BEFORE ENVIRONMENT CANTERBURY

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of submissions and further submissions made by **the OIL COMPANIES** on Proposed Hurunui and Waiau River Regional Plan

STATEMENT OF EVIDENCE OF DAVID LE MARQUAND ON BEHALF OF THE OIL COMPANIES

1.0 INTRODUCTION

1.1 My name is David le Marquand and I am a Director of Burton Planning Consultants Limited. My qualifications are a Bachelor and Master of Arts degree in Geography from Auckland University. I have practised resource management for over thirty years: fifteen of those years in Central Government including six years as a Scientist in the Planning Section of the Water and Soil Directorate (MWD) Wellington, and two years as a Policy Analyst and five years as a Senior Policy Analyst both with the Ministry for the Environment in Auckland. I have spent the last seventeen years as a Resource Management Consultant with Burton Consultants.

1.2 My evidence generally supports the submissions lodged by Z Energy Limited, BP Oil New Zealand Limited, and Mobil Oil New Zealand Limited (the Oil Companies) on the Proposed Hurunui and Waiau River Regional Plan.

1.3 At Burton Consultants, I have been the Account Manager for the Oil Industry Working Group (OIEWG) for more than fifteen years. OIEWG comprises of Z Energy Limited, BP Oil New Zealand Limited, and Mobil Oil New Zealand Limited (the Oil Companies)

and currently includes Refining NZ and Motor Trade Association as associate members. In that role as Account Manager I have been responsible for providing resource management advice to the Oil Companies on a national basis, on relevant district and regional plan provisions (including the Natural Resource Regional Plan) and various environmental issues of collective interest including contaminated land, air and water discharge provisions, hazardous substances and risk management provisions.

1.4 OIEWG has been responsible for initiating a number of guidelines including "Guidelines for Assessing & Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand (MfE updated 2011)", "Above-Ground Bulk Tank Containment Systems - Environmental Guidelines for the Petroleum Marketing Oil Companies (MfE 1995)" and "Environmental Guidelines for Water Discharges from Petroleum Industry Sites in New Zealand (MfE 1998)". I have also been involved in a range of joint venture oil industry projects relating to new and existing infrastructure (e.g. jointly operated bulk terminal facilities) involving various regional and district council consents.

2.0 BASIS OF EVIDENCE

2.1 I have read and am familiar with the Proposed Hurunui and Waiau River Plan, the relevant Officer's Report(s) for the Hearing in relation to the Oil Companies submissions, and primarily focuses on the recommendations in the Officer's Report (s42A report L White) on the provisions as they relate to the concerns of the Oil Companies and the redline version of the provisions (S42A report L White Appendix 2).

2.2 I have read the Code of Conduct for Expert Witnesses issued as part of the Environment Court Practice Notes. I agree to comply with the code and am satisfied that the matters I address in my evidence are within my expertise. I am not aware of any material facts that I have omitted that might alter or detract from the opinions I express in my evidence.

3.0 GENERAL BACKGROUND

3.1 The Oil Companies collectively operate a number of service stations in the area covered by the Proposed Plan. Service stations typically have fuel stored in 2-3

underground storage tanks that can each be 50-60,000 litres in capacity and in tank pits that are approximately 4-4.5m deep. These tanks have to be replaced from time to time due to age, suspected failure, routine replacement or upgrading. In the last two years tanks have also been replaced due to damage by the Canterbury Earthquakes. In areas of shallow groundwater the Companies will need to dewater the tank pit in order to be able to appropriately lay the foundations and install any replacement tank. Where there is shallow groundwater the tank pits are usually sheet piled and well point(s) established. The sheet piling reduces lateral flows into the pit. Typically the maximum take occurs at the time of first emptying the excavation and once draw down occurs flows usually taper off significantly. The total duration of dewatering is typically around 5 days. Dewatering discharges are managed for suspended solids and any hydrocarbons. As site dewatering involves both a take and discharge the Oil Companies are keen to ensure that when they need to replace a tank at these sites there are no unnecessary or inappropriate rules, including prohibited activity status, that would prevent them from doing what is essential maintenance.

3.2 In their submissions to the Plan, the Oil Companies sought the following relief:

A. Introduce a new groundwater policy along the following lines:
To facilitate groundwater abstractions within the Hurunui and Waiau River catchments where these will have a less than minor adverse effect on long term groundwater decline and/or an associated adverse effect on surface water flows.

B. Retain Policy 4.1 without modification.

C. Include, in existing Policies 9.1 – 9.4 or as a new policy 9.x, recognition of the need to afford priority to short term takes required for the non-consumptive purposes of carrying out excavation, construction and geotechnical testing activities.

