Australia, and we do not consider it should be specifically required.</p> <p>In relation to the last bullet point regarding coordination – this is better addressed in the safety case and related bridging documents than in the well notification.</p> |
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Provision of well operation information

The Association supports the provision of reports on “well operation” to the regulator with the reporting frequency either as agreed or weekly.

Please note our comments on the definition of well operations in response to question 3. We note the table on proposed particulars is titled “drilling reports” although as outlined in paragraph 110 and elsewhere the definition of “well-operations” includes activities that do not involve drilling.

The Association notes that regular reports on drilling activity are also required to be provided to New Zealand Petroleum and Minerals (NZPM) under part 4 of the *Crown Minerals (Petroleum) Regulations 2007*. These are also currently under review as part of a wider review of the Crown Minerals Act regime and following 1 July 2012 both sets of regulations are being administered by different parts of the same agency, the Ministry of Business Innovation and Employment. We would welcome these reporting requirements and processes being aligned where possible to reduce compliance costs for the industry.

Our comments on the proposed notification particulars are outlined in the right hand column of the following table.

| Proposed particulars to be included in drilling reports (outlined on pages 27 and 28 of the discussion document) | | PEPANZ Comments |
|--|---|-----------------|
| 1 | The name, number and location of the well | Support |
| 2 | The name of any installation involved | Support |
| 3 | A summary of the activity in the course of the operation since its commencement, or since the previous report | Support |
| 4 | The diameter and true vertical and measured depths of — <ul style="list-style-type: none"> • any hole drilled; and • any casing installed | Support |
| 5 | The drilling fluid density immediately before making the report | Support |
| 6 | In the case of an existing well, its current operational state | Support |

Co-operation

It is very important that not only the operator and contractors integrate their systems and procedures but that where there are multiple contractors involved, which is not uncommon, these are also integrated. Deficiencies in this regard were one of the major issues identified in the investigations into the Deepwater Horizon/Macondo incident. Co-operation and interface issues can be formally outlined in bridging documents.

Competence of persons carrying out well-operations

The Association supports the proposed introduction of requirements on the operator relating to ensuring the competence of the persons carrying out well operations. The Association considers these requirements should be focussed on the safety critical and industry specific roles (e.g. drilling supervisor, tool pusher, well engineer etc.). It is also important that any requirements don't overlap the existing regulation of other industries that are involved with petroleum extraction and production (e.g. chemicals).

We would welcome the opportunity to engage further with the regulator on the detail of requirements to be provided for in regulations.

Q4. What do you think are the main benefits and costs of this proposal?

The adoption of goal-setting regulations will better enable practice to keep pace with advances in technology and techniques.

The proposal to move from daily and summary reports to weekly reports should reduce costs to industry although providing weekly reports may involve additional effort to collate the information. Aligning where possible this reporting with well activity related reporting to NZPM under the Crown Minerals Act regime would assist in reducing costs to industry.

Chapter 4: Improving notification and reporting requirements

Q5. Do you agree with the proposed mandatory notification and reporting of dangerous occurrences? Why / why not?

The Association supports in principle the mandatory notification and reporting of dangerous occurrences.

We consider however that there must be a threshold for notification and that it should not include simply “lost time” incidents. The focus must remain on the rationale, which is contributing to avoiding major accident events and the risk of serious harm. A risk management framework would be a sensible way of determining an appropriate threshold.

The Association considers it appropriate that an operator notify the regulator as soon as practicable after a dangerous occurrence and that within 7 days provide written notification of the circumstances of a dangerous occurrence.

We consider that 30 days will be sufficient for providing a report on dangerous occurrences in most situations but insufficient for some complex dangerous occurrences where it might take more than 30 days to do the investigations required and fully understand the root causes and behavioural aspects of the incident. In some cases part of 30 day period might be spent by key staff on sorting the situation itself. To provide for those situations where 30 days is insufficient for reporting we consider that a longer period is provided and/or the regulator is given discretion to extend the time period.

Q6. Do you have any comments in relation to the proposed list of dangerous occurrences to be reported?

Our comments on the proposed list of dangerous occurrences to be reported are outlined in the right hand column of the following table.

| List of Dangerous Occurrences | PEPANZ Comments |
|--|---|
| <p><u>General</u></p> <ul style="list-style-type: none"> Any occurrence that (whether or not any person was in fact harmed) might have caused any person serious harm. | Support |
| <p><u>Wells</u></p> <ul style="list-style-type: none"> Any cementing failures. Any well kick that required corrective action and the time taken to recognise the kick and take the corrective action. Any blowout (that is to say an uncontrolled flow of well fluids from a well). The coming into operation of a blowout preventer or diversion system to control a flow from a well where normal control procedures fail. The detection of hydrogen sulphide in the course of operations at a well or in samples of well-fluids from a well where the presence of hydrogen sulphide in the | <ul style="list-style-type: none"> We consider “<u>any cementing failure</u>” is too broad and suggest this is limited to situations where there is a failure of the cement to pass a barrier “test”. In our view it is unnecessary to notify events such as re-pumping cement on a casing job. We note that the relevant Australian regulations do not require cementing failures to be reported. Only <u>well kicks</u> that cannot be managed within the limitations of the equipment deployed and require corrective actions should be required to be reported. We note |

