

BEFORE THE ENVIRONMENT COURT
I MUA I TE KOOTI TAIAO O AOTEAROA

Decision No [2020] NZEnvC 18

IN THE MATTER of the Resource Management Act 1991
AND of an appeal under clause 14 of the First
Schedule of the Act
BETWEEN TARANAKI ENERGY WATCH
INCORPORATED
(ENV-2016-WLG-80)
Appellant
AND SOUTH TARANAKI DISTRICT COUNCIL
Respondent

Court: Environment Judge J E Borthwick
Environment Commissioner J A Hodges
Environment Commissioner J T Baines

Hearing: at New Plymouth on 12-15 August 2019

Appearances: R B Enright and R G Haazen for Taranaki Energy Watch Incorporated
and for Royal Forest and Bird Protection Society of New Zealand
Incorporated
M G Conway and O L Rego for South Taranaki District Council,
New Plymouth District Council, Stratford District Council and
Powerco Limited
D Allen for Petroleum Exploration and Production Association of New
Zealand
R Gardner for Federated Farmers of New Zealand (Inc)

Date of Decision: 2 March 2020

Date of Issue: 2 March 2020

SECOND INTERIM DECISION OF THE ENVIRONMENT COURT

REASONS



[1] This is the second Interim Decision concerning an appeal by Taranaki Energy Watch in relation to the proposed South Taranaki District Plan.

[2] The appeal raises two broad topics of concern:

- (a) Topic A – the risk of human fatality attendant upon a fire or explosion; and
- (b) Topic B – the risk of adverse health effects from the emission of contaminants to air.

[3] In this decision, we consider further evidence produced on the topic of risk and the wording proposed for the District Plan’s provisions addressing the same. A separate decision will be released on the emission of contaminants to air.

[4] The court has yet to consider whether there is scope for certain proposed minimum setback distances and will do so when it has a clearer picture whether any of the existing petroleum production activities propose to incorporate into the planning maps contours recording the area of unacceptable risk for individual fatality. Therefore, the court’s findings in this second interim decision are subject to its determination on scope.

Topic A – The risk of human fatality attendant upon either a fire or an explosion

Introduction

[5] At the end of the hearing in August 2018, the District Council and PEPANZ had shifted their positions in response to expert evidence that sensitive activities would be exposed to an unacceptable level of risk if they were located within an individual fatality risk contour of 1×10^{-6} per year.¹ We record again that we have focused on fatality risk (excluding injury risk) as that was the evidence placed before us.²

[6] For context, we set out the court’s key findings on risk at paragraphs [5] and [62] of the first Interim Decision as follows:

¹ Risk JWS, dated 28 August 2018.

² *Taranaki Energy Watch Incorporated v South Taranaki District Council* at [32].



[5] For reasons that we will give, where there is a risk of individual fatality arising from fire or explosion at a petroleum exploration and production facility (topic (a)) it is appropriate this risk be avoided. It is not appropriate for the District Plan to address this risk in terms of it being mitigated.

...

[62] By the end of the hearing, the risk experts had reached agreement on many of the key risk issues before the court and we have relied on those agreements in making the following preliminary findings:

- (a) for both well-sites and production stations use of land by a new sensitive activity seeking to locate within the 1×10^{-6} individual fatality risk contour is to be avoided;
- (b) for new well-sites and production facilities (including facilities whose risk profile expands), pDP Section 12 objective and policies are to be reviewed in light of whether the provisions should discourage new petroleum activities from externalising risk onto neighbouring land. Consideration is also to be given as to whether, and the extent to which, the objective and policies drive the internalisation of risk within the cadastral boundary of the petroleum activity as their primary outcome and second, whether activity status and other methods may incentivise the internalisation of the individual fatality risk within the cadastral boundary;
- (c) for existing well-sites and production facilities where the individual fatality risk contour has not been produced, land use controls are required to ensure separation of incompatible activities avoid the risk of fatality from fire and explosion. Following on from an assessment of all objectives and policies pursuant to s 32, an assessment of the methods recommended by the risk experts of the consequence distance or maximum credible fatality distance is required;
- (d) In the Rural Industrial Zone, alterations or additions to an existing or new significant hazardous facility that expands an existing individual fatality risk contour into or within a neighboring zone are not permitted; and
- (e) due to their risk profile, the location of some petroleum activities within the township and residential zones are not appropriate. The provisions and methods are to be reviewed to prohibit those petroleum activities within these zones.

[7] We directed conferencing of planning witnesses on the topic of risk.³ The participating witnesses were Mr H P J Wesney (South Taranaki District Council), Mr M L St Clair (PEPANZ), Mr G J Carlyon (TEW) and Mr S A Hartley (Federated Farmers).



³ Minute dated 27 March 2019.

[8] The inputs to the planning conferences were substantial and the three Joint Witness Statements (“JWS”) produced, comprehensive. The Joint Witness Statements include one produced after the hearing adjourned in response to issues raised by the court.

[9] We record our appreciation of the extent and quality of the work undertaken by the planning experts throughout the expert conferencing process and in court. The task set them was particularly challenging in that the proposed plan is to respond not only to future petroleum production and exploration activities but also to the risk to human health arising from existing activities where new sensitive activities either seek to locate or are presently located already, in close proximity to existing petroleum activities.

[10] The experts took a structured approach when undertaking their review of the plan provisions, starting with a statement of issues before proceeding to the objectives, policies and methods (including rules). This approach was appropriate and the analysis thorough, including consideration of horizontal and vertical integration of the proposed provisions within the plan.⁴

Principal changes to the proposed District Plan

[11] Petroleum production and exploration activities (which we will now refer to as “petroleum activities”) are significant hazardous facilities, as defined in the proposed plan.⁵ The decision under appeal approved a single set of objectives and policies for all significant hazardous facilities. The principal changes proposed by the planning witnesses include:

- (a) two new objectives to address activities that are incompatible with petroleum production and exploration activities (Objectives 2.8.3a and 2.8.3b);
- (b) a separate set of policies for petroleum production and exploration activities and their associated rules (Policies 2.8.11(a)-(i) and Rules 12.1.1(b)-(c), Rules 12.1.3(b)-(c), Rules 12.1.4(b)-(d), Rules 12.1.5(b)-(e), Rule 12.1.6, Rule 3.1.3 and Rules 3.1.5(d)-(f));
- (c) minimum setback distances (Rule 3.2.2.1, Table 1);



⁴ Transcript at 366.

⁵ Significant hazardous facilities are not limited to petroleum activities, but include a wide range of activities.

- (d) consequential amendments to the explanation of the policies;
- (e) the level of risk of fatality to individuals that has been determined to be unacceptable under this plan; and
- (f) the definition of key terms.

Key terms

[12] Three key terms are introduced as follows:

Petroleum Activity Risk Area (for petroleum exploration and petroleum production provisions) means:

- the area defined by the 1×10^{-6} individual fatality risk contour contained in one or more allotments, sections or parcels in relation to which the operator of a petroleum exploration and petroleum production activity (currently established or proposed to be established) either owns or has an enforceable interest in (including lease, covenant, and legal contract); and
- precludes the establishment or operation of sensitive activities for the duration of the operation of the petroleum exploration and petroleum production activity within this area.

Petroleum Activity Risk Contour (for petroleum exploration and petroleum production provisions) means the 1×10^{-6} individual fatality⁶ risk contour shown on the Planning Maps.

Unacceptable Risk (for significant hazardous facilities provisions⁷) means exposure of sensitive activities (including residential dwellings) to an individual fatality risk exceeding 1×10^{-6} per year.

[13] . It is our understanding that the term “Unacceptable Risk” applies to petroleum exploration and petroleum production activities only. If correct, we suggest amending the definition by replacing “significant hazardous facilities” with “petroleum exploration and petroleum production provisions”.

