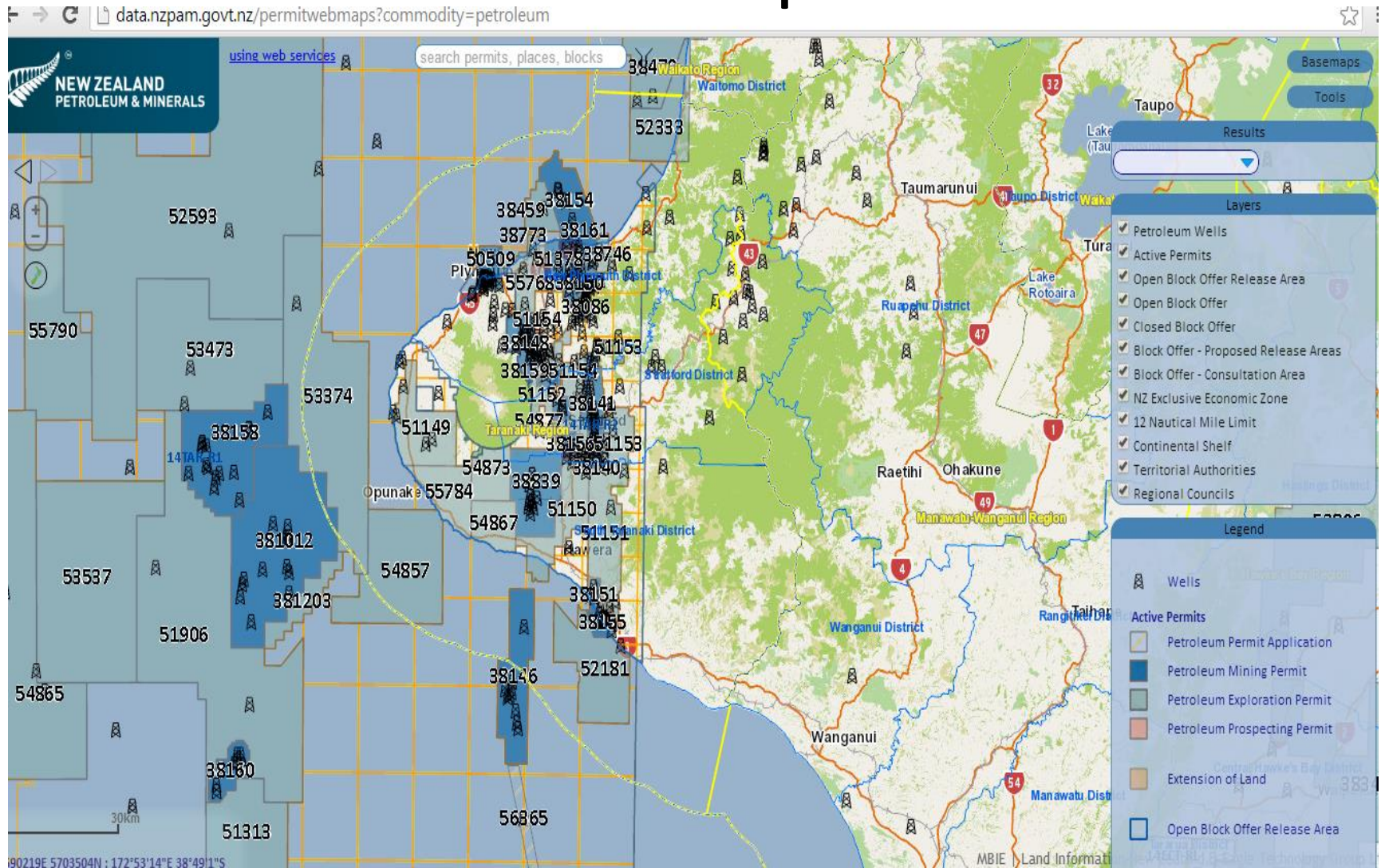


Taranaki Oil and Gas permits



View from our house prior to
TAG Oil Cheal-B well site



View from our house TAG Oil
Cheal-B well site



Taranaki Regional Council discharge consents

“Each of the consent applications were processed on a non-notified basis as Cheal Petroleum Limited obtained the landowner approvals as an affected party, and the Council were satisfied that the environmental effects of the activity would be minor.”

