I would like to make a submission to the Taranaki Regional Council Consents and Regulatory Committee meeting on 23rd July 2013 at 10.30 am. I am also writing in response to Mr McLay's reply to my submission to the previous meeting on 10th June 2013.

http://www.trc.govt.nz/assets/Uploads/cr2307-public-web.pdf

1. I commend the Environment Court sentencing decision regarding Taranaki Ventures Limited (New Zealand Energy Corporation) and the Copper-Moki well site. The Council states "hopefully the attitude of the defendants changed such that there will not be future non-compliance in their business operations". I also hope this is the case.

I was disappointed there was no self-notification by New Zealand Energy Corporation. It was several days before it was noticed by a member of the public. Last year I had cause to raise concern regarding this particular well site and issues with flaring. The flaring at this well site was significantly larger than the flare used for the flaring trial at Turangi-B.

I have previously questioned why there is no published environmental monitoring report for the Copper- Moki well site particularly when it has been operating for some time. I would like copies of the Taranaki Regional Council inspection notes of this well site and any testing of the discharges that has occurred please. My understanding is these can be made available digitally. I would like to know when the Copper- Moki well site is due to have its annual environmental monitoring report published.

 It was pleasing to see there was limited contamination in the groundwater surrounding Turangi-B well site and the level of testing of private water and bores within 1km (<u>Greymouth Petroleum Limited Turangi-B Hydraulic Fracturing Groundwater Monitoring Programme Report</u>, July 2013).

 $\frac{http://www.trc.govt.nz/assets/Publications/technical-reports/oil-and-gas-compliance-monitoring-reports/1219404w2.pdf$

This report speculates the contamination may have occurred from flaring. I believe the contamination occurred as the skimmer pits were not lined as outlined in a previous published report for Turangi-B wellsite for the same time period. It is my understanding all skimmer pits are to be lined to prevent the likelihood of contaminants discharging to groundwater via infiltration from the skimmer pit.

<u>Greymouth Petroleum Limited Turangi B Wellsite Monitoring Programme Report</u> (April, 2013, pg.18) states

Towards the end of the monitoring period when there were periods of low rainfall it was observed that clear groundwater had entering the skimmer pits. While it was theoretically possible that contaminants from the site might have discharged into groundwater due to the permeable nature of the pit walls, preliminary results of groundwater monitoring around the site showed in fact that no effects were detected.

 $\frac{http://www.trc.govt.nz/assets/Publications/technical-reports/oil-and-gas-compliance-monitoring-reports/1073740w2.pdf}{\ }$

This report only acknowledged the higher concentration of suspended solids. It did not acknowledge the increase in chloride concentrations which I believe breaches the consent conditions of Consent 7853-1 for this well site only allowing for 50 ppm. This information was available and known but not reported.

The raise in chloride concentration levels was reported in the Groundwater Report (July, 2013, Appendix II) as GND2237 20 December 2011 at 25 increasing by 3 May 2012 to 130. Why was it not reported in the appropriate environmental monitoring report and why was abatement notices not served requiring the pits to be lined and for breaching conditions? Please can you comment on this matter.

3. <u>'The Review of regulation of deep well injection under the Resource Management Act'</u> was commissioned by Taranaki Regional Council and written by GNS.

The GNS report looks at the recently proposed TRC consent conditions (2012) for deepwell injection at Greymouth Petroleum Limited Turangi-A well site. This deepwell injection consent and consent conditions look completely different from previous deepwell injection consents.

<u>Cheal Petroleum Limited Deepwell Injection Monitoring Programme Triennial Report 2009-</u>2012 (published June 2013)

Cheal Petroleum Limited (TAG Oil) Consent 4728-2 (granted 25 May 2012) in does <u>not</u> include specific injection pressures of 23.6 bar (342 psi) at the wellhead not be exceeded or the operation should be ceased immediately and the CEO of TRC informed immediately, or specific rates of injection per hour (e.g. 143 cubic metres/hour not exceeding 300 cubic metres a day). TAG Oil's consent allows for up to 800 cubic metres a day.

TAG Oil's consent does not outline (2.) well construction requirements; (3.) general and specific criteria for types of waste or waste quality; (4.) monitoring and reporting

requirements during well operational life; (5.) proposed plans including proposed formation testing program plan, proposed operation, proposed contingency plans in the event of malfunctions or well failures, proposed well maintenance plan (to include stimulation provisions), monitoring and reporting plan and plugging and abandonment plan; and (6.) provision of a performance bond or equivalent to guarantee resources sufficient to plug or abandon the well at the end of its service life. These are all listed as Special Conditions as assessed by TRC staff in an application by Greymouth Petroleum Limited for DWI at Turangi-A.

http://www.trc.govt.nz/assets/Publications/technical-reports/oil-and-gas-compliance-monitoring-reports/1133945w2.pdf

<u>Greymouth Petroleum Acquisitions Company Limited Deepwell Injection Monitroing</u> <u>Programme Triennial Report 2009-2012 (published March 2013)</u>

Greymouth Petroleum Limited Deepwell Injection Consent (7897-1) granted 12 September 2011 and expiring on 1 June 2026 only includes a few of the conditions given as an example by the Greymouth Petroleum Limited Turangi-A DWI consent in the GNS Report. Greymouth Petroleum Limited Deepwell Injection Consent (7466-1) granted 1 May 2009 and expiring on 1 June 2027 includes a few of the conditions given as an example by the Greymouth Petroleum Limited Turangi-A DWI consent in the GNS Report Greymouth Petroleum Limited Deepwell Injection Consent (5312-1) granted 17 April 1988 and expiring 1 June 2014 has almost none of the conditions given as an example by the Greymouth Petroleum Limited Turangi-A DWI consent in the GNS Report.