[14] Secondly, and importantly, we raise for the parties' consideration whether the term Petroleum Activity Risk Area (“PARA”) has or should have an extended meaning to include land outside of the fatality risk contour but in respect of which the operator either owns or has an enforceable interest and can demonstrate that the establishment or operation of sensitive activities for the duration of the operation of the petroleum activities is precluded. For those existing petroleum activities with fatality risk contours presently

⁶ Note, the term “facility” in the JWS has been amended to read “fatality”.

⁷ Tracking indicated proposed amendment.



extending across neighbouring land, could risk be satisfactorily addressed through the acquisition of an interest in land that precludes the establishment or operation of sensitive activities? In this second Interim Decision the court has assumed that the extended definition applies, but in saying that parties may disagree with this approach. If they do agree the wording of the definition of Petroleum Activity Risk Area may need to be amended to make this clearer.

[15] Finally, while “setbacks” are not a term defined in the proposed plan, they are an important tool that applies in the absence of a Petroleum Activity Risk Contour (“PARC”). So, for completeness we record, Rule 3.2.2.1, Table 1, includes new minimum setback distances from well-sites and from petroleum production stations or gas treatment plants. Those distances are based on the consequence risk⁸ and, as stated, are to apply where there is no PARC for the relevant facility on a planning map. The risk experts were agreed on the distances to be applied and these are included in the plan as the minimum setback distances for new sensitive activities seeking to establish near existing petroleum activities.⁹

[16] That said, because it is likely sensitive activities are already established within the fatality risk contour for (at least) one production station, we will direct the District Council to advise as to the steps it has or will take to alert the affected owner/occupants.

Discussion

[17] As noted, the provisions have added complexity insofar as they are addressing both present-day and future risk between incompatible activities. As a result, the rules proposed separately address new petroleum activities, alterations or additions to existing petroleum activities and finally, new sensitive activities seeking to locate within close proximity to existing petroleum activities.

[18] Existing petroleum activities are (or nearly all are) located in the Rural and Rural Industrial Zones.

⁸ See discussion on the “consequence risk” from paragraph [55] of the first Interim Decision. There, the consequence distance is described as a generic measurement that does not take into account the site characteristics (including inventory) or the likelihood of the event occurring.

⁹ Planning JWS, 16 May 2019 at 4.13-4.15.



[19] The Rural Zone needs no elaboration. There are ten Rural Industrial Zones. These are essentially spot zones for large scale industrial activities, including Maui Production Station, Kapuni Production Station and the Vector Gas Treatment Plant. The proposed plan has two objectives for the Rural Industrial Zone as follows:

2.6.3 To provide for the efficient and effective operation and development of existing large-scale manufacturing and processing activities and sites in rural areas while ensuring their adverse effects on the environment are avoided, remedied or mitigated recognising their rural location.

2.6.4 To enable the efficient and effective functioning of existing large-scale manufacturing and processing activities and ensure that these activities are not constrained by adverse effects of new incompatible subdivision, land use and development in the Rural Zone.¹⁰

[20] The above objectives were not appealed by TEW and the objectives are important insofar as specific provision is made for existing large-scale manufacturing – including petroleum activities – located within the Rural Industrial Zone. Petroleum activities also occur within the Rural Zone (at least), but the proposed plan is most enabling of petroleum activities in the Rural Industrial Zone.

[21] Regardless of the zone, significant issues arise for hazardous substances associated with petroleum activities. The management of hazardous substances is specifically addressed in Section 2.8 of the proposed plan. Mindful that individual zones enable petroleum activities differently, the planning witnesses propose new objectives, policies and rules in Section 2.8 in response to the issues raised by the appellant and addressed in the first Interim Decision.

[22] Two new objectives are proposed for Section 2.8 as follows:¹¹

Objective 2.8.3a

Recognise the important benefits associated with the use, storage, disposal and transportation of hazardous substances associated with petroleum exploration and petroleum production activities whilst also ensuring that risks to the environment and human health are:



¹⁰ *Fonterra Limited and Others v South Taranaki District Council* (NZEvc) Consent Order dated 14 February 2018.

¹¹ Planning JWS, dated 6 September 2019.

- (a) Avoided where the risks are unacceptable; and
- (b) Minimised for lesser risks as low as reasonably practicable (ALARP).

Objective 2.8.3b

Sensitive activities are located where they:

- (a) Avoid areas exposed to an unacceptable level of risk from existing petroleum exploration and petroleum production activities; and
- (b) Do not compromise existing petroleum exploration and petroleum production activities due to reverse sensitivity effects and/or incompatibility.

[23] The objectives are addressing a new issue to be included in the plan as follows:

Issue 2.8.1a

The risks to human health and property from incompatible land use when new sensitive activities locate in proximity to existing significant hazardous facilities.

[24] The unacceptable level of risk referred to in Objectives 2.8.3a and 2.8.3b is defined. The “Unacceptable Risk” is the exposure of sensitive activities (including residential dwellings) to an individual fatality risk level exceeding 1×10^{-6} per year. The area of Unacceptable Risk can be calculated and shown as a contour in relation to each petroleum activity. For some petroleum production activities, the parties are working towards confirmation of the facility’s individual fatality risk contour for inclusion in the proposed District Plan’s planning map. Where the fatality risk contour is shown on a planning map, it is called the Petroleum Activity Risk Contour.

[25] Different rules apply to those petroleum activities that have or do not have, as the case may be, a Petroleum Activity Risk Contour. The location of the fatality risk contours for existing well-sites or well-fields has not been confirmed and it is not proposed to include any contours for these activities in the proposed plan. Likewise, we understand, the fatality risk contour for well-sites that have expanded over time to include production capability are not proposed to be included in the plan. In these circumstances, Rule 3.2.2.1 applies.

[26] With that said, we find the proposed objectives appropriately respond to the issue identified.



[27] Save in one material respect, we agree with the planners' general approach by making specific provision for petroleum activities in Section 2.8 of the plan.¹² The matter on which we are not satisfied concerns the internalisation of risk about which we said at paragraph [62(b)] of the first Interim Decision:

- (b) for new well-sites and production facilities (including facilities whose risk profile expands), pDP Section 12 objective and policies are to be reviewed in light of whether the provisions should discourage new petroleum activities from externalising risk onto neighbouring land. Consideration is also to be given as to whether, and the extent to which, the objective and policies drive the internalisation of risk within the cadastral boundary of the petroleum activity as their primary outcome and second, whether activity status and other methods may incentivise the internalisation of the individual fatality risk within the cadastral boundary;

New petroleum activities in all zones

[28] For new activities, the proposed policies implement the objectives by ensuring that new petroleum activities locate where they cannot expose existing sensitive activities to unacceptable risk (Policy 2.8.11(b)). A second policy requires new petroleum activities to internalise the unacceptable risk within the "site of the activity". However, new petroleum activities are not required to internalise risk to the site if there is a mechanism in place that avoids the unacceptable risk (Policy 2.8.11(c)). "Mechanism" is not defined, but the planners contemplate this may involve covenants or legal agreement between the operators and neighbouring landowners.¹³

[29] Rule 12.1.4(b) implements Policy 2.8.11(c) by providing that new petroleum activities are discretionary activities where the fatality risk contour is located within the Petroleum Activity Risk Area (PARA). Where the fatality risk contour extends outside of the PARA, Rule 12.1.5(b) classifies new petroleum activities as non-complying activities and this is so even in circumstances where there are no existing sensitive activities located within the risk contour.

¹² The proposed plan provision for "hazardous substances" has been renamed "significant hazardous facilities" to keep distinct the policies and rules for Petroleum Exploration and Petroleum Production Activities.