<https://www.trc.govt.nz/assets/Documents/Environment/Monitoring-OGdrilling/MR2013-ChealBExplorationWellsite.pdf>

Decision Date
(Change): 18 September 2013

Commencement Date
(Change): 18 September 2013 (Granted: 23 March 2006)

Conditions of Consent

Consent Granted: To discharge treated stormwater and treated produced water from hydrocarbon exploration and production operations at the Cheal-B wellsite onto and into land in the vicinity of the Ngaere Stream in the Patea catchment

Expiry Date: 1 June 2022

Review Date(s): June 2016

Site Location: Cheal-B wellsite, 2 Taylor Road, Stratford
(Property owner: RC & CA Taylor)

Legal Description: Lot 1 DP 18576 Lots 1 & 2 DP 20526 Blk VI Ngaere SD
(Discharge source & site)

Grid Reference (NZTM) 1712675E-5640813N

Catchment: Patea

Tributary: Ngaere

Name of
Consent Holder: Cheal Petroleum Limited
1407-1050 Burrard Street
Vancouver BC
CANADA V6Z 2S3

Consent Granted
Date: 23 March 2006

Conditions of Consent

Consent Granted: To discharge emissions to air during flaring from well workovers and in emergency situations and miscellaneous emissions associated with production activities at the Cheal-B wellsite at or about (NZTM) 1712688E-5640749N

Expiry Date: 1 June 2022

Review Date(s): June 2010, June 2016

Site Location: Cheal-B wellsite, 2 Taylor Road, Stratford
[Property owner: RC & CA Taylor]

Legal Description: Lot 1 DP 18576 Lot 1 2 DP 20526 Blk VI Ngaere SD

Name of Consent Holder:	Cheal Petroleum Limited P O Box 402 NEW PLYMOUTH 4340
Decision Date [Change]:	24 August 2011
Commencement Date [Change]:	24 August 2011 [Granted: 23 March 2006]

Conditions of Consent

Consent Granted:	To discharge emissions to air from flaring of hydrocarbons and miscellaneous emissions associated with drill stem testing, well clean up, initial well testing and production testing associated with up to 14 wells at the Cheal-B wellsite at or about (NZTM) 1712640E-5640861N
Expiry Date:	1 June 2022
Review Date(s):	June 2016
Site Location:	Cheal-B wellsite, 2 Taylor Road, Stratford [Property owner: RC & CA Taylor]
Legal Description:	Lot 1 DP 18576 Lots 1 & 2 DP 20526 Blk VI Ngaere SD [Discharge source & site]

Name of
Consent Holder: Cheal Petroleum Limited
1407-1050 Burrard Street
Vancouver BC
CANADA V6Z 2S3

Consent Granted
Date: 23 March 2006

Conditions of Consent

Consent Granted: To discharge drilling muds, drilling cuttings and drilling wastes from hydrocarbon exploration activities at the Cheal-B wellsite onto and into land via mix bury cover at or about (NZTM) 1712585E-5640816N

Expiry Date: 1 June 2022

Review Date(s): June 2010, June 2016

Site Location: Cheal-B wellsite, 2 Taylor Road, Stratford
[Property owner: RC & CA Taylor]

