Submission by Climate Justice Taranaki Inc.

In response to Minute 9 – Memorandum of Proposed District Plan Hearings Panel Chair Andy Beccard Relating to Further Information

17 August 2016

Climate Justice Taranaki Inc. (CJT) welcome the opportunity to comment on the further information provided by selected submitters and other parties in response to the Proposed South Taranaki District Plan Hearings Panel's requests stated in Minute 8. As required in Minute 9, our comments relate only to the further information provided, its implications and how/where it may reinforce our submission points presented over the course of the hearings. We have also raised a few questions stemming from some of the further information provided.

Comments on Further Information

Taranaki District Health Board

The Taranaki District Health Board (TDHB), in their response to the further information request (Minute 8), stated that while there is a lack of local health research in Taranaki, there are well researched and publicised reports from overseas that suggest potential adverse impact on human health from drilling and gas extraction involving fracking. The TDHB highlighted the conclusions from a 2014 review by Public Health England:

- An assessment of the currently available evidence indicates that the potential risks to public health from **exposure to the emissions** associated with shale gas extraction will be low if the operations are properly run and regulated.
- The potential health impact from single wells is likely to be very small, but the **cumulative impacts of many wells in various phases of development in relatively small areas** are potentially greater and will need careful scrutiny, during the planning process.

Because of the potential of adverse health effects and the lack of knowledge in the New Zealand setting, the TDHB strongly recommend that a precautionary approach is applied to planning decisions related to oil and gas. They even provide the definition of precautionary approach — *"when an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically"*.

Council's responsibility in public health and need for separation distances

The strong and cautious response from the TDHB echoes our (Climate Justice Taranaki Inc.) and several other submitters' concerns presented over the course of the hearings. It is in line with what we have been calling for, notably Council to uphold its responsibility in protecting public health, and the need for prudent separation distances between petroleum hazardous facilities and sensitive landuse.

Health impacts from unregulated emissions

More specifically, the first conclusion of the Public Health England review focusses on exposure to emissions and states a critical caveat – "*if the operations are properly run and regulated*". As pointed out during the hearings, emissions via venting and fugitive gases from oil/gas wellsites and associated hazardous facilities in Taranaki are not monitored or properly regulated. Taranaki Regional Council grant discharge consents for emissions from combustion involving flaring, not venting or other fugitive gases. There is thus no way of assessing the range and potential impacts of air contaminants on nearby communities. Some homes are less

than 200 m from wellsites, and children in schools, although further away, are especially vulnerable. Elderly people and the sick are even more susceptible to harm from air contaminants.

In the vacuum of independent, comprehensive research in Taranaki, a precautionary approach as proposed by the TDHB must be taken to protect human health.

Cumulative impacts

The second conclusion of the Public Health England review calls for scrutiny when dealing with sites with multiple wells in various phases of development and the cumulative impacts from such sites within small areas. One obvious example is Shell Todd Oil Services' Kapuni Production Station and the numerous associated wellsites with multiple wells. There is also Ngaere and surrounding areas with numerous Cheal wellsites for production, reinjection of wastes and/or undergoing water-flooding to enhance flow. Both areas have homes and schools in close proximity to the multiple facilities. In such situation, the cumulative impacts on local communities cannot be ignored and there comes a point when 'enough is enough'.

We believe it is the responsibility of planners and regulators to put down strong rules that limit further expansion and/or intensification of such hazardous facilities/activities, notably within and around Rural-Industrial Zones, and put in place prudent setback from sensitive activities to avoid additional cumulative impacts and harm on local communities.

As we expressed at the hearings (27 June 2016), Concept Plans have not been able to avoid/manage the issue of 'creep' from development or intensification of activities and their associated effects on local communities and environment. We are deeply concerned by Rule 8.1.1(g) which Permits petroleum activities (S42A Rural-Industrial Zone Report Table 14 para 96) and any increase of hazardous substances within a Rural-Industrial Zone (S42A Hazardous Substances Report Table 25 para 177), while deleting the separation distance of 300m from sensitive landuse (S42A Rural Zone Report Table 43 para 203).