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| <p>reservoir being drawn on by the well was not anticipated by the responsible person before that detection.</p> <ul style="list-style-type: none"> • The taking of precautionary measures additional to any contained in the original drilling programme following failure to maintain a planned minimum separation distance between wells drilled from a particular installation. • The mechanical failure of any safety critical element of a well (and for this purpose the safety critical element of a well is any part of a well whose failure would cause or contribute to, or whose purpose is to prevent or limit the effect of, the unintentional release of fluids from a well or a reservoir being drawn on by a well). | <p>the relevant Australian regulations provide that well kicks exceeding 8 cubic metres (or 50 barrels) must be notified.³</p> <ul style="list-style-type: none"> • The requirements relating to the <u>detection of hydrogen sulphide</u> should be refined to focus more on the capability of the design/equipment to manage hydrogen sulphide than the prediction of the presence of hydrogen sulphide. The key issue is detection of hydrogen sulphide originating from reservoir fluids at levels where well design and operations should have been configured for sour gas operations and this was not done. • In relation to “<u>the coming into operation of a blowout preventer.....where normal procedures fail</u>”. Normal procedure can include the use of the blowout preventer to circulate out influx or suspected influx. The reporting threshold needs to be set at a level that provides useful information to the regulator and is also sufficiently clear to operators. • We support the other proposed dangerous occurrences relating to wells. |
| <p><u>Pipelines</u></p> <ul style="list-style-type: none"> • An occurrence that results, or is likely to have resulted, in significant damage to a pipeline (for example, reducing the capacity of the pipeline to contain petroleum flowing through it). | <p>Support</p> |
| <p><u>Safety critical equipment</u></p> <ul style="list-style-type: none"> • any damage to safety critical equipment. | <p>We note this requirement is based on the Australian regulations but consider “any damage to safety critical equipment” could usefully be made more specific. Suggest linking to safety critical equipment outlined in the relevant safety case and this should include rig safety-critical systems and the well systems. It should be where damage or degradation of the safety critical element is to a level where the design intent is no longer met that it is required to be reported.</p> |
| <p><u>Release of petroleum hydrocarbon</u></p> <ul style="list-style-type: none"> • Any unintentional release of petroleum hydrocarbon on or from a petroleum operation which: | <p>Support</p> |

³ Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009 – clause 2.41.

| | |
|---|--|
| <ul style="list-style-type: none"> ○ results in: <ul style="list-style-type: none"> ▪ a fire or explosion; or ▪ the taking of action to prevent or limit the consequences of a potential fire or explosion; or ○ has the potential to cause death or serious harm to any person. | |
| <p><u>Fire or explosion</u></p> <ul style="list-style-type: none"> • Any fire or explosion at a petroleum operation, | Support |
| <p><u>Release or escape of dangerous substances</u></p> <ul style="list-style-type: none"> • The uncontrolled or unintentional release or escape of any substance (other than petroleum hydrocarbon) on or from a petroleum operation which has the potential to cause the death or serious harm to any person. | We suggest that if possible a more specific definition of dangerous substances is provided. We understand that Norway for example has a red/yellow/green chemical list with associated volumes that provides a threshold over which notification to authorities is required. |
| <p><u>Collapses</u></p> <ul style="list-style-type: none"> • Any unintended collapse of any offshore installation or onshore site, or any unintended collapse of any part thereof, or any plant thereon which jeopardises the overall structural integrity of the installation or site. | Support |
| <p><u>Subsidence or collapse of seabed/ground</u></p> <ul style="list-style-type: none"> • Any subsidence or local collapse of the seabed/ground likely to affect the foundations, or the overall structural integrity, of an offshore installation or onshore site. | Support |
| <p><u>Evacuation</u></p> <ul style="list-style-type: none"> • Any evacuation of an offshore installation or onshore site, in whole or part, in the interests of safety. | Support We note that there can be precautionary evacuations within the operating envelope, for example from an offshore installation in anticipation of bad weather. |
| <p><u>Dangerous occurrences (offshore installations only)</u></p> <ul style="list-style-type: none"> • Any of the following occurrences having the potential to cause death or major injury: <ul style="list-style-type: none"> ○ the failure of equipment required to maintain a floating offshore installation on station; ○ damage to or on an offshore installation caused by adverse weather conditions, earthquakes, or tsunamis. | Support |

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|--|--|
| <p><u>Collisions (offshore installations only)</u></p> <ul style="list-style-type: none"> Any collision between a vessel or aircraft and an offshore installation which results in damage to the installation, the vessel or the aircraft. Any occurrence with the potential for a collision between a vessel and an offshore installation where, had a collision occurred, it would have been liable to jeopardise the overall structural integrity of the offshore installation. | <p>Support</p> <p>Notwithstanding the second limb of the second bullet point, “potential collision” needs to be defined in such a way that it does not include every approach by a service vessel to an offshore installation.</p> |
| <p><u>Loss of stability or buoyancy (offshore installations only)</u></p> <ul style="list-style-type: none"> Any incident involving loss of stability or buoyancy of a floating offshore installation. | <p>Support</p> |

Q7. What do you think are the main benefits and costs of this proposal?

As outlined in the discussion document we consider there is value in reporting dangerous occurrences.

The cost of this proposal is the additional reporting to the regulator that will be required. We note that if the threshold for reporting dangerous occurrences is not set appropriately it could create perverse incentives, for example a concern for additional paperwork clouding sensible decision making.