¹³ Proposed amendments to the Section 2.8, Explanation of Policies. See also Wesley, supplementary evidence dated 31 May 2019 at [3.8], where he elaborates on the mechanism noting that it could also "involve land purchase or lease by the operator to control the sensitive activity, or an agreement with the owner/occupier of the sensitive activity that it is not to be occupied whilst the petroleum activity is operating".



[30] While we approve the direction of the policies and rules for new petroleum activities, we wonder whether Policy 2.8.11(c) would be clearer and provide greater flexibility if new petroleum activities are required to internalise the unacceptable risk to the PARA. We make this suggestion on the basis that an extended definition of PARA applies. The PARA would be secured by the “mechanisms” referred to in the original policy wording and may extend outside the fatality risk contour over land that is under the control of petroleum operators and in respect of which establishment or operation of sensitive activities are precluded.

[31] Thus, Policy 2.8.11(c) could be reworded as follows:

Require new petroleum exploration and petroleum production activities to internalise the Unacceptable Risk within the Petroleum Activity Risk Area.

[32] If accepted by the parties, the amendment does not appear to warrant consequential changes to the rules.

Additions and alterations to existing petroleum activities

[33] While it is yet to be confirmed, the evidence suggests¹⁴ that for the Maui, Kapuni, Kupe and Rimu Production Stations the fatality risk contours may well extend outside the sites of the production station into the surrounding Rural Zone. In the case of Maui Production Station there could be residential activities located within the fatality risk contour.¹⁵

[34] It is not intended to include Petroleum Activity Risk Contours in the planning map for well-sites and well-fields, of which we now know there are currently 28 well-sites either producing or consented to drill in South Taranaki.¹⁶ There was a suggestion in the evidence that the fatality risk contours for Kapuni, Manutahi and Rimu well-fields may also extend in proximity to residential dwellings.¹⁷

¹⁴ The fatality risk contour has yet to be confirmed for any petroleum activity.

¹⁵ Wesley, supplementary evidence at [5.3] and Table 3: Number of Properties and Existing Dwellings within 1×10^{-6} Contours for Production Facilities.

¹⁶ Wesley, supplementary evidence at [5.4].

¹⁷ Wesley, supplementary evidence at [4.1].



[35] Policies 2.8.11(g) and (h) apply to alterations and additions to existing petroleum activities. Given their importance, it is our view these policies should follow on from the policies for new petroleum activities.

[36] Policy 2.8.11(h) is a straightforward implementation of the objectives and we would approve the same. It is not yet clear to us how this policy differs in substance to 2.8.11(g).

[37] The policies pertaining directly to alterations and additions are silent on the internalisation of risk. Subject to the planning advice on the substance of Policy 2.8.11(g), we wonder whether Policy 2.8.11(g) should be deleted and replaced by a new provision encouraging alterations and additions to existing petroleum activities to internalise the unacceptable risk within the PARA. The new policy could be worded as follows:

Policy 2.8.11 (XXX)

Encourage additions and alterations to existing petroleum exploration and petroleum production activities to internalise the Unacceptable Risk within the Petroleum Activity Risk Area.

Other policy matters

[38] Proposed policy 2.8.11(e) presently reads:

Policy 2.8.11(e) Identify for existing petroleum exploration and petroleum production activities the areas of unacceptable risk based on a level of risk threshold of 1×10^{-6} (risk contour) on the Planning Maps.

[39] While it is not entirely clear, this appears to be a policy about the need to progressively amend the planning maps by locating the PARC for existing petroleum activities. The phrase "based on" is ambiguous and the policy reads as if the contours are already in the planning maps, which is incorrect. We wonder if the sense of the policy could be improved by saying:

Policy 2.8.11(e) Amend the planning maps by including the Petroleum Activity Risk Contour for existing petroleum exploration and petroleum production activities.



Rural Zone

[40] We consider there would be greater incentivisation given to existing operators to internalise risk, and in particular to internalise risk within the PARA (extended definition), by including a new restricted discretionary rule for alterations and additions in the Rural Zone.

[41] That new rule, Rule 12.1.3(d), could read:

Rule 12.1.3

(d) In the Rural Zone, alterations or additions to existing petroleum exploration and production activities where the new 1×10^{-6} individual fatality risk contour is contained within the Petroleum Activity Risk Area for the subject site.

[42] Matters of discretion:

- (a) changes to operations and site layout arising from the proposed alterations or additions to the facility, including the location of hazardous substances onsite;
- (b) separation distances from sensitive activities and sensitive environments, including the number of people potentially at risk from the proposed alterations or additions to the facility;
- (c) any new or increase in potential health or environmental hazards and exposure pathways arising from the proposed alterations or additions to the facility and any onsite containment measures proposed;
- (d) application of risk management (ALARP) to lesser risks;
- (e) proposed emergency management planning (spills, fills and other relevant hazards);
- (f) proposed monitoring and maintenance schedules;
- (g) compliance with relevant Codes of Practice and standards and relevant regional plan permitted activity performance standards / resource consents.



[43] We propose the addition of a new matter of discretion, sub-clause (d) to the list proposed by the planners. The reasons for this are discussed later in the section entitled “Neighbour’s approval for Unacceptable Risk”.

Rural Industrial Zone

[44] The rules for the existing petroleum production facilities located in the Rural Industrial Zones are more complex, as they must also implement the objectives for this zone (Objectives 2.6.3 and 2.6.4).

New activities

[45] All new activities are either discretionary or non-complying (Rules 12.1.4(b) and 12.1.5 (b)). We will approve these rules.

Alterations or additions to existing petroleum production activities – permitted activities

[46] Alterations or additions to existing petroleum production activities are permitted in two circumstances:

- where the new fatality risk contour does not extend outside the PARC (Rule 12.1.1(b)); or
- where the fatality risk contour does not extend outside the Rural Industrial Zone (Rule 12.1.1(c)).

[47] In the first Interim Decision we accepted the risk experts’ advice that the District Plan should protect against the exposure of sensitive receptors to unacceptable risk. Within the fatality risk contour, residential activities (at least) should not be allowed.¹⁸ We said there needed to be consideration as to whether and to what extent the objectives and policies drive the internalisation of risk. This required consideration of activity status and other methods.

[48] We would approve Rule 12.1.1(c) based on our understanding that operators either own or have an enforceable interest in the land located within the Rural Industrial



¹⁸ *Taranaki Energy Watch Inc v South Taranaki District Council* [2018] NZEnvC 227 at [54].

Zone and no sensitive activities are currently located in this zone. The parties are to correct us if we are wrong in our understanding.

[49] We are not yet satisfied Rule 12.1.1(b) adequately incentivises the internalisation of risk. Rather, it promotes no change to the risk profile for existing petroleum production activities. In other words, petroleum activities are permitted in circumstances where the fatality risk contour shown on a planning map is not extended. As recorded, it is likely the fatality risk contour for existing petroleum production activities already extends beyond the Rural Industrial Zone and into neighbouring land and, we assume, therefore, beyond the subject “site”, if not the zone. We were told that for one Production Station, residential dwellings may¹⁹ be located within this contour while residential dwellings are also likely located near the fatality risk contours for other production stations.

[50] We are uncertain as to the parties' intention where there are existing sensitive activities located within a fatality risk contour. Specifically, there does not appear to be any policy that addresses the location of existing sensitive activities within a PARC. If there is no PARC shown on a planning map, any alterations and additions would be classified as non-complying activities under Rule 12.1.5(d) if sensitive activities are present. If correct, the operator of the petroleum facility may be perversely incentivised to include a PARC in the plan as any alterations and additions to the existing petroleum production activity would be permitted provided the fatality risk contour does not extend beyond the PARC as a result of that work (12.1.1(b)).

[51] If correct, it is our view the proposed Rule 12.1.1(b) is not the most appropriate method to implement the relevant policies and objectives and we would not approve of the rule. The activity described in the proposed rule is, in our view, more appropriately a restricted discretionary activity and as such, and – subject to the correctness of our interpretation above, we will direct the planning witnesses to propose wording for the same.