In areas with less intensive petroleum hazardous activities, planners still need to consider potential intensification and companies' plan for future development, because cumulative impacts occur and exacerbate over time with development 'creep' or intensification of activities.

Greymouth Petroleum Ltd.

Greymouth Petroleum, when asked about the Controlled Zone as per Minute 8, stated clearly that the Controlled Zone for each of their operation is limited to the fenced boundary of each site.

Definition of Controlled Zone is given by the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001, and is related to the classes and quantities of hazardous substances (HSNO) being stored and handled on site. It does not account for the actual or potential risks from Major Accident Hazards (e.g. well blowout or sudden gas release), the impacts of which could go well beyond the Controlled Zone or fenced boundary of the operation. As such, CJT argue that companies CANNOT *"internalise within their site boundaries the actual and potential health and safety effects of their operations"* by complying with HSNO alone.

To assess and prepare for Major Accident Hazards, companies are required to formulate Safety Cases under the Health and Safety at Work Act (HSWA) 2015 and Health and Safety at Work (Petroleum Exploration and Extraction) Regulations 2016. In these regards, Greymouth Petroleum referred to risk assessments "*based on evidence of equipment and control measure reliability … consequence analysis using modelling software to understand the dispersion or thermal radiation affects resulting from a fire or substance release*", and consideration of "*the likelihood of a person being exposed to the event."*

CJT recommend Council to request from oil/gas companies and operators of wellsites and major/significant hazardous facilities their respective Safety Cases, for clarity and better understanding on the effectiveness of HSWA and the role and responsibility Council have in managing risks to public safety.

Shell Todd Oil Services (STOS)

When asked about the Controlled Zone by the Hearings Panel as per Minute 8, STOS stated that *"the exclusion zones for the Maui Production Station, Kapuni Production Station and associated Kapuni wellsites are delimited by the boundary security fences"* which mark the extent of *"the Hazardous Area Classification specific to each site."* STOS referred to IP 15 – Part 15 of the IP Code of Safe Practice in the Petroleum Industry which has been used to define the classifications where flammable liquids are handled.

STOS did not explain the process and specifics about the Code, notably the hazard zone classification under IP 15. Typically Zone 0 refers to an area where an explosive gas atmosphere is present continuously or for long periods; Zone 1 where an explosive gas atmosphere is likely to occur in normal operation; and Zone 2 where an explosive gas atmosphere is not likely to occur in normal operation and, if it occurs, will only exist for a short time (http://www.hse.gov.uk/comah/sragtech/techmeasareaclas.htm).

CJT question how the respective IP 15 hazard zones relate to the 'exclusion zone', 'controlled zone' and STOS' site boundaries?

As with Greymouth Petroleum, STOS also referred to a Safety Case for each of their installations, as required under HSWA to deal with major incidents and Major Accident Hazards. These Safety Cases and associated Emergency Response Plans are critical documents that Council must consult in order to understand the full extent of hazards and risks that nearby communities are exposed to, and to make informed planning decisions that would help minimize or mitigate risks on public safety. While Major Accident Hazards may be rare, the consequences can be catastrophic (http://www.healthandsafetyatwork.com/hsw/buncefield-explosion).

Moreover, STOS stated that "*If a landowner wished to build a dwelling in close proximity to a facility we would work with them to understand the impact of any proposed developments and ensure all risks continue to be appropriately managed for all parties. … In our view, the most efficient and effective process for achieving good outcomes in respect of those new activities is through dialogue."*

Ballance Agri-Nutrients

In response to the Hearings Panel's request for further information, Ballance Agri-Nutrients confirmed that all Controlled Zones are restricted to land owned and/or leased by the company. In terms of reverse sensitivity issues, Ballance also emphasized that its preferred response is *"to continue its dialogue with the adjacent owners and occupiers, and to ultimately agree a mechanism that could be imposed with mutual agreement."*

CJT believe that while there is some merit in companies like STOS and Ballance to work with their neighbours through dialogues, such processes offer little transparency or guarantee for landowners/occupiers, regulators, planners or the general public that the level of risks and hazards is acceptable to all, or that any mitigation measure or compensation is adequate for all those involved.