Chapter 5: Enhancing the safety case regime for offshore installations

Make regulations to provide for workforce involvement in the preparation and revision of safety cases

Q8. Do you agree with the proposal requiring operators to demonstrate that there has been effective consultation with, and participation of, members of the workforce in the preparation or revision of the safety case for an installation? Why / why not?

The Association and its members support effective consultation with the members of the workforce in the development of safety cases.

The *Health and Safety in Employment Act 1992* requires employers to provide reasonable opportunities to employees to participate effectively in on-going processes for the improvement of health and safety in their place of work (section 19B). This applies in particular to the hazard management, information, training and supervision processes set out in sections 6-13 of the Act.

Effective consultation with the workforce should not distract from the key issue of ensuring appropriately knowledgeable and skilled people with relevant knowledge of the facility are involved in the development of the safety case. Neither does consultation on the development of a safety case substitute for education and up-skilling the workforce for working on the relevant installation. This can mean developing documentation beyond the safety case itself, which clearly explains relevant aspects of the safety case to all site staff and allows each staff member to fully understand their individual responsibilities for maintaining controls/barriers assigned to them.

It must be recognised that with exploration or appraisal activity it may not be practical to consult those who will work on the rig as it may not be clear which individuals would be working on an installation at the time the safety case is developed. For rigs, particularly offshore rigs, we note that initial preparation of the safety case is generally undertaken at the time a rig is built, generally overseas, and at this time there may not be any specific expectation it would in the future operate in New Zealand. For these rigs the safety case for operation in New Zealand will be a pre-existing safety case. These potential scenarios will need to be provided for in the regulations and recognised by the regulator.

Q9. What do you think are the main benefits and costs of this proposal?

As noted in our response to question 8, where practicable, we consider there is value in effectively consulting members of the workforce in the preparation or revision of the safety case for an installation.

Costs will be modest so long as that the requirement to involve the workforce do not require a fundamental change in the approach to developing or revising a safety case in situations where the workforce would not otherwise be specifically identifiable at the time the case was developed.

Make regulations to provide for the acceptance or rejection of safety cases

Q10. Do you agree with the proposal to introduce a formal acceptance/rejection mechanism into the safety case assessment process? Why / why not?

The Association supports introducing a formal acceptance/rejection mechanism into the safety case assessment process.

It is unclear from the discussion document how long before the commencement of operations an operator would be required to submit a safety case. We note that the timeline provided for in the equivalent Australian and UK regimes (for non-production installations) is around 3 months and that under the UK's offshore safety case regulations there are different timelines for submitting safety cases for production installations, non-production installations and for non-production installations being converted to production installations.

The timings for the approval process (including times within which the regulator can request further information) should be clearly set out in the regulations. There then needs to be a set timeframe for the regulator to complete processing and advise approval or not, and if not approved, written reasons given for that. Given that the regulator will in future accept or reject the safety case it may be more appropriate to state the period in which the regulator must do this rather than the time before the commencement of operations.

By way of comparison the approval process for a discharge management plan under Maritime Protection Rules Part 200, which is similarly rig or installation specific, requires submission 2 months before commencement and allows 15 working days from receipt for the government to advise the applicant in writing if it requires additional information setting out the details required and reasons for it.

The Association envisages that the key elements of the prescribed process would be along the lines of the following:

- Application (in “prescribed” form) may be made at any time;
- Regulator to be under general obligation “to deal with the application as promptly as is reasonable in the circumstances”;
- If regulator considers further information is required, must request it in writing, giving reasons, within say 20 working days of receipt;
- Regulator must make its decision as soon as reasonably practicable and in any event no later than 3 months/60 working days from receipt; decision to be in writing and include reasons if refused.

The Association does not support the proposed two strikes and you’re out approach outlined in paragraph 141 of the discussion document. In our view consideration should be given to the ability to seek formal review of a decision to reject a safety case, as is for example provided for under clause 24 and Schedule 8 of the UK’s *Offshore Installations (Safety Case) Regulations 2005*, or it made clear that a new application can be submitted if the original is refused.

We note the proposed approach to acceptance of safety cases is based on that outlined in the Australian *Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009* but that those regulations also contain specific provisions relating to the potentially multiple stages in the life of a facility.

Q11. Do you agree with the proposal that would enable the Department to withdraw acceptance of the safety case? Why / why not?

The Association supports the regulator being able to withdraw acceptance of a safety case if an operator fails to comply with their duties under the regulations, any of the proposed safety case revision triggers, or if the regulator has rejected a revised safety case.

The proposed notice period of 30 days seems appropriate.

In situations where a safety case is withdrawn there needs to be a process for resubmitting a safety case and potentially allowing for interim approval to restart the facility while awaiting the formal review and approval of a revised/updated safety case to be given.

Q12. Do you agree with the proposal that would enable the Department to recover the full costs, for the assessment of safety cases, from operators? Why / why not?

The Association considers it appropriate that the regulator recovers from operators the full costs of assessing safety cases, but does not expect these costs to be open-ended.

Q13. What do you think are the main benefits and costs of this proposal?

It is important that regulator has or utilises the appropriate capability to assess safety cases and needs to be funded appropriately to do so.

As stated above, we do however not expect costs to be open-ended and recommend that the regulator itself audits each safety case first before seeking outside input, with specialist review only undertaken for those aspects of the safety case it does not have capability to consider. This approach will also increase the capability of the regulator compared with simply sending away safety cases for outside review.

We note that given the modest size of the New Zealand industry it is likely that the submitting of safety cases will ebb and flow and it is important that the regulator is able to manage this whilst still adhering to regulated timelines.