[52] We consider the internalisation of risk may be better incentivised if alterations and additions were permitted within the PARA (extended definition); namely land containing the fatality risk contour, that is under the control of an operator and in respect of which the establishment or operation of sensitive activities is precluded for the duration of the



¹⁹ At the timing of releasing this decision, the fatality risk contour had not been established for any petroleum activity.

activity. For operators within the Rural Industrial Zone to take advantage of the rule, they will need to address the exposure of sensitive activities to Unacceptable Risk. We propose this new rule in response to the evidence of the risk experts and to better address the principal concern of Federated Farmers and, to an extent, TEW.

[53] The new rule could read:

Rule 12.1.1 (XXX)

- (b) In the Rural Industrial Zone for sites with a Petroleum Activity Risk Contour shown on the Planning Maps, alterations or additions to existing petroleum production activities provided the new 1×10^{-6} individual fatality risk contour does not extend outside the Petroleum Activity Risk Area.

[54] If not permitted by a rule in the plan, the planners propose alterations and additions to existing petroleum production activities are classified as either restricted discretionary or non-complying activities.

Alterations or additions to existing petroleum production activities – restricted discretionary activities

[55] There are two restricted discretionary activities proposed, each apply in circumstances where there are no existing sensitive activities within the fatality risk contour.

[56] Where the new fatality risk contour extends outside the PARC shown on a planning map the activity is a restricted discretionary activity (Rule 12.1.3(b)). Likewise, the activity is a restricted discretionary activity where no fatality risk contour is shown on a planning map i.e no PARC (Rule 12.1.3(c)). Rule 12.1.3(c) applies whether or not the fatality risk contour extends across neighbouring rural land.

[57] For reasons provided in the section entitled "Neighbour's approval for Unacceptable Risk", we propose an additional matter of discretion, as sub-clause (d), and invite feedback from the planners and the parties.



[58] Otherwise, save in relation to sub-clause (g) of both rules,²⁰ we have no difficulty in principle with the matters of discretion listed. Sub-clause (g) notes as a matter of discretion:²¹

Controls proposed to prevent or restrict the establishment of new sensitive activities within the area of unacceptable risk.

[59] The planners are to clarify whether sub-clause (g) concerns a PARA (at least the court's extended definition) or something else. Secondly, to clarify what is meant by "restrict". For example, does "restrict" mean "avoid" as per the objectives?

[60] Finally, if the new permitted activity rule, Rule 12.1.1 (XXX above), is approved, the rules for restricted discretionary activities will need to be amended to include the circumstances being addressed in the planner's rule i.e no extension of the fatality risk contour outside the PARC.

Alterations or additions to existing petroleum production activities – non-complying activities

[61] Alterations or additions to existing petroleum activities within the Rural Industrial Zone are non-complying activities where the fatality risk contour contains existing sensitive activities (Rules 12.1.5(d) and (e)). These rules apply also to the other zones.

Prohibited or non-complying activity status?

[62] As the parties will have divined, the court would approve a non-complying activity status for Rules 12.1.5(b), (c) and (d) and Rule 3.1.5(e).

[63] We listened carefully to Mr Carlyon's rationale for these activities to be prohibited. He is particularly concerned that existing operators would not be proactive in reducing their risk profile, particularly in response to neighbouring sensitive activities.²² It is our preliminary view, however, that his aim – to encourage the reduction of risk – would be better incentivised by policies enabling petroleum activities within the PARA. The proposed objectives and policies provide strong direction against the co-location of



²⁰ Sub-clause numbering is as per the planning JWS, dated 6 September 2019.

²¹ Planning JWS, dated 6 September 2019.

²² Transcript (Carlyon) at 487.

petroleum activities and sensitive activities within the fatality risk contour. The policies on the PARA, including amendments proposed by the court, would apply in an even wider range of circumstances. So, while we understand his rationale to prohibit these activities, we find that there are other preferred planning responses.

[64] If the court's proposed amendments are not confirmed, we would still conclude that the lesser of the two restrictive activity status options is appropriate because of the potential for the risk profile shown on a planning map (PARC) to reduce over time. If the risk profile has changed, then the new or altered²³ activities ought at least to have an opportunity to apply for resource consent and to be assessed on their merits.

Sensitive activities

Restricted discretionary activities

[65] We approve the proposed restricted discretionary activity status that would apply to additions to or alterations of existing activities within the minimum setback (Rule 3.1.3(x)(ii)).

[66] However, we do not approve the application of the restricted discretionary rule where those additions or alterations are to existing sensitive activities occurring within the Petroleum Activity Risk Contour (Rule 3.1.3(x)(i)). Persons within a PARC are exposed to an unacceptable risk of fatality. The matters of discretion assume the risk may be avoided by, inter alia, the design of the building or activity. We do not recall evidence from any risk expert that could support this. For 3.1.3(x)(ii), unless the parties can satisfy us that the matters of discretion are the most appropriate method to give effect to the rule, we will direct the parties propose amendments by making this a discretionary activity.

Non-complying activities

[67] We approve a non-complying activity status for new sensitive activities coming within the PARC or, if a PARC has not been established, then coming within the minimum set back from a wellsite or petroleum production station/gas treatment plant (Rules



²³ More correctly alterations or additions to existing petroleum activities.

3.1.5(d)-(e)). We will approve also a non-complying activity for alterations and additions to habitable homes 20% or greater than gross floor area ("GFA") (Rule 3.1.5(f)).

Other provisions

Residential Zone and Township Zone

[68] Petroleum activities are (or nearly all are) located in the Rural and Rural Industrial Zones. A more nuanced response is proposed for petroleum activities seeking to locate in the other zones, with activities involving the use, storage or handling of hazardous activities being prohibited in the Residential Zone and Township Zone (Rule 12.1.6(a)). We approve this rule.

Commercial Zone and Industrial Zone

[69] We note that new petroleum activities within the commercial and industrial zones are non-complying activities where the fatality risk contour is not contained within the PARA (Rule 12.1.5(b)). Counsel are to confirm whether there are any existing petroleum activities within the Commercial and Industrial Zones. If there are none, we interpret this rule as incentivising all new petroleum activities to establish a PARA. If correct, we would approve this rule.

20.5.28 Sensitive Activities Near Petroleum Exploration or Petroleum Production Activity

[70] The matters to be considered include sub-clause (c), as follows:²⁴

... design of the building and activity and other measures to avoid or mitigate the risks, including surrounding topography, the location and nature of emergency egress points to facilitate movements away from the hazard;

[71] The "Unacceptable Risk" is not one that is able to be mitigated. We will direct the planners give further consideration to sub-clause (c), including its deletion altogether.



²⁴ Planners JWS, dated 6 September 2019.

Explanation of policies

[72] We have suggested minor changes to the draft text. These changes are marked up in Appendix 1 to this decision.

[73] The changes include:

- (a) consistent with other defined terms, capitalising Unacceptable Risk;
- (b) deleting the text²⁵ explaining the provenance of the fatality risk contour. The text is not an accurate description of the contour; the phrase “international evidence indicates” could be interpreted by an uninformed reader as challenging the veracity and significance of the risk to human life represented by the contour. Instead we introduce the concept of an “Unacceptable Risk” in the second paragraph of the explanation;
- (c) amending the text²⁶ to make clear that the plan incentivises the internalisation of risk;
- (d) amending the text²⁷ to delete the reference to an appeal. The text does not aid in the understanding of the provisions. Moreover, the text is inaccurate in that the notified plan contained setbacks that were subsequently deleted by the District Council.

Neighbour’s approval for Unacceptable Risk

[74] An issue arose during the hearing that is a matter of importance to the public generally.