Graeme Lowe Protein Ltd.

Graeme Lowe Protein, in their response to the Hearings Panel's request for further information, referred to the Christchurch Replacement District Plan Independent Hearings documents.

CJT understand one of the over-riding views of the Christchurch Hearings Panel is that protection of sensitive activities and environment from hazardous substances is best addressed through zonings and overlay controls in the district plan. The Panel emphasized that any overlay / Risk Management Area should be underpinned by a comprehensive Quantitative Risk Assessment (QRA). Within the overlay / Risk Management Area, certain activities would have non-complying status. (http://www.chchplan.ihp.govt.nz/wp-content/uploads/2015/03/Decision-18-Hazardous-Substances-and-Contaminated-Land-and-relevant-definitions-Stages-1-and-2.pdf)

Statement of evidence for The Oil Companies at the Christchurch Hearings explained:

"*An overlay within a planning instrument provides a transparent means of ensuring operators of a facility (who are the sources of risk) are aware of, and communicate with their neighbours, and that existing surrounding land uses and proponents of any future development within the overlay area are aware of those matters. … the overlay approach is a prudent means of achieving separation between potentially hazardous facilities and incompatible sensitive receptors as this approach takes into account the potential for future changes that cannot be factored in using codes and standards, or risk assessment prepared by the source of risk.*" (http://www.chchplan.ihp.govt.nz/wp-content/uploads/2015/04/2185-Oil-Companies-Haz-Substance-and-Contaminated-Land-Jennifer-Polich-Evidence-30-9-15.pdf)

CJT argue that this overlay / risk management area approach based on site-specific (and cumulative where multiple facilities exist) QRA is a far more robust, transparent and effective way of managing risks from hazardous facilities, and protecting public safety, than 'dialogue' alone (See our comments on STOS and Ballance above).

CJT believe that site-specific, cumulative QRA are also essential for assessing the health impacts (acute and chronic) of process and fugitive emissions from multiple wells and associated hazardous facilities on neighbouring communities (See our comments on TDHB above).

CJT urge that Council request from all oil/gas companies and operators of hazardous facilities site-specific and/or cumulative QRA to inform planning, potentially with the overlay / Risk Management Areas approach. Indeed, comprehensive QRA is essential for Council to properly assess any landuse consent applications concerning petroleum exploration and productive activities and other hazardous facilities.

Worksafe New Zealand

CJT note that the Hearings Panel has requested further information from Worksafe NZ in regards to the relevant legislation they administer and enforce. No response from Worksafe NZ has yet been provided. CJT see this information as crucial to the Hearings Panel in better understanding the relationships between different legislation and where district planning and rules may be needed in ensuring public health and safety. CJT request that this information, once received, be made public and submitters be notified for comments.

Te Korowai o Ngaruahine Trust (TKONT) and Te Runanga o Ngati Ruanui Trust

TKONT, in their response to Council's further information request (Minute 8), expressed their "*intimate spiritual, cultural, social and historical association with the whenua, wai maori (freshwater) and takutai moana (foreshore and seabed) within its rohe… The practice of landfarming represents a challenge for TKONT because of the dispersement and displacement of contaminants across the whenua into the wai. … wetlands, forests, the coastal environment and riparian margins etc., function as 'buffer zones' that try to filter as much harmful material as possible, for the protection of the people that it serves. … Problems arise when the capacity of these life giving systems are compromised… By questioning the locations for landfarming, we are*

enacting our kaitiakitanga… The coastal area (which includes the abutting land) is significant to Ngaruahine. It provides a source of food, materials for production, places of live, to celebrate; they are places of sustenance and life. The placement of contaminant hydrocarbons onto the land affects the mauri and wairua of these lands."

Ngati Ruanui also pointed out that "*Sand dunes contain many important cultural sites including middens … remains of general living areas with stained sands from ovens and urupa (burial grounds). These sites are very significant spiritually to Ngati Ruanui. … Soil resources are important for plant cultivation, food production and has a cleansing role.*" Disturbingly, landfarming on the South Taranaki coast often involves 'recontouring' of sand dunes.