In many cases operators get third parties to review their safety cases and there seems to be the potential for the operator and regulator to agree on a reviewer for a safety case, or parts of it, thereby eliminating the need to undertake two separate independent reviews of the same material, both of which would be paid for by the operator.

We also note that costs charged to operators for assessing safety cases need to recognise the efficiencies associated with drilling programmes – where a single rig drills a series of wells in a campaign and where much of the safety case will be the same.

Safety cases for newer offshore facilities cost are often in the order of NZ\$150,000 – NZ\$250,000 to develop. Safety case preparation for an old facility that may require more work could be around NZ\$300,000. In some cases a full field safety case with multiple interconnected facilities could reach seven figures.

Make regulations that provide for the revision of safety cases

Q14. Do you agree with the proposed safety case revision process? Why / why not?

We support in principle the requirement to review and update a safety case in certain circumstances.

Revision of a safety case because of a change in circumstances or operations

The Association supports in principle the requirement to revise a safety case being triggered by certain developments or circumstances. We note the similarity of the proposed triggers to those contained in the *Australian Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009*.

In relation to the triggers for revision proposed under paragraph 153 of the discussion document. We consider that “is outdated” in the first bullet point is highly subjective and if possible clearer terminology should be employed or the concept linked more clearly to the contents of the safety case. The proposal to require revision of a safety case within five years also ensures that technical knowledge remains current.

We also consider that “a significant increase in the level of risks” in the second bullet point under paragraph 154 should be refined and linked to the definition of major hazards and the risk of a major accident event. A risk matrix approach could be utilised.

In our view 30 days is too short a time period to allow for the revision of a major safety case. The regulations need to include either ability for interim/provisional approval of a revised safety case or a longer timeframe. The UK’s *Offshore Installations (Safety Case) Regulations 2005* allow three months, with the regulator given the discretion to shorten this time period. We consider a timeframe of this order to be appropriate.

Revision on request of the regulator

The Association supports the regulator being able to request that a revised safety case be submitted where there is a material issue to be addressed. We consider the proposed default time period of three months is appropriate.

Revision after five years

The Association supports safety cases being reviewed after five years.

Q15. What do you think are the main benefits and costs of this proposal?

The costs of preparing safety cases to meet the proposed requirements are likely to vary substantially depending on the type and nature of the facility.

Requiring reviews and revisions is important to ensure safety cases remain current and the process of review is valuable in itself. Whilst this will likely increase costs for operators, subject to our response to question 14, we consider it appropriate to incur these costs.

Amend Schedule 4 (particulars to be included in safety case for installation)

Q16. Do you agree with the proposed changes to the particulars to be included in the safety case for the operation of an installation? Why / why not?

It is preferable from an efficiency perspective that the specific requirements align with overseas requirements so that a safety case that for example complies with the IADC's safety case guidelines also complies here.

Our comments on the proposed particulars for safety cases for offshore installations are outlined in the right hand column of the following table. We note that it may be useful to separately prescribe particulars for production and non-production (i.e. mobile) installations as occurs under the UK's offshore safety case regulations. Whilst there would be substantial commonality between the two sets of particulars this approach could more specifically and clearly provide for the different aspects of each type of installation.

| Particulars to be included in safety case for offshore installation | | Proposed change | PEPANZ Comments |
|---|--|---|---|
| 1 | A general description of the means by which an employer intends to ensure that the structure and plant of the installation will be designed, constructed, operated, and maintained in a way that will minimise hazards | No change currently proposed | Support retention |
| 2 | Details of any significant hazards | It is proposed to amend this requirement so that operators would provide the details of: <ul style="list-style-type: none"> any hazard with the potential to cause a major accident event; an assessment of the risk associated with each major accident hazard (including identification and evaluation of causal chains and consequence chains); the engineering, procedural, and human barriers that will be implemented to prevent the realisation of a major accident hazard or limit the consequences if the hazard is realised; | Support proposed amendment The process employed for ensuring all significant hazards have been identified should also be outlined. |

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| | | <ul style="list-style-type: none"> • the performance standards for each barrier; • the position responsible for each barrier; and • the assurance processes that will be put in place to confirm that the barriers remain fit for purpose. | |
| 3 | <p>A general description of the safety management system that will operate, how it will be implemented and the audit procedures that will be adopted</p> | <p>It is proposed to amend this requirement so that operators would provide a detailed description of the safety management system, how it will be implemented, and the audit procedures that will be adopted.</p> <p>In this context, the safety management system should:</p> <ul style="list-style-type: none"> • provide for all activities that will, or are likely to take place at, or in connection with, the installation; • include a permit to work system for the safe performance of various activities; • provide for the continual and systematic identification, assessment, and treatment of hazards to health and safety of persons at or near the installation; • provide for the inspection, testing, and maintenance of the plant and equipment that are the physical control measures for those risks; • provide for the satisfactory management of arrangements with contractors and sub-contractors; • specify the position in command of the installation and responsible for its safe operation; • provide for any other matter that is necessary to ensure that the safety management system meets the requirements of these Regulations; and • specify the performance standards that apply. | <p>Support proposed amendment subject to comment below</p> <p>With regard to the specification of position in command – this must include who is in command of a combined operation, in addition to those in charge of individual installations.</p> |
| 4 | <p>Details of any quantitative risk assessments and any consequent measures proposed to ensure that hazards are minimised.</p> | <p>It is proposed that this requirement will be removed as it would duplicate the proposed change at paragraph 2.</p> | <p>Support removal</p> |
| 5 | <p>A description of –</p> <ul style="list-style-type: none"> • the principal features of the design of the installation, and the arrangements and procedures for its completion; and • the arrangements and procedures for the construction and commissioning of the | <p>No change currently proposed</p> | <p>Support retention</p> <p>There should be a linkage to ALARP here.</p> |