[75] Pursuant to ss 95D(e), 95E(3)(b) and 104(3)(a)(ii) a consent authority must disregard any effect on a person who has given written approval to the application for resource consent. On its face, the section is broad enough to encompass the unacceptable risk of fatality, and/or chronic or acute health effects from contaminants discharged to air by petroleum activities. The issue that arose is whether written approval for an application for resource consent is a “mechanism” referred to in the Explanation to the Section 2.8 and sub-clause (g) of the proposed restricted discretionary activity rules (Rules 12.1.3(b) and (c), JWS numbering).



²⁵ The fourth paragraph of the Explanation.

²⁶ The second paragraph of the Explanation.

²⁷ The third paragraph of the Explanation.

[76] All counsel agree in principle any such approval will not preclude the consent authority considering the wider effects of the proposed activity, including (relevantly) effects on members of the public and on any person who has not given their approval (entered into an agreement) with the operator.²⁸ A rather more considered approach to ss 95D(e), 95(3)(b) and 104(3)(a)(ii) is required than one that is to simply set aside the effects of a proposal, regardless of their significance, on persons who have given their approval to the same; per Court of Appeal in *Royal Forest and Bird Protection Society of New Zealand Inc v Kapiti Coast District Council* at paragraphs [7] and [26]-[27].²⁹

[77] We agree with the District Council and others, that persons who have given their approval to a proposed activity are not the “sole arbiter of effects”; this is the consent authority’s role.³⁰ If it is reasonably foreseeable that a member of the public may be present at or in occupation of the sensitive activity, we find that given the nature, scale and severity of adverse human health effects, the effect on those persons is able to be considered pursuant to s 104(1)(a). More so, gaining the neighbour’s approval is not a “mechanism” either in respect of the PARA or the restricted discretionary activity rules because it would not implement the corresponding objectives which are to “avoid” Unacceptable Risk.

[78] While TEW continues to press for prohibited activity status for some rules,³¹ under s 104D any proposal to extend the fatality risk contour over an existing sensitive activity would be contrary to Objectives 10 2.8.3a and 2.8.3b of the plan. We find this is so regardless of whether the owner/occupier of the sensitive activity has given their approval to the same. To ensure that there is consideration of lesser risks, which may also have serious consequences for human health, we will direct the rules for restricted discretionary activities be amended to include consideration of whether lesser risks will be minimised as low as reasonably practicable (also referred to in the plan as “ALARP”).

[79] While the District Council, PEPANZ and Federated Farmers do not regard it necessary to introduce new measures clarifying the administration of the plan, they



²⁸ Joint memorandum of counsel for South Taranaki District Council, PEPANZ and Federated Farmers dated 28 August 2019 at [3]-[5]. Memorandum of Taranaki Energy Watch dated 28 August 2019 at [2].

²⁹ [2009] NZCA 73.

³⁰ Joint memorandum of counsel for South Taranaki District Council, PEPANZ and Federated Farmers dated 28 August 2019 at [13].

³¹ Rules 12.1.3(b) and (c) and Rule 3.1.5(e).

proffered three tools. The measures are supported by TEW and, in our view, warranted. We will direct the planners confer and propose wording for the same.

Minor drafting corrections

[80] We have suggested minor corrections to the draft provisions. These corrections are marked up in Appendix 1 to this decision.

[81] The corrections include:

- (a) consistent with other defined terms, capitalising Unacceptable Risk;
- (b) correcting the reference to “facility” to read “fatality” in the definition of Petroleum Activity Risk Contour;
- (c) deleting reference to “Production” where it appears in Rules 12.1.3(b) and (c); and
- (d) consistently applying the phrase “does not contain any existing sensitive activities”.

Directions

[82] We direct the parties to confer and respond by **Friday 13 March 2020** either confirming the changes proposed by the court as set out in Appendix 1 and/or to seek further directions. Where the parties do not agree with the court’s suggested changes, the parties are to propose a timetable for the production of a joint witness statement by the planning witnesses.

[83] The matters to be addressed by the planning witnesses are to include:

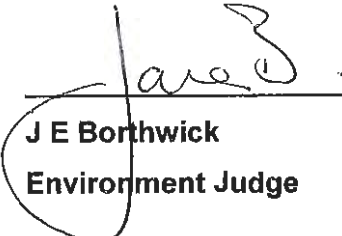
- (a) their response to the issues raised by the court and (where required) proposed alternative wording;
- (b) a new restricted discretionary activity rule as discussed at paragraph [52]; and
- (c) the wording for the three tools discussed under “Neighbour’s approval for Unacceptable Risk”.



[84] Also by **Friday 13 March 2020**, the parties will collate and file a set of provisions in respect of which they were earlier agreed and seek orders by consent (landfarming, definitions for peak particle velocity and seismic survey etc).

[85] Finally, and again by **Friday 13 March 2020**, the District Council is to respond to paragraph [16], advising what action it proposes to take if it is confirmed that there are sensitive activities located in an area of Unacceptable Risk.

[86] Leave is reserved for parties to apply for further directions.



J E Borthwick
Environment Judge



Appendix 1: Suggested Plan Provisions in response to Interim Decision of Environment Court on Risks from Hazardous Substances

Where approved, the court has accepted the track changes made by the parties to the proposed plan.

All the court's amendments are shaded blue.

Section 1 Definitions

Add the following new definitions to Section 1.11:

Petroleum Activity Risk Area (for petroleum exploration and petroleum production provisions) means:

- the area defined as the 1×10^{-6} individual fatality risk contour contained in one or more allotments, sections or parcels in relation to which the operator of a petroleum exploration and petroleum production activity (currently established or proposed to be established) either owns or has an enforceable interest in (including lease, covenant, and legal contract); and
- precludes the establishment or operation of sensitive activities for the duration of the operation of the petroleum exploration and petroleum production activity within this area.

Commented [BJ1]: Seek further submissions on interpretation.

Petroleum Activity Risk Contour (for petroleum exploration and petroleum production provisions) means the 1×10^{-6} individual fatality risk contour shown on the Planning Maps.

Commented [BJ2]: Accept, with the amendment tracked.

Unacceptable Risk

(for petroleum exploration and petroleum production provisions) **significant hazardous facilities provisions** means exposure of sensitive activities (including residential dwelling) to an individual fatality risk level exceeding 1×10^{-6} per year.

Commented [BJ3]: Propose amendment tracked.

Section 2.8 Hazardous Substances and Contaminated Land

Add the following new Issue to Section 2.8:

Issue 2.8.1a The risks to human health and property from incompatible land use when new sensitive activities locate in proximity to existing significant hazardous facilities.

Add the following text after the first sentence in the 3rd paragraph to the Explanation in the Issues section in Section 2.8:

Significant hazardous facilities can pose a risk to surrounding land uses from emergency events, such as explosions or large fires. Such emergency events have a very low probability of occurring, though if they occur, they can pose high potential harm to nearby people and damage to property.



Add the following new Objective and heading to Section 2.8:

Petroleum Exploration and Petroleum Production

- Objective 2.8.3a** Recognise the important benefits associated with the use, storage, disposal and transportation of hazardous substances associated with petroleum exploration and petroleum production activities whilst also ensuring that risks to the environment and human health are:
- (a) Avoided where the risks are unacceptable; and
 - (b) Minimised for lesser risks as low as reasonably practicable (ALARP).

Add the following new Objective to Section 2.8:

- Objective 2.8.3b** Sensitive activities are located where they:
- (a) Avoid areas exposed to an unacceptable level of risk from existing petroleum exploration and petroleum production activities; and
 - (b) Do not compromise existing petroleum exploration and petroleum production activities due to reverse sensitivity effects and/or incompatibility.