Ngati Ruanui "*request the Hearings Panel to recognise our mana whenua and the impact of landfarming on our taonga. This is in accordance with Part 2 of the RMA and Ngati Ruanui Deed of Settlement 2001*."

Prohibit Landfarming in Coastal Protection Area

TKONT called for landfarming to be Prohibited in a Coastal Protection Area under Section 87 of the RMA, and adequate setback between landfarming activity and Significant Natural Areas, Outstanding Natural Features and Landscapes, Areas of Outstanding Natural Character and Areas of Cultural and Spiritual Significance.

Climate Justice Taranaki Inc. (CJT) ask that Council respect and consider TKONT's further information and the above recommendation.

Landfarming Standards

Both TKONT and Ngati Ruanui proposed specific standards for landfarming where it is a Discretionary Activity; including setback from waterways (50 m), wahi tapu and area of cultural or historical significance to iwi; the kind of contaminants; and requirements of coastal dune restoration, riparian planting and fencing.

CJT also ask that Council consider such standards, and where conditions in regional council consents differ, the more stringent standard be taken. E.g. Discharge consents for landfarms issued by the Taranaki Regional Council (TRC) generally allow discharge of contaminants as close as 25 m from waterbodies, there is seldom a setback from wahi tapu or areas of cultural significance, and oily wastes are sometimes allowed (e.g. Waikaikai landfarm).

Ngati Ruanui explained that while the regional council explicitly controls the effects of contaminants on soil, water and the ecosystem, "*In respect of the South Taranaki District Council, the application of waste on coastal soil (predominantly within the Coastal Protection Area and within rural land) gives rise to effects on local coastal landscape, Significant Natural Areas, heritage, archaeological sites, Maori's relationship with their ancestral land, water and coast, socio-economic well-being, dust and hazardous substances. The South Taranaki District Council must control these effects."*

Coastal Policy Statement

Notably TKONT and Ngati Ruanui's requests are closely in line with the NZ Coastal Policy Statement, based on which, councils (persons exercising functions and powers under the RMA) are required to:

- recognise that tangata whenua have traditional and continuing cultural relationships with areas of the coastal environment, including places where they have lived and fished for generations (policy 2a);
- provide for opportunities for tangata whenua to exercise kaitiakitanga over waters, forests, lands, and fisheries in the coastal environment… (policy 2f);
- adopt a precautionary approach to use and management of coastal resources potentially vulnerable to effects from climate change, so that the natural character, public access, amenity and other values of the coastal environment meet the needs of future generations (policy 3(2c));

- protect indigenous biological diversity in the coastal environment (policy 11);
- preserve natural character (policy 13);
- restore and rehabilitate degraded coastal environments (policy 14) which includes rehabilitating dunes and other natural coastal features or processes (iv), restoring and protecting riparian and intertidal margins (v), reducing or eliminating discharges of contaminants (vi), restoring cultural landscape features (viii), and decommissioning or restoring historic landfill and other contaminated sites which are, or have the potential to, leach material into the coastal marine area (x);
- protect the natural features and natural landscapes (including seascapes) of the coastal environment… (policy 15).

Procedural Matters and Natural Justice

CJT question Council's reliance on further information from oil/gas companies and operators of major/significant hazardous without also seeking similar information / advice from independent professionals or submitters who have proven expertise?

Notably, expert witnesses representing Taranaki Energy Watch (TEW) have provided extensive expert evidence on health and safety aspects in relation to oil/gas installations and hazardous facilities. Yet Council did not request further information from them or provide them with reasonable amount of time to respond substantively to Minute 9. The five-day duration available for submitters including TEW (with their expert witnesses) to respond is inadequate.

Moreover, no response from Worksafe NZ has yet been provided (See our comments on Worksafe NZ).

Based on the above, CJT argue that the principle of natural justice has not be met and question the validity of any conclusions that Council may reach based on responses to Minute 8 and 9.