| | installation | | |
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| 6 | Particulars of plant and equipment installed for the purpose of detecting explosion, fire, heat, smoke, gas, and toxic fumes, the prevention and mitigation of fires, and the protection of petroleum workers from the consequences of explosion, fire, heat, smoke, gas, and toxic fumes. | No change currently proposed | Support retention |
| 7 | The results of a practical demonstration of all practicable steps to be taken to ensure that plant and equipment essential for the safety of personnel or for controlling the consequences of a major accident event will be capable of functioning in conditions of fire, explosion, flooding, inclination, or strong vibration. | No change currently proposed | We support this in principle, however, “practical demonstration” should be refined or new terminology adopted to recognise the limitations on what can be practically demonstrated or achieved through testing of plant and equipment. |
| 8 | <p>A scale plan of the intended location of the installation and of anything to be connected to it, and particulars of —</p> <ul style="list-style-type: none"> the meteorological and oceanographic conditions to which the installation may be subjected; and the properties of the seabed and subsoil at its location where the installation requires the support of the seabed. | <p>It is proposed to merge this requirement with paragraph 12 to reduce unnecessary duplication. Consequently, operators would be required to provide a scale plan of the intended location of the installation and of anything to be connected to it, and particulars of —</p> <ul style="list-style-type: none"> the meteorological and oceanographic conditions to which the installation may be subjected; the limits of the environmental conditions beyond which the installation cannot safely be stationed or operated; the locations in which the installation may be stationed and operated safely; and the properties of the seabed and subsoil that are necessary for the safe stationing and operation of the installation. | <p>Support proposed amendment</p> <p>The proposed requirements lack specificity. Some of these matters are addressed in specific international standards, such as ISO standards.</p> |
| 9 | A description with scale diagrams, of the main and secondary structure of the installation and its materials, its plant and equipment, and any connections to be made to any pipeline or other installation | It is proposed to amend this requirement so that operators would also provide a description, with scale diagrams, of the layout and configuration of its plant and any wells connected to or to be connected to the installation. | Support proposed amendment |
| 10 | Particulars of the main requirements in the specification for the design of the installation and its plant and equipment, including any limits for safe operation and use | It is proposed to remove this requirement as it duplicates paragraph 11. | Support removal |

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| 11 | <p>Particulars of the main requirements in the specification for the design of the installation and its plant and equipment, including any codes of practice to be complied with and any limits for safe operation or use</p> | <p>It is proposed to amend this requirement by removing the words ‘codes of practice’ and replacing with ‘New Zealand and international standards’, and requesting that operators also provide:</p> <ul style="list-style-type: none"> • a description of how they have ensured, or will ensure, the suitability of the safety-critical elements; and • a description of how the operator — <ul style="list-style-type: none"> ○ where they are also the operator in relation to a pipeline, has ensured, or will ensure compliance with the Health and Safety in Employment (Pipelines) Regulations 1999; or ○ where they are not also the operator in relation to a pipeline, has co-operated or will co-operate with the operator in relation to a pipeline to ensure compliance with the Health and Safety in Employment (Pipelines) Regulations 1999. | Support proposed amendment |
| 12 | <p>Details of</p> <ul style="list-style-type: none"> • the limits of the environmental conditions beyond which the installation cannot safely be stationed or operated; and • the properties of the seabed and subsoil that are necessary for the safe stationing and operation of the installation; and • the locations in which the installation may be stationed and operated safely. | <p>It is proposed to merge this requirement with paragraph 8 to reduce unnecessary duplication. Consequently, operators would be required to provide a scale plan of the intended location of the installation and of anything to be connected to it, and particulars of —</p> <ul style="list-style-type: none"> • the meteorological and oceanographic conditions to which the installation may be subjected; • the limits of the environmental conditions beyond which the installation cannot safely be stationed or operated; • the locations in which the installation may be stationed and operated safely; and • the properties of the seabed and subsoil that are necessary for the safe stationing and operation of the installation. | Support proposed amendment |
| 13 | <p>Particulars of each operation to be carried out, including —</p> <ul style="list-style-type: none"> • activities on and in connection with the installation relating to each operation; and • a description of any wells or pipelines containing pipeline risers to be connected to the installation, and a description of the methods to isolate petroleum contained in these wells or pipelines from the installation; and | <p>It is proposed to remove this requirement and replace with the following:</p> <ul style="list-style-type: none"> • Particulars of the types of operation, and activities in connection with an operation, which the installation is capable of performing. • A programme of operations. • Particulars of the plant and arrangements for the control of well operations, including those to — <ul style="list-style-type: none"> ○ control pressure in the well; ○ prevent the uncontrolled release of hazardous substances; and ○ minimise the effects of damage to subsea equipment by drilling | Support proposed amendment |