Retain Policies 2.8.5 – 2.8.11 as below, except for the amendment to Policy 2.8.9 as previously agreed at expert conferencing and add a new sub-heading:

Significant Hazardous Facilities

Commented [BJ4]: Accept amended heading.

- Policy 2.8.5** Ensure significant hazardous facilities are located, designed, constructed and managed to minimise risk to the extent practicable and avoid unacceptable risk to the environment and human health.
- Policy 2.8.6** Ensure appropriate facilities and systems are provided to avoid accidental or unintentional release, or loss of control (such as spills and gas escapes) of hazardous substances.
- Policy 2.8.7** To avoid duplication of the regulation of activities controlled by the Hazardous Substances and New Organisms Act 1996 (HSNO) and other workplace safety law by:
- (a) Generally providing for activities that meet the relevant requirements of the HSNO Act and other workplace safety law as permitted activities; and
 - (b) Only requiring resource consents for activities that may have actual and potential effects that are cumulative, or where there is significant potential risk of adverse effects on the environment or human health.
- Policy 2.8.8** Manage the location of significant hazardous facilities by:
- (a) Locating significant hazardous facilities to avoid or adequately mitigate adverse effects, including risks, to people, property and the environment in the following situations:
 - (i) In close proximity to sensitive activities;
 - (ii) Within and adjacent to significant areas of indigenous vegetation and habitats of indigenous fauna;
 - (iii) Adjacent to significant waterbodies;
 - (iv) Within and adjacent to Sites of Significance to Tāngata Whenua or sites of historical or archaeological significance;
 - (v) Within the Coastal Protection Area and Flood Hazard Area, and areas at risk of ground rupture from known active faults.
 - (b) Ensuring adequate separation distances or other measures between significant hazardous facilities and activities sensitive to significant hazardous facilities to avoid or adequately mitigate risk to people and property; and



- (c) Identifying, assessing and managing adverse effects (including cumulative) of significant hazardous facilities to mitigate risk to people, property and the environment.

- Policy 2.8.9 Manage potential reverse sensitivity conflicts between existing lawfully established significant hazardous facilities and new sensitive activities through subdivision and land use activity controls and other appropriate measures¹
- Policy 2.8.10 Disposal of hazardous wastes is to be undertaken in an environmentally safe manner at authorised facilities to avoid risk of hazardous substances creating adverse effects on the environment and human health.
- Policy 2.8.11 Transportation of hazardous substances, including wastes, as part of a land use activity should be undertaken in a safe manner, by modes and transport routes which prevent or minimise the risk of adverse effects on other land use activities, the environment, and other transport users.

Add the following new Policies and heading to Section 2.8:

Petroleum Exploration and Petroleum Production

- Policy 2.8.11(a) Ensure petroleum exploration and petroleum production activities are located, designed, constructed and managed to avoid Unacceptable Risk and minimise lesser risks as low as reasonably practicable (ALARP) to the environment and human health.
- Policy 2.8.11(b) Ensure new petroleum exploration and petroleum production activities are located where they do not expose existing sensitive activities to Unacceptable Risk.
- Policy 2.8.11(c) Require new petroleum exploration and petroleum production activities to internalise the unacceptable risk within the site of the activity unless, where the unacceptable risk extends outside the site of the activity, a mechanism avoids the unacceptable risk to sensitive activities.

OR Court's alternative wording

Require new petroleum exploration and petroleum production activities to internalise the within the Petroleum Activity Risk Area.

- Policy 2.8.11(h) Ensure additions and alterations to existing petroleum exploration and petroleum production activities do not expose existing sensitive activities to Unacceptable Risk.

Commented [BJ5]: Reordered, sub-clause (h).

- Policy 2.8.11(XXX) Encourage additions and alterations to existing petroleum exploration and petroleum production activities to internalise the Unacceptable Risk within the Petroleum Activity Risk Area.

Commented [BJ6]: New sub-clause

- Policy 2.8.11(d) Avoid the establishment of petroleum exploration and petroleum production activities which use, store or handle hazardous substances in the Residential Zone and Township Zone due to risk to the environment and human health.

¹ Amendment agreed in Planning JWS dated 6 March 2018 (page 6).
Joint Witness Statement – Planning dated 6 September 2019



Policy 2.8.11(e) Identify for existing petroleum exploration and petroleum production activities the areas of **Unacceptable Risk** based on a level of risk threshold of 1×10^{-6} (risk contour) on the Planning Maps.

OR Court's alternative wording

Amend the planning maps by including the Petroleum Activity Risk Contour for existing petroleum exploration and petroleum production activities.

Policy 2.8.11(f) That petroleum exploration and petroleum production risk contours will be **uplifted from the Planning Maps in whole or in part and for separation distances to no longer apply where:**

- (a) **there are no risk generating activities being undertaken; or**
- (b) **the level of risk reduces significantly and extant consents or rules do not enable risk generating activities to establish or intensify in the future.**

~~Policy 2.8.11(g) Manage additions and alterations to existing petroleum exploration and petroleum production activities where:~~

- ~~(a) the **Unacceptable Risk** extends outside the existing identified 1×10^{-6} risk contour on the Planning Maps, or~~
- ~~(b) the nature and extent of the 1×10^{-6} risk contour is not on the Planning Maps; subject to avoiding **Unacceptable Risk** to sensitive activities.~~

Commented [BJ7]: Seek further submissions. If in substance the same as 2.8.11 (h) then delete.

~~Policy 2.8.11(h) Ensure additions and alterations to existing petroleum exploration and petroleum production activities do not expose existing sensitive activities to **Unacceptable Risk**.~~

Commented [BJ8]: Reordered to above.

Policy 2.8.11(i) **Avoid new sensitive activities locating in areas which are exposed to **Unacceptable Risks** from existing petroleum exploration and petroleum production activities.**

Policy 2.8.11(j) **Where the nature and extent of the 1×10^{-6} risk contour is not on the Planning Maps, manage the location of new sensitive activities near existing petroleum exploration and petroleum production activities by applying separation distances based on generic fatality consequence distances for petroleum exploration and petroleum production activities.**

Amend the Explanation of Policies to Section 2.8 as follows:

These objectives and associated policies have been specifically drafted to avoid duplication between the District Plan and the HSNO Act and other regulations managing hazardous substances. The Council recognises that the HSNO Act is the primary legislation that controls the manufacture, import, transportation, storage, use and disposal of hazardous substances, and that it manages hazardous facilities. Under the HSNO Act, the Environmental Protection Authority is the regulatory agency who assess and decide on applications which seek to introduce hazardous substances or new organisms into New Zealand. Under the Health and Safety at Work (HSW) Act, WorkSafe New Zealand is responsible for the use of hazardous substances in workplaces, such as factories, farms and drilling sites.

Whilst compliance with the HSNO Act, HSW Act and other regulations will generally ensure that any adverse effects arising from the use, storage, disposal and transportation of hazardous substances are effectively managed, the District Plan applies additional controls on significant hazardous facilities and



for sensitive environments. Significant hazardous facilities have the ability to can adversely affect the environment and community if they are not appropriately sited and/or managed. Particular regard would be had to risks to neighbouring property (including dwellings) and the community from fire, explosion or natural hazard events affecting the significant hazardous facility. For these reasons, the Rural Industrial zoned land has been identified as the most appropriate location for significant hazardous facilities to locate, acknowledging the Rural Zone can also accommodate significant hazardous facilities if effects can be appropriately managed. However, in identifying this, it is recognised that these zones often contain sensitive natural environments or have unusual characteristics (i.e., waterbodies, natural hazards etc) that also need to be taken into account and carefully managed. The District Plan therefore applies controls where particular locations have been identified where the environment may be more sensitive to adverse effects from significant hazardous facilities. In addition, a risk assessment for each new significant hazardous facility would determine the appropriate distance for locating this facility in relation to existing sensitive activities.