Legal Description: Lot 1 DP 18576 Lots 1& 2 DP 20526 Blk VI Ngaere SD

Catchment: Patea

Tributary: Ngaere

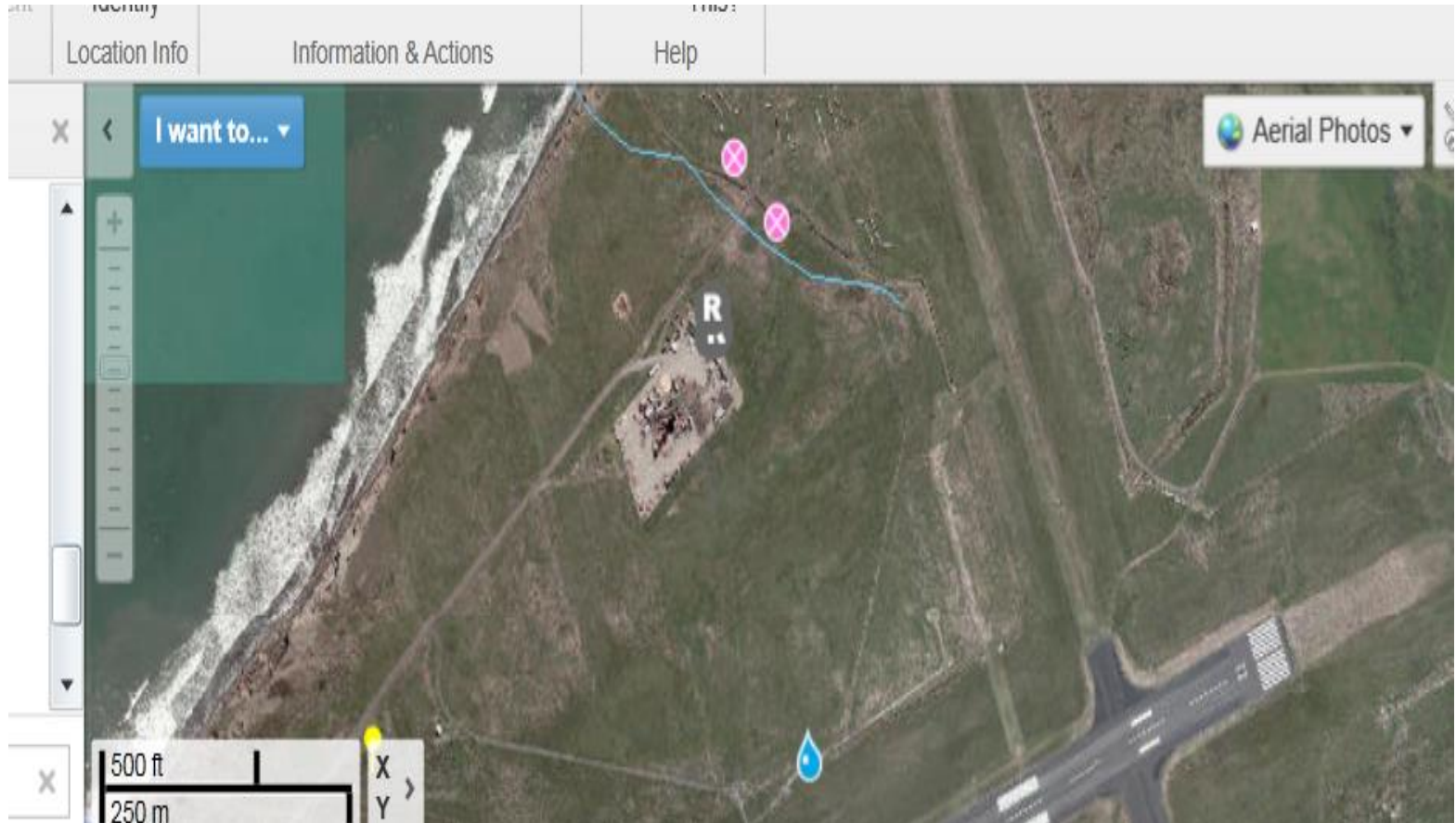
New Plymouth District



New Plymouth City -Greymouth Petroleum Moturoa-5 well site

Source: Sarah Roberts

New Plymouth Airport



Source: <http://www.trc.govt.nz/taranaki-regional-xplorer/>



Todd Energy Mangahewa-D well site

Source: Fiona Clark



Todd Energy Mangahewa-C well site

Source: Fiona Clark



Todd Energy Mangahewa-A well site

Source: Fiona Clark



Source: Sarah Roberts

Inglewood

Stratford District



TAG Oil Cheal-A well site and production station

Source: Sarah Roberts



TAG Oil Cheal-C well site

Source: Sarah Roberts



New Zealand Energy Corporation Copper-Moki well site

Source: Sarah Roberts



Flare at Copper-Moki well site

Source: Sarah Roberts

South Taranaki District



Kapuni Production Station and Vector Gas Treatment Plant (First Gas)

Source: Sarah Roberts

Drilling for oil and gas in New Zealand:
Environmental oversight and regulation

June 2014



The conclusions on environmental monitoring from the previous chapter equally apply here. While regular visual monitoring by council inspectors, and *ad hoc* sampling in response to incidents or complaints are to be encouraged, they cannot be relied on to detect pollution from a spill or a leak. The overall lack of systematic monitoring programmes that require baseline sampling and ongoing testing for the lifetime of the well (and beyond) – particularly for indicators of ecological health – is disappointing.

1. I recommend that:

The Minister for the Environment directs the Ministry for the Environment to prepare a national policy statement on onshore oil and gas exploration and production.