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| | <ul style="list-style-type: none"> a programme of operations | <p>equipment.</p> <ul style="list-style-type: none"> For an installation undertaking mining activities, a description of any pipeline with the potential to cause a major accident, including — <ul style="list-style-type: none"> the fluid which it conveys; its dimensions and layout; its contained volume at declared maximum allowable operating pressure; and any apparatus and works intended to secure safety. For an installation undertaking exploration activities, a description of the arrangements for — <ul style="list-style-type: none"> identifying the routes and locations of pipelines, wells and other subsea equipment; and assessing the risks that they pose to the installation. | |
| 14 | <p>The maximum number of petroleum workers —</p> <ul style="list-style-type: none"> expected to be on the installation at any time; and for whom accommodation is to be provided. | No change currently proposed | Support retention |
| 15 | <p>The provisions to be made —</p> <ul style="list-style-type: none"> for a temporary refuge to prevent significant harm from explosions, fire, heat, smoke, gas, and toxic fumes; and for facilities capable of operating and monitoring emergency shutdown systems and emergency alarms, and maintaining communication with onshore facilities. | No change currently proposed | Support retention |
| 16 | <p>Particulars of escape routes, embarkation points, plant, and equipment (including lifeboats and life-rafts) to be provided to enable the full and safe evacuation, escape and rescue of petroleum workers in an emergency.</p> | <p>It is proposed to amend this requirement by requiring operators to confirm that lifeboat capacity will be based on actual (or expected) passenger weights. The reason for this is that SOLAS assumes capacity based on an average weight that is considerably lower than that typically found on an installation.</p> | <p>This proposal seems to address a recognized and very specific issue with lifeboat capacity but we consider this is better left to be addressed under SOLAS. We also consider the regulator should have the flexibility to allow relevant exemptions where sensible to meet ALARP. i.e for unmanned facilities.</p> |
| 17 | <p>Particulars of plant, equipment, and procedures for diving support and hyperbaric rescue</p> | No change currently proposed | Support retention |

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| 18 | A statement of the performance standards that the temporary refuge, escape routes, embarkation points, lifeboats and life-rafts will be designed to meet, including the minimum period for which they will remain capable of functioning in conditions of explosion, fire, heat, smoke, gas, and toxic fumes. | It is proposed to remove this requirement and replace with the following: <ul style="list-style-type: none"> • A statement of performance standards which have been established in relation to the temporary refuge, escape routes, embarkation points, lifeboats and life-rafts; and a statement of the minimum period for which they will remain capable of functioning in conditions of explosion, fire, heat, smoke, gas, and toxic fumes. | Support proposed amendment |
| 19 | A demonstration, by reference to the results of quantitative risk assessment, that performance standards used in relation to the installation are adequate to minimise hazards | It is proposed to remove this requirement. | Support removal |
| 20 | Details of the proposed frequency and scope of reviews of the safety case | It is proposed to remove this requirement and make regulations to provide for the revision of safety cases after five years, because of a change of circumstances or operations, or on request of the Department. | Support removal |
| 21 | <i>New requirement</i> | A description of the means by which each member of the workforce at the installation has, or will have, the necessary skills, training, and ability: <ul style="list-style-type: none"> • to undertake routine and non-routine tasks that might reasonably be given to him or her: in normal operating conditions; in abnormal or emergency conditions; and during any changes to the installation; and • to respond and react appropriately, and at the level that might be reasonably required of him or her, during an emergency. | Support proposed new requirement Reference to detail in standalone documents should be allowed. |
| 22 | <i>New requirement</i> | A summary to demonstrate, that: <ul style="list-style-type: none"> • in the development or revision of the safety case for the installation, there has been effective consultation with, and participation of, members of the workforce; and • the safety case provides adequately for effective consultation with, and effective participation of, members of the workforce, so that they are able to arrive at informed opinions about the risks and hazards to which they may be exposed on the installation. | Support proposed new requirement |

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| 23 | <i>New requirement</i> | <p>Particulars of any combined operations which may involve the installation, including —</p> <ul style="list-style-type: none"> • a summary of the arrangements in place for coordinating the management systems of all duty holders involved in any such combined operation; • a summary of the arrangements in place for a joint review of the safety aspects of any such combined operation by all duty holders involved, which shall include the identification of hazards with the potential to cause a major accident and the assessment of risks which may arise during any such combined operation; • the plant likely to be used during any such combined operation; and • the likely impact any such combined operation may have on the installations involved. | <p>Support proposed new requirement</p> <p>Recent incidents overseas have highlighted the importance of ensuring that where combined operations take place there are strong measures in place to ensure appropriate co-ordination. This will require either appropriate bridging documents to be in place or a holistic safety case for combined operations.</p> |
| 24 | <i>New requirement</i> | <p>Particulars of all New Zealand and international standards that have been applied, or will be applied, in relation to the installation, or plant used on or in connection with the installation, for the relevant stage or stages in the life of the installation.</p> | <p>Support proposed new requirement</p> |
| 25 | <i>New requirement</i> | <p>Particulars of the emergency response plan for the installation, how it will be implemented, and the audit procedures that will be adopted. The plan must:</p> <ul style="list-style-type: none"> • specify the position responsible for implementing and supervising emergency procedures at the installation; • specify the command structure that will apply in the event of an emergency; • specify all reasonably practicable steps to ensure the installation is safe and without risk to the health of persons likely to be in the facility at the time of the emergency; • specify the performance standards that it applies; and • make adequate provision for escape drill exercise and fire drill exercises by persons at the installation. In particular, those exercises must ensure that those persons will be trained to function in the event of an emergency with an adequate degree of knowledge, preparedness and confidence concerning the relevant emergency procedures. | <p>Support proposed new requirement</p> |

Q17. What do you think are the main benefits and costs of this proposal?