~~Through an appeal on the Proposed Plan relating to petroleum exploration and petroleum production facilities, specific provisions were added to This Plan to manages the risks to human health and the environment from additions and alterations to existing petroleum exploration and petroleum production activities as well as risks from new sensitive activities locating close to existing petroleum exploration and petroleum production activities.~~

Commented [BJ9]: Reordered and amended.

~~The risks from petroleum exploration and petroleum production cannot be fully eliminated, only reduced. There is a level of risk of human fatality that is considered unacceptable. The Plan defines this as the "Unacceptable Risk". Where risks are not unacceptable, the Plan adopts the principle of minimising risks to As Low As Reasonable Practicable (ALARP) which is a concept used in health and safety context.~~

Commented [BJ10]: Reordered and amended.

In relation to new petroleum exploration and petroleum production activities, the Unacceptable Risk is to be internalised within the site of the activity unless, and where the Unacceptable Risk extends outside the site of the activity, an enforceable mechanism(s) is in place to avoid the Unacceptable Risk to sensitive activities. For example, such mechanisms may comprise covenants or legal agreement between the operators and neighbouring landowner.

~~International evidence indicates that a risk (probability of an event occurring – i.e. frequency x consequence) of 1/1,000,000 (1 x 10⁻⁶ or read as one in a million) per year of fatality to an individual person if they were to spend 365 days per year, 24 hours per day at that location, is the level of unacceptable risk for residential use from these events. This level of Unacceptable Risk has been adopted in this plan. Where risks are not unacceptable, the Plan adopts the principle of minimising risks to As Low As Reasonable Practicable (ALARP) which is a concept used in health and safety context. This principle is based on a concept where the balance between risk, cost and safety margin is reasonably achieved. For a risk to be ALARP, it must be demonstrated that the cost involved in reducing risk further would be grossly disproportionate to the benefit gained.~~

In addition to the above, it is equally important that more sensitive activities such as residential subdivision and development are managed so that reverse sensitivity matters can be averted. The risk posed by significant hazardous facilities is often directly related to the nature and proximity (particularly in terms of population density) of the more sensitive receiving environment. The establishment of new sensitive activities close to an existing significant hazardous facility may result in unacceptable risks to the new activity and/or reverse sensitivity effects on the existing facility. Accordingly, site-specific (e.g. 1 x 10⁻⁶ individual fatality risk contour) and the zone-based (e.g. setbacks and list of activities) sections of the District Plan contain provisions to manage incompatible land uses and reverse sensitivity matters. Where petroleum exploration or petroleum production activities are decommissioned and/or wells capped, and the ability to establish or intensify in the future is not enabled by the rules or consents, there is no longer a risk to sensitive activities. In these circumstances, the provisions to manage incompatibility and reverse sensitivity for new sensitive activities no longer apply.



In terms of the potential risks to the environment and human health, the inappropriate disposal of hazardous waste can result in contamination of soil, air, groundwater or surface water, both at the source and at locations remote from the source through migration. The improper release of hazardous substances into the environment presents a major threat to the life supporting capacity of the environment and community health. Hazardous waste must be disposed of at a licensed hazardous waste facility that can accept such waste, or alternatively be treated to reduce the level or mobility of the contaminants to acceptable levels.

The transport of hazardous substances on land (including State Highways and local roads) is controlled by the Land Transport Rule: Dangerous Goods 2005 (created under the Land Transport Act 1998), and New Zealand Standard 5433:2007 which is a means of compliance. Accordingly it is not considered necessary for the transport of hazardous substances in the District to be the subject of resource consent.

Add the following new Method to Section 2.8 under the sub-heading 'Collection and Provision of Information':

- Collect and maintain publicly available information about the level of risk from petroleum exploration and petroleum production activities. This information would be supplied by operators of petroleum exploration and petroleum production activities via resource consent applications or in meeting their obligations under other legislation or regulations.
- Regularly share changes to risk assessment information and risk contours between operators and the Council, and undertake plan changes to keep the Petroleum Activity Risk Contour shown on the Planning Maps up to date.

Section 12: Hazardous Substances Rules

Add the following new Permitted Activity Rule to Section 12.1.1:

Rule 12.1.1 (XXX) In the Rural Industrial Zone for sites with a Petroleum Activity Risk Contour shown on the Planning Maps, alterations or additions to existing petroleum production activities provided the new 1×10^{-6} individual fatality risk contour does not extend outside the Petroleum Activity Risk Area.

Commented [BJ11]: Court's proposed new rule.

Rule 12.1.1 (b) In the Rural Industrial Zone for sites with a Petroleum Production Activity Risk Contour shown on the Planning Maps, alterations or additions to existing petroleum production activities provided the new 1×10^{-6} individual fatality risk contour does not extend beyond the Petroleum Production Activity Risk Contour shown on the Planning Maps for the subject site.

Commented [BJ12]: Not approved, court seeks further evidence.

Rule 12.1.1 (c) In the Rural Industrial Zone for sites with no Petroleum Production Activity Risk Contour shown on the Planning Maps, alterations or additions to existing petroleum production activities where the 1×10^{-6} individual fatality risk contour does not extend beyond the Rural Industrial Zone.

Add the following new Restricted Discretionary Activity Rule to Section 12.1.3:

Rule 12.1.3 (b) In the Rural Industrial Zone for sites with a Petroleum Production Activity Risk Contour shown on the Planning Maps, alterations or additions to existing petroleum production activities where the new 1×10^{-6} individual fatality risk contour extends outside beyond the Petroleum Production Activity Risk Contour shown on the Planning Maps for the subject site and does not contain any existing sensitive activities.

Commented [BJ13]: Subject to directions, the parties are to consider a new RDA rule for the activity described in 12.1.1 (b) above.

Commented [BJ14]: Court seeks further evidence on its proposed sub-clause (d) and renumbered sub-clause (h)

Matters of discretion:



- (a) Changes to operations and site layout arising from the proposed alterations or additions to the facility, including the location of hazardous substances on site.
- (b) Separation distances from sensitive activities and sensitive environments, including the number of people potentially at risk from the proposed alterations or additions to the facility.
- (c) Any new or increase in potential health or environmental hazards and exposure pathways arising from the proposed alterations or additions to the facility and any on site containment measures proposed.
- (d) Application of risk management (ALARP) to lesser risks.
- (e) Proposed emergency management planning (spills, fills and other relevant hazards).
- (f) Proposed monitoring and maintenance schedules.
- (g) Compliance with relevant Codes of Practice and standards and relevant regional plan permitted activity performance stands/resource consents.
- (h) Controls proposed to prevent or restrict the establishment of new sensitive activities within the area of Unacceptable Risk.

Rule 12.1.3 (c) In the Rural Industrial Zone for sites with no Petroleum Production Activity Risk Contour shown on the Planning Maps, alterations or additions to existing petroleum production activities where the 1×10^{-6} individual fatality risk contour does not contain any existing sensitive activities.

Commented [BJ15]: Court seeks further evidence on its proposed sub-clause (d) and renumbered sub-clause (h)

Matters of discretion:

- (a) Changes to operations and site layout arising from the proposed alterations or additions to the facility, including the location of hazardous substances on site.
- (b) Separation distances from sensitive activities and sensitive environments, including the number of people potentially at risk from the proposed alterations or additions to the facility.
- (c) Any new or increase in potential health or environmental hazards and exposure pathways arising from the proposed alterations or additions to the facility and any on site containment measures proposed.
- (d) Application of risk management (ALARP) to lesser risks.
- (e) Proposed emergency management planning (spills, fills and other relevant hazards).
- (f) Proposed monitoring and maintenance schedules.
- (g) Compliance with relevant Codes of Practice and standards and relevant regional plan permitted activity performance stands/resource consents.
- (h) Controls proposed to prevent or restrict the establishment of new sensitive activities within the area of Unacceptable Risk.