 $\frac{http://www.trc.govt.nz/assets/Publications/technical-reports/oil-and-gas-compliance-monitoring-reports/1119464w2.pdf$

<u>Shell Todd Oil Services Limited Deep Well Injection Monitoring Programme Triennial Report</u> 2009-2012 (published March 2013)

Shell Todd Deepwell Injection Consent (1336-3) granted 21 April 2005 and expiring 1 June 2023 allows for discharge of 2,000 cubic metres a day via deepwell injection and only includes a few of the conditions given as an example by the Greymouth Petroleum Limited Turangi-A DWI consent in the GNS Report.

http://www.trc.govt.nz/assets/Publications/technical-reports/oil-and-gas-compliance-monitoring-reports/1126526w2.pdf

Of note all three companies had non-compliance regarding reporting information to Taranaki Regional Council. This is concerning given that the majority of the consent conditions rely on the Companies proving information for the Council to determine the environmental impacts. I strongly disagree with Mr McLay's assertion (27th June 2013) regarding TAG Oil's non-compliance being only 'poor administrative reporting'. One of the non-compliances relating to TAG Oil was they were continuing to discharge types of contaminants they were no longer consented for after the new consent had been granted. This is hardly poor administrative reporting.

Please can you comment on how you are planning to bring all the outstanding DWI injection consents into line with the best practice example documented in the GNS DWI Report?

4. <u>Land-farming</u> is a serious concern. I do not share your view there is adequate appropriate independent research to currently inform the regulation of land farming activities. I will be interested in the findings of the Parliamentary Commissioner for the Environment towards the end of the year.

<u>Mix-bury-cover consents</u> allowing for the discharge of contaminants to land are throughout Taranaki. A number of these are on or beside dairy farms. The most recent published environmental monitoring report on only two of these consents was in 2010. There are a number of active consents of this nature.

http://www.trc.govt.nz/assets/Publications/technical-reports/oil-and-gas-compliance-monitoring-reports/756859.pdf

Please can you comment on the details of monitoring of these consents by Taranaki Regional Council and when we can expect to see a published report on this matter.

- 5. <u>Guidelines as to affected parties to oil and gas discharge consents</u>
 In light of recently published reports Taranaki Regional Council urgently need to review and change affected party status. Currently it is my understanding it is determined only by proximity of dwellings to a flare pit. This is only in relation to discharges to air.
 - It is noted I do not share the opinion of Taranaki Regional Council regarding the
 robustness of the flaring report written in February 2012 being a singular test in
 particular conditions then extrapolated to all situations. I therefore criticised The
 Atmospheric Dispersion Modelling Report written by Dr Backshall of Air Quality
 Management Limited based on the earlier report. It is my understanding he was also the
 co-author of the original singular air quality report in 1988.

However one of his findings using the dispersion modelling demonstrated the maximum concentrations of contaminants was at a distance of 615m. The Taranaki Regional Air Quality Plan stipulates the flare pit is required to be 300m from a dwelling. Given the model shows the maximum concentrations are at 615m I believe the distance in the Air Plan needs to be extended from 300m to 615m. I also believe it should also cover all areas not only dwellings. In a number of cases the neighbouring properties which used daily can be within 100-200m.

 $\underline{http://www.trc.govt.nz/assets/Publications/guidelines-procedures-and-publications/hydraulic-fracturing/FlaringJune2013.pdf$

2. The 'Review of regulation of deep well injection under the Resource Management Act' includes the recommendation of the concept of an Area of Review (AoR) when assessing applications for proposed injection wells. This allows for an area of 1.6 km from the bottom-hole location of the injection well. This review states "delineation of a suitably sized AOR for assessment is a sound concept that provides appropriate assessment of potential impacts from a posed injection well". I believe this AoR should be urgently considered and incorporated into appropriate Regional Plans. This further extends the affected parties area in particular to DWI sites.

http://www.trc.govt.nz/assets/Publications/guidelines-procedures-and-publications/resource-management-act/GNS-DWI-2013.PDF

3. The testing of ground water including private wells around a hydraulic fracturing site is 1 km in radius. The environmental monitoring report presented at this meeting recommends the radius of 1 km continues. I believe this identifies affected parties to hydraulic fracturing activities to be in a 1km radius. Given Taranaki Regional Council's own recommendations I urgently request Taranaki Regional Council to adopt a 1km affected party's radius for hydraulic fracturing activities.

 $\frac{http://www.trc.govt.nz/assets/Publications/technical-reports/oil-and-gas-compliance-monitoring-reports/1219404w2.pdf$

Yours faithfully Sarah Roberts