2. I recommend that:

Regional councils review the objectives and rules in their plans that are relevant to the oil and gas industry and:

- classify drilling an oil and gas well, fracking, and waste disposal methods as 'discretionary' activities;
- identify areas where oil and gas drilling can take place and where it cannot;
- set out core requirements for environmental monitoring;
- require applications for consents for establishing well sites and for drilling wells to be 'bundled' together;
- make explicit the circumstances when consents will be publicly notified and when they will not be;
- hold joint hearings with district councils whenever possible;
- identify and plan for the cumulative effects of an industry that may expand very rapidly.

We need your help

District councils in Taranaki are reviewing their oil and gas rules. There is a possibility this process will inform baselines for national standards affecting the rest of New Zealand. TEW need your help to pay for experts who presented strong evidence oil and gas activities should never be permitted and separation distances from our homes and families should be increased. While the experts are generous with their knowledge and time donations help pay for some of the costs of their ongoing work. Thank you for your support so far and we hope to we can count on your help again.

Help us by donating to Taranaki Energy Watch today.

www.taranakienrgywatch.org.nz

Dangerous Occurrences and Notifiable Incidents

High Hazard Unit

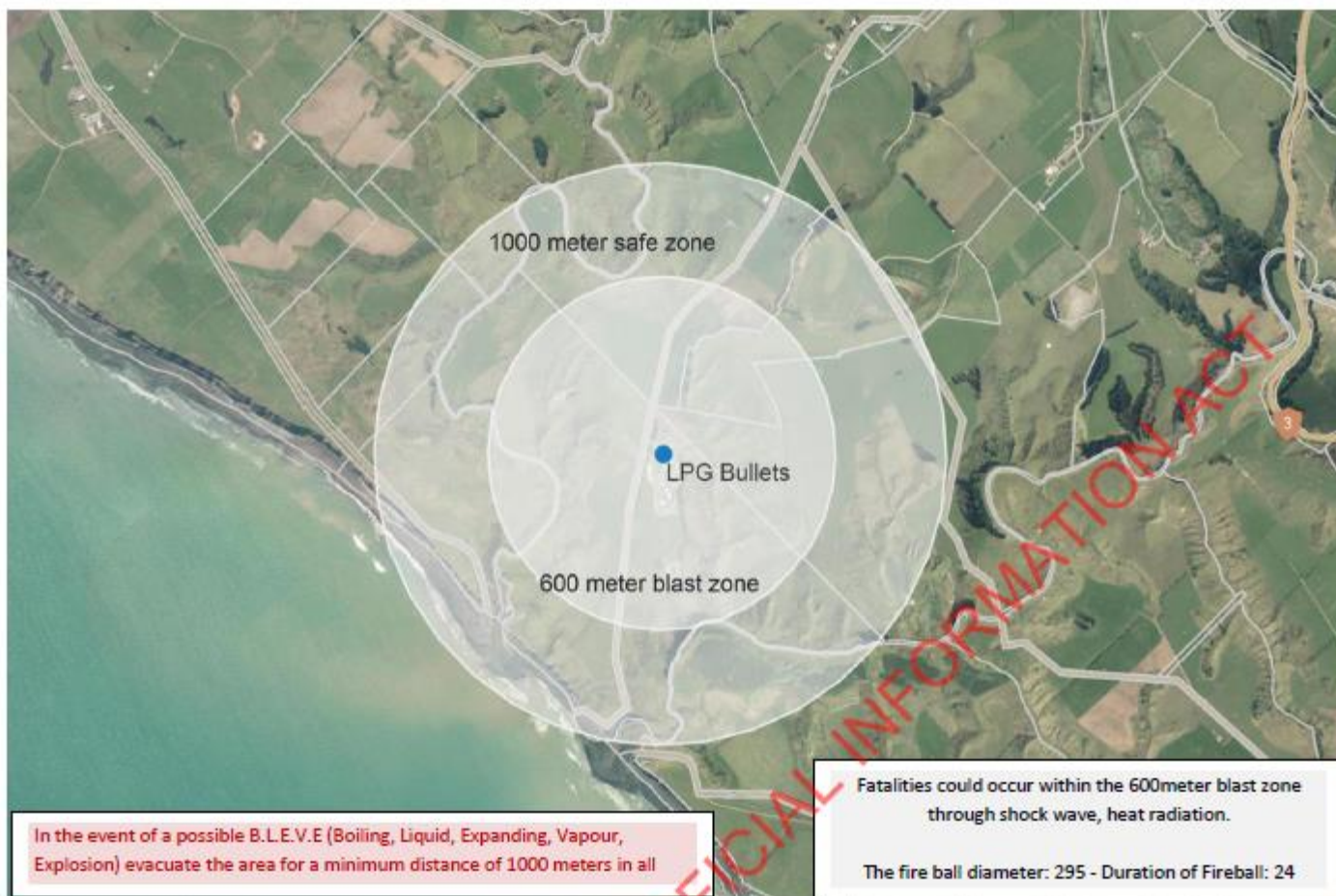
- “Dangerous occurrences and notifiable incidents are notified to the High Hazard Unit in accordance with Regulations... Dangerous occurrences and notifiable incidents include events such as uncontrolled releases of hydrocarbon vapour or petroleum liquids, damage to safety-critical equipment, unplanned events that require the installation emergency response plan to be implemented and other events that require an immediate investigation by the operator”. High Hazard Unit (OIA, 13 January 2017)
- The High Hazard recorded 60 self-reported dangerous occurrences (notifiable incidents) in the oil and gas industry from November 2016 to November 2017- 38 of these were onshore. Between July 2013 and November 2017 there were 285 in total- 123 were offshore; 162 occurred at onshore installations.