D. Retain Rule 6.3 without modification. Alternatively, if the Rule is to be modified, ensure that the dewatering activities required by the Oil Companies from time to time remain as permitted activities.

E. Retain the following statement from Part 1 – Introduction, Scope of this Plan and the area to which it applies:

Where an activity is expressly provided for in this Plan, the provisions of this Plan apply. For all other activities, the provisions in the Natural Resources Regional Plan apply.

F. Retain Rule 8.1.

G. Retain Rule 9.1.

H. Ensure that de-watering of sites for the carrying out of excavation, construction and geotechnical testing associated with replacement and/or maintenance of existing activities at a site is not caught by prohibited activity status, in the event the activity is unable to meet the permitted thresholds for permitted activity. One way of doing this would be to specifically provide for the taking of groundwater not meeting Rule 6.3 to be considered as either a restricted discretionary or discretionary activity.

I. Amend Rule 10.1 to clarify that the rule only applies to those land use activities that result in the discharge of nitrogen and phosphorus and on that basis retention of rules 10.2 and 11.1 and 11.2.

4.0 DISCUSSION

4.1 In my opinion the Oil Companies submissions need to be considered as an integrated package. They seek to ensure that water takes around their maintenance activities (i.e. dewatering for underground tank removals) are not unduly fettered by the Proposed Plan provisions to the extent that the environmental benefits of undertaking the activity (the need to remove damaged or ageing and less reliable equipment) are not foregone or that the provisions result in a perverse regulatory disincentive against such activity.

4.2 In assessing the effects and consequences of the Proposed Plan provisions on a discrete set of activities it is also necessary to consider how the Plan functions as a whole. It is also a useful check on how the Plan may operate in practice.

Dewatering

4.3 The primary rule that applies to the Oil Companies dewatering activities is Rule 6.3. The principal concern of the Companies is what happens in the event that the permitted activity is not met, what does the provision cascade to? As a consequence the submission while supportive of Policy 4.1 sought to ensure any failure to meet the

permitted activity threshold did not automatically default to the prohibited activity status and that there should be a clear cascade to either restricted discretionary or discretionary activity status. The submission also sought that there be some additional policy included in the Proposed Plan for abstraction that had less than minor effects and some priority given in the Resource Consent Management policy framework for short term non-consumptive takes for the purposes of carrying out excavation, construction and geotechnical testing activities. On this basis the Companies were prepared to support Rules 8.1 and 9.1.

4.4 There seems to me to be two issues here. The first matter is the scope of the permitted activity status in Rule 6.3 and whether there is a significant issue for the activity that the Companies wish to undertake (dewatering) and therefore the relevance of any associated policy amendments requested. The second relates to the clarity and effect of the cascade.

Scope of Permitted Rule 6.3

4.5 Rule 6.3 specifically permits the taking of groundwater for the purposes of dewatering subject to conditions. Those conditions are broad and permissive. In my opinion, these conditions will provide significant opportunity for dewatering of the nature and relatively small scale undertaken by the Oil Companies. The staff report has not recommended any changes to the rule.

4.6 In my opinion I find it very difficult to consider a dewatering scenario by the Oil Companies in this area that would result in a breach of the conditions in Rule 6.3. Furthermore, if a permitted condition is breached, then the effects on the environment are likely to have the potential to be more than minor, particularly if associated with large scale works (not necessarily Oil Company projects). As a consequence I do not see the value of including the proposed new policy relating to minor effects into the Plan for the Hurunui and Waiau River catchments to solely address the Oil Companies concerns. On this basis I support the staff report which states (paragraph 376):

However, they seek an additional policy be included to facilitate groundwater abstractions where these will have a less than minor effect on groundwater decline and surface water flows, to be given effect to through a permitted activity status for dewatering activities. On this basis they seek that Policy 4.1 does not apply to such activities. It is my view that this is already adequately addressed in the Plan framework without the need for an additional policy. This is because smaller or temporary groundwater takes are already provided for as permitted activities, on the basis that they will have such minimal effect that they will not compromise the

outcomes sought in the Plan. That is, the identified permitted activities are expected to achieve Objective 4. This includes Rule 6.3 which provides for de-watering for excavation, construction and geotechnical testing, subject to conditions.

4.7 As a consequence I do not support or consider that there is the need for a new policy specifically to address the Oil Company issues and I support retention of rule 6.3 as proposed.

Clarity of the Rule Cascade.