The Association considers the proposed particulars better cover the relevant content that should be addressed in a safety case.

Chapter 6: Extending the safety case regime to onshore production facilities

Q18. Do you agree with the proposal to extend the safety case regime to onshore production facilities? Why / why not?

The Association supports in principle the proposal to extend the safety case regime to onshore production facilities. Safety cases are already routinely produced for onshore production facilities, particularly larger facilities.

The Association notes also that safety issues for production facilities are already addressed to an extent through the requirements of the *HSE (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999* and the *HSE (Pipelines) Regulations 1999*. We recognise the cross-references to the *HSE (Pipeline) Regulations*, and note the absence of cross references to the *HSE (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations*, in the proposed particulars for safety cases for onshore production facilities. Given the overlap of the scope of these regulations and their associated inspection/verification regimes, in the interests of maximising efficiency it is important that these are aligned and integrated where this is practicable.

We would appreciate further clarification of the proposed treatment of fields with multiple well sites and processing facilities, and situations where one field utilises the production facilities at another field. It is important that the safety case requirements are both effective and efficient.

Whilst commonly not required in overseas jurisdictions we would also support in principle the safety case regime being extended to onshore drilling operations, which is not currently proposed in the discussion document. This would mean that all drilling and production facilities would be required to have safety cases. The Association would expect to engage further with the regulator on the development of requirements for onshore drilling operations, including a list of particulars for safety cases. We recognise that given the highly mobile nature of onshore drilling activities, the extensive use of temporary facilities, and the short-duration of operations, there are different challenges in preparing a safety case for onshore drilling operation as compared with production facilities and offshore installations. Any regulatory requirements will need to appropriately recognise the different environment and risk profile of these operations.

Q19. Do you agree with the proposed processes for the submission, assessment (acceptance/rejection), revision, and withdrawal of acceptance of safety cases for onshore production facilities? Why / why not?

The Association supports in principle the proposed transition period for existing production facilities of 18 months. We are concerned however that the regulator may not have the capacity to consider safety cases for all onshore production facilities, on top of other regular work, if many are submitted close to the 18 month deadline.

We have serious concerns with the proposed requirement to submit a design safety case **three months** in advance of commencing the detailed design stage. We consider this to be unworkable in practice and unnecessary.

We have provided comments on the particulars to be included in the safety case for onshore production facilities in the right hand column of the following table.

| Particulars to be included in safety case for onshore production facility | | PEPANZ Comments |
|---|--|---|
| 1 | <p>A summary to demonstrate, that:</p> <ul style="list-style-type: none"> in the development or revision of the safety case for the facility, there has been effective consultation with, and participation of, members of the workforce; and the safety case provides adequately for effective consultation with, and effective participation of, members of the workforce, so that they are able to arrive at informed opinions about the risks and hazards to which they may be exposed at the facility. | Support proposed requirement |
| 2 | A general description of the means by which an employer intends to ensure that the structure and plant of the facility will be designed, constructed, operated, and maintained in a way that will minimise hazards. | Support proposed requirement. To make consistent with overarching approach “minimise hazards” should be replaced with “manage hazards to ALARP”. |
| 3 | Particulars of the New Zealand and international standards that have been applied, or will be applied, in relation to the facility, or plant used on or in connection with the facility, for the relevant stage or stages in the life of the facility. | Support proposed requirement |
| 4 | A description with scale diagrams, of the facility structure and its materials, its plant, the layout and configuration of its plant; any connections to be made to any pipeline or other facility; and any wells connected to or to be connected to the facility. | Support proposed requirement |
| 5 | <p>Details of:</p> <ul style="list-style-type: none"> any hazard with the potential to cause a major accident event; an assessment of the risk associated with each major accident hazard (including identification and evaluation of causal chains and consequence chains); the engineering, procedural, and human barriers that will be implemented to prevent the realisation of a major accident hazard or limit the consequences if the hazard is realised; the performance standards for each barrier; the position responsible for each barrier; and the assurance processes that will be put in place to confirm that the barriers remain fit for purpose. | <p>Support proposed requirement</p> <p>Performance standards can be voluminous and could be contained in supporting documents rather than outlined in detail in the safety case itself.</p> |
| 6 | A detailed description of the safety management system that will operate, how it will be implemented, and the audit procedures that will be adopted. | Support proposed requirement |