Rule 12.1.3 (d) In the Rural Zone, alterations or additions to existing petroleum exploration and production activities where the new 1×10^{-6} individual fatality risk contour is contained within the Petroleum Activity Risk Area for the subject site.

Commented [BJ16]: Court's proposed new rule.

Matters of discretion:

- (a) Changes to operations and site layout arising from the proposed alterations or additions to the facility, including the location of hazardous substances on-site.
- (b) Separation distances from sensitive activities and sensitive environments, including the number of people potentially at risk from the proposed alterations or additions to the facility.
- (c) Any new or increase in potential health or environmental hazards and



- exposure pathways arising from the proposed alterations or additions to the facility and any on site containment measures proposed.
- (d) Application of risk management (ALARP) to lesser risks.
- (e) Proposed emergency management planning (spills, fills and other relevant hazards).
- (f) Proposed monitoring and maintenance schedules.
- (g) Compliance with relevant Codes of Practice and standards and relevant regional plan permitted activity performance standards/resource consents.

Add the following new Discretionary Activity Rule to Section 12.1.4:

- Rule 12.1.4 (b) In the Rural Industrial Zone, Rural Zone, Commercial Zone and Industrial Zone, new petroleum exploration and petroleum production activities where the 1×10^{-6} individual fatality risk contour is contained within the Petroleum Activity Risk Area.
- Rule 12.1.4 (c) In the Rural Zone for sites with no Petroleum Activity Risk Contour shown on the Planning Maps, alterations or additions to existing petroleum exploration and petroleum production activities where the 1×10^{-6} individual fatality risk contour ~~is contained within the Petroleum Activity Risk Area, or extends outside the Petroleum Activity Risk Area and does not contain any~~ ~~contains no~~ existing sensitive activities.
- Rule 12.1.4 (d) In the Rural Zone, alterations or additions to existing petroleum exploration and production activities where the new 1×10^{-6} individual fatality risk contour extends outside the Petroleum Activity Risk Contour shown on the Planning Maps, ~~and does not contain any~~ ~~contains no existing~~ sensitive activities.

Commented [BJ17]: Amended, the court proposes this activity has RDA classification.

Add the following new Non-Complying Activity Rules to Section 12.1.5:

- Rule 12.1.5 (b) In the Rural Industrial Zone, Rural Zone, Commercial Zone and Industrial Zone, new petroleum exploration and petroleum production activities where the 1×10^{-6} individual fatality risk contour extends outside the Petroleum Activity Risk Area and does not contain ~~contains~~ one or more existing sensitive activities.
- Rule 12.1.5 (c) In the Rural Industrial Zone and Rural Zone, alterations or additions to existing petroleum exploration and production activities where the new 1×10^{-6} individual fatality risk contour extends outside the Petroleum Activity Risk Contour shown on the Planning Maps, and contains one or more existing sensitive activities.
- Rule 12.1.5 (d) In the Rural Industrial Zone and Rural Zone for sites with no Petroleum Production Activity Risk Contour shown on the Planning Maps, alterations or additions to existing petroleum exploration and petroleum production activities where the 1×10^{-6} individual fatality risk contour contains one or more existing sensitive activities.
- ~~Rule 12.1.5 (e) In the Residential Zone and Township Zone, petroleum exploration and petroleum production activities not involving the use, storage or handling of hazardous substances.~~
- ~~Rule 12.1.5 (d) In the Rural Industrial Zone for sites with no Petroleum Production Activity Risk Contour shown on the Planning Maps, alterations or additions to existing petroleum production activities where the 1×10^{-6} individual fatality risk contour contains one or more existing sensitive activities.~~



Add the following new Prohibited Activity Rules to Section 12.1.6:

Rule 12.1.6 (a) In the Residential Zone and Township Zone, petroleum exploration and petroleum production activities involving the use, storage or handling of hazardous substances.

Section 3: Rural Zone Rules

Add the following new setback to Table 1 in Rule 3.2.2.1 Permitted Activity Performance Standard:

Type of activity	Minimum setback: State Highway	Minimum setback: Road boundary	Minimum setback: Other site boundaries	Maximum height	Additional setbacks/requirements
Dwelling unit, home occupation and other sensitive activities					<p>Minimum setbacks: 250m from wellsites which do not have a Petroleum Activity Risk Contour shown on the Planning Maps.</p> <p>For the purposes of this rule, the 250m distance is measured from the source of risk (i.e. location of existing or consented wellheads and/or surface production equipment,).</p>
					<p>650m from a petroleum production station/gas treatment plant which does not have a Petroleum Activity Facility Risk Contour shown on the Planning Maps.</p> <p>For the purposes of this rule, the 650m distance is measured from the security fence within which the hazardous substances are used and stored at the petroleum station/gas treatment plant.</p>



Add the following new Restricted Discretionary Activity Rule to Section 3.1.3:

- Rule 3.1.3 (x) Any additions or alterations of habitable rooms up to 20% of GFA to existing sensitive activity which is either:
- (i) within a Petroleum Activity Risk Contour shown on the Planning Maps,
 - or
 - (ii) within 250m of a wellsite or 650m of a petroleum production station/gas treatment plant which does not have a Petroleum Activity Risk Contour shown on the Planning Maps.

Commented [BJ18]: Accept in part (x)(ii). Directed further evidence on balance.

Matters of discretion:

- (a) Design of the building and activity.
- (b) Other measures to avoid or mitigate the risks, including surrounding topography, the location and nature of emergency egress points to facilitate movements away from the hazard.

The GFA to be at the date the District Plan is made operative.

Add the following new Non-Complying Activity Rules to Section 3.1.5:

- Rule 3.1.5 (d) Any new sensitive activity within 250m of a wellsite or 650m of a petroleum production station/gas treatment plant which does not have a Petroleum Activity Risk Contour shown on the Planning Maps.

- Rule 3.1.5 (e) Any new sensitive activity within a Petroleum Exploration or Petroleum Production Activity Risk Contour shown on the Planning Maps.

- Rule 3.1.5 (f) Any additions or alterations of habitable rooms 20% or greater of GFA to existing sensitive activity which is either:
- (i) within a Petroleum Exploration or Petroleum Production Activity Risk Contour shown on the Planning Maps; or
 - (ii) within 250m of a wellsite or 650m of a petroleum production station/gas treatment plant which does not have a Petroleum Activity Risk Contour shown on the Planning Maps.

The GFA to be at the date the District Plan is made operative.

Section 20: Resource Consent Information Requirements and Assessment Matters

Add the following new Assessment Criteria to Section 20.5:

20.5.28 Sensitive Activities Near Petroleum Exploration or Petroleum Production Activity

An assessment of the risks to human health and risks of reverse sensitivity where a new sensitive activity is proposed within an individual fatality risk area or the separation distance from a petroleum exploration or petroleum production activity, the following information will be required:

- (a) The nature, magnitude and extent of risks of an emergency event from the petroleum exploration or petroleum production activity, including whether the proposed new sensitive activity is sited outside the area of Unacceptable Risk (1×10^{-6});



- (b) Consultation with the operator of the existing petroleum exploration or petroleum production activity, and their view on the nature and location of the proposed new sensitive activity in terms of level of risk and potential reverse sensitivity effects.

The following matters will be considered:

- (c) Design of the building and activity and other measures to avoid or mitigate the risks, including surrounding topography, the location and nature of emergency egress points to facilitate movements away from the hazard.

Commented [BJ19]: Directed further evidence.

Planning Maps

Add new Petroleum Exploration and Petroleum Production Risk Contour to the Planning Maps for the following facilities:

- Kapuni Production Station
- Kapuni Gas Treatment Plant
- Maui Production Station
- Kupe Production Station
- Rimu Production Station
- Add any wellsites