<http://www.worksafe.govt.nz/worksafe/about/what-we-do/high-hazards>



OENZ Site Emergency Response Manual

OEUP-NZ1000-MAN-SAF-001



Petroleum prospecting- seismic surveys using explosives

- Undetonated explosives in seismic surveys can happen on average 1% of the time.
- There were 24,000 charges set in the Shell Todd Kapuni seismic survey in the South Taranaki and Stratford districts.
- Some of these explosives did not detonate.
- The Council proposed a continuation of permitting the use of explosives with no oversight. TEW and PEPANZ engaged independent explosives experts who gave evidence for standards providing protection for landowners. This is with the Environment Court.



Taranaki Energy Watch appeal to Environment Court and interim findings on risk

[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 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

Planners JWS, dated 23 August 2018 at Table 1.

Taranaki Energy Watch appeal to Environment Court and interim findings on air

For well-sites

- (c) we accept the effects of emissions are likely to be below the level for chronic health effects on occupants of a dwelling house greater than 300m from the point of discharge. The position in relation to acute health effects is unknown.

For production stations

- (d) the evidence does not establish to the level required that emissions from production stations are not exceeding the guideline chronic health values. The position in relation to acute health effects is unknown;
- (e) for the avoidance of doubt, our findings relate only to residential and other sensitive activities defined in the pDP, not to outside activities undertaken as part of day to day work.

[184] We confirm the correctness of the propositions set out at paragraph [64]:

- (a) the location of sensitive activities is incompatible with petroleum activities if the sensitive activity is exposed to levels of contaminants which can cause chronic health effects (including death); and
- (b) the location of sensitive activities may be incompatible with petroleum activities if the sensitive activity is exposed to levels of contaminants which have the potential to cause acute health effects (including nausea and headaches) and where the actual experience of those effects have the potential for reverse sensitivity towards activities acting in accordance with the conditions of their consent.

[185] The Regional Council is not a party to this proceeding and so the court has not had the benefit of evidence from its air quality experts. The District Council is encouraged to approach the Regional Council to see whether it is willing to prepare a brief of evidence from a suitably qualified expert. Otherwise the parties may wish to consider seeking a witness summons from the court. The court would also be assisted if the Regional Council were to address the following questions, together with any other related questions arising from this interim decision and identified by counsel, which are important to the determination whether there is a need for separation distances between

incompatible land use activities:

Landowners Rights under the CMA 1991

<http://www.legislation.govt.nz/act/public/1991/0070/latest/DLM242536.html>

- A permit does not give the permit holder the right to go on to land covered by the permit. Before they can start work they must arrange access to the land in the permit with the landowner or the tenant.
- This can be denied and arbitration sought.
- The final decision is with the Governor General. This has never happened.
- There are people including farmers in Taranaki and the East Coast (Gisborne, Hawkes Bay, Tararua) of the North Island who have refused access to the oil and gas companies and effectively 'locked the gate' to their land and their road.