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| 7 | Particulars of the types of operation, and activities in connection with an operation, which the facility is capable of performing. | Support proposed requirement |
| 8 | A programme of operations. | Support proposed requirement |
| 9 | The maximum number of petroleum workers expected to be in the facility at any time and any offsite populations that could be affected. | Support proposed requirement |
| 10 | <p>A description of the means by which each member of the workforce at the installation has, or will have, the necessary skills, training, and ability:</p> <ul style="list-style-type: none"> • to undertake routine and non-routine tasks that might reasonably be given to him or her: in normal operating conditions; in abnormal or emergency conditions; and during any changes to the installation; and • to respond and react appropriately, and at the level that might be reasonably required of him or her, during an emergency. | Support proposed requirement |
| 11 | Particulars of the plant and arrangements for the control of well operations, including those to control pressure in the well and to prevent the uncontrolled release of hazardous substances. | Support proposed requirement |
| 12 | A description of any pipeline with the potential to cause a major accident, including: the fluid which it conveys; its dimensions and layout; its contained volume at declared maximum allowable operating pressure; and any apparatus and works intended to secure safety. | Support proposed requirement |
| 13 | Particulars of plant and equipment installed for the purpose of detecting explosion, fire, heat, smoke, gas, and toxic fumes, the prevention and mitigation of fires, and the protection of petroleum workers and offsite populations from the consequences of explosion, fire, heat, smoke, gas, and toxic fumes. | Support proposed requirement |
| 14 | The results of a practical demonstration of all practicable steps to be taken to ensure that plant and equipment essential for the safety of personnel or for controlling the consequences of a major accident event will be capable of functioning in conditions of fire and/or explosion. | Support proposed requirement |
| 15 | <p>Particulars of the emergency response plan for the facility, how it will be implemented, and the audit procedures that will be adopted. The plan must:</p> <ul style="list-style-type: none"> • specify the position responsible for implementing and supervising emergency procedures at the facility; • specify the command structure that will apply in the event of an emergency; • specify all reasonably practicable steps to ensure the facility is safe and without risk to the health of persons likely to be in the facility at the time of the emergency; • specify the performance standards that it applies; and • make adequate provision for escape drill exercise and fire drill exercises by persons at the facility. In particular, those exercises must ensure that those persons will be trained | Support proposed requirement |

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| | to function in the event of an emergency with an adequate degree of knowledge, preparedness and confidence concerning the relevant emergency procedures. | |
| 16 | <p>Particulars of the main requirements in the specification for the design of the facility and its plant, which shall include —</p> <ul style="list-style-type: none"> • any limits for safe operation or use; • any codes of practice to be complied with; • a description of how the operator has ensured, or will ensure, the suitability of the safety-critical elements; and • a description of how the operator — <ul style="list-style-type: none"> ○ where they are also the operator in relation to a pipeline, has ensured, or will ensure compliance with the Health and Safety in Employment (Pipelines) Regulations 1999; or ○ where they are not also the operator in relation to a pipeline, has co-operated or will cooperate with the operator in relation to a pipeline to ensure compliance with the Health and Safety in Employment (Pipelines) Regulations 1999. | Support proposed requirement |

Q20. Do you agree with the preferred approach for recovering costs from operators for the assessment of safety cases for onshore production facilities? Why / why not?

The Association supports the proposed approach for the same reasons as outlined in our response to question 12 above.

Q21. What do you think are the main benefits and costs of this proposal?

Onshore production facilities range from small unmanned processing plants to large and complex facilities with many staff and it is important that the requirements remain proportionate to the risks associated with a facility.

Chapter 7: Other matters

Amend regulations to ensure that “all practicable steps” is only applied to goal setting regulations

Q22. Do you agree with the proposal to only apply “all practicable steps” to goal setting regulations? Why / why not?

The Association agrees this is sensible amendment to the drafting of the regulations for the reasons outlined in the discussion document.

Make regulations to ensure that the safety case for an offshore installation or onshore facility specify all standards that have or will be applied

Q23. Do you agree with the proposal to provide operators with the flexibility to select the standards to be applied? Why / why not?

The Association agrees that greater flexibility is required than provided by the current requirement to meet the Institute of Petroleum Model Code of Safe Practice. We consider however that there would be value in making clear what standards are acceptable. This would provide certainty to industry, assurance to stakeholders and means the regulator would not need to invest time and resources in understanding less common standards.

Please refer to our response to question 2 above relating to well drilling for further comments on the role of standards.

Q24. What do you think are the main benefits and costs of this proposal?

The ability to utilise modern standards will increase flexibility for operators and should also improve outcomes by facilitating the use of the most up to date approaches. We cannot identify any costs with this proposal.

Develop an approved code of practice to set out the functions of health and safety representatives in the upstream petroleum sector

Q25. Do you agree with the proposal to develop an approved code of practice to set out the functions of health and safety representatives operating in the upstream petroleum sector? Why / why not?

As outlined in our response to question 8 we consider the active participation of the whole workforce is essential to maintaining safe operations.

Health and safety representatives are one way of achieving workforce representation in the management of health and safety issues and are a common feature of international regimes for upstream petroleum activities, particularly those occurring offshore. The Association supports formal requirements regarding the role of health and safety representatives being provided in New Zealand. We note that in some jurisdictions this role is provided for in regulation but that this may not be possible under the regulation making powers of the *Health and Safety in Employment Act 1992*.

Given this the Association supports the development of an approved code of practice to set out the functions of health and safety representatives operating in the upstream petroleum sector. It will be important to ensure that the approach taken remains comparable and compatible with approaches taken in other similar industries in New Zealand.

Revoke regulation 27 and replace with regulations that more clearly set out the process to establish a verification scheme

Q26. Do you agree with the proposal clarifying the process to establish a verification scheme? Why / why not?

The Association supports proposed clarification of the process for establishing a verification scheme for offshore installations.

Given the expanded scope of the regulations regarding onshore operations we suggest consideration is given to expanding the scope of verification schemes to include onshore facilities.

Concluding comments

The Association would again like to thank the Department (now Ministry of Business, Innovation and Employment) for the opportunity to comment on the proposals outlined in the discussion document and for the extension of the deadline for submissions. As outlined in this submission we look forward to working further with officials on refining and operationalising some aspects of the proposals.

David Robinson
Chief Executive