4.8 In my opinion there is an issue with the cascade from the permitted rules, both Rule 6.3 and 6.4. The staff report states in paragraph 386 the following:

Z Energy Ltd, BP Oil NZ Ltd, Mobil Oil NZ Ltd and Caltex NZ Ltd (Submitter 14) supports Rule 6.3 on the basis that it provides for dewatering of sites for excavation, construction and geotechnical testing as a permitted activity. However they are concerned that non-compliance with a condition of this rule would automatically default to a non-complying activity status, because it would not fall under Rule 7.1 pertaining to takes for non-consumptive activities. It is my opinion however that should the conditions of Rule 6.3 not be met, the activity would more likely fall under Rule 7.2 which provides for the taking and using of groundwater within the identified zones as a restricted discretionary activity, subject to compliance with specified standards and terms, that in my view such an activity should be able to meet. (This is with the exception of the necessity for an Infrastructure Development Plan under (e), which in any case I recommend is removed, for the reasons discussed below).

4.9 The Plan defines non-consumptive activity as follows:

Is an activity where water is taken and discharged back to the water body in the same or better quality and at the same or similar rate.

This plan identifies that non-consumptive activities which take A or B Block water and discharge the water back to the same surface water body within 250m from where it is taken are subject to different restrictions of discretion than other non-consumptive activities.

4.10 I was unable to find a clear definition of non-consumptive uses in the NRRP or the Proposed Land and Water Plan. However based on the definition in the Proposed Hurunui and Waiau River Regional Plan I agree with the staff report that the Oil Companies activities, if unable to comply with Rule 6.3, would logically need to be considered in terms of Rule 7.2.

4.11 However Rule 7.2 has not been crafted to naturally cascade from Rules 6.3 or from Rule 6.4. While I accept that the staff report has recommended (refer paragraph 390 s 42A report L White) that for any take less than 100litres/sec there be a waiver from the requirement to comply with an Infrastructure Development Plan, the key

impediment would appear to be condition 7.2 a) where the allocation limit has been reached in terms of Policy 4.1. If this situation is reached then the activity is a prohibited activity in terms of Rule 9.1. The effect of this is that if dewatering for say community, council or national infrastructure were to briefly exceed 10l/s and the allocation limit for the particular catchment in Policy 4.1 has been reached, the dewatering activity would be prohibited.

4.11 I am not clear whether the intent is to retain the prohibited activity status or delete it. The redline version of the s42A report Appendix 2 has Rule 9.1 deleted, together with the reference to prohibited activity in Rule 8.1, but the main staff report (s42A L White) has, in section 13.9, discussed the issue in detail and in paragraph 397 has stated the following in an apparent intention to retain provision 9.1:

It is further my view that a prohibited activity status will better implement Policy 4.1.

4.12 As indicated, while I cannot foresee an Oil Company dewatering activity exceeding the permitted activity thresholds I am not sure if the cascade will deliver the best outcomes, particularly for infrastructure activities relying on Rule 6.4, which for example has a flow limit of 10l/s. I can understand the need to send a clear and strong signal in relation to setting and complying with the allocation limits set out in Policy 4.1. However, temporary takes for construction activities (and infrastructure) should not, in my opinion, cascade to a prohibited activity. I do not see this as being efficient and effective. It will involve potentially significant costs and consequences if infrastructure maintenance activities are curtailed, in the event a permitted threshold in Rule 6.4 is exceeded. It would seem to me that any such exceedance of the permitted Rule 6.4, especially for flows should sit within the margins of error in allowing for these activities as a permitted activity in any event. There would certainly appear to be some risks if the likes of maintenance activities become potentially fettered, for example one would not want to leave the need to repair tower foundations on the National Grid because dewatering exceeded 10l/s. It may well be an issue for other community, council and national infrastructure as well.

4.13 It seems to me the signal, at least for infrastructure operators, is that consents may need to be sought in advance before they are needed, as a form of insurance, prior to allocation thresholds being reached. I don't think the Plan should be doing that. The provisions in the redline version of the Plan (s42A Report L White Appendix 2) for Rule 9.1 would appear to provide for such activities to be assessed at least, by

deleting the prohibited activity rule, and in which case rule 8.1 (non-complying) is the default.

4.14 If non-complying were to be the default rule then it would be appropriate, in my view, to include a policy along the lines that the Oil Companies have suggested. The policy would need to address matters that relate to dewatering of sites for excavation and construction or geotechnical testing or maintaining, repairing or replacing existing infrastructure. This could be worded as follows:

9.X To facilitate groundwater abstractions that relate to dewatering of sites for excavation and construction or geotechnical testing or maintaining, repairing or replacing existing infrastructure within the Hurunui and Waiau River catchments, where any adverse effects are temporary and have less than minor adverse effect on long-term decline in groundwater levels and surface water flows.

4.15 As an alternative it may be possible to include a specific exclusion in Rule 7.2(a) along the following lines:

the maximum annual volume of take, in addition to all existing resource consented takes, including expired resource consents continuing to be operated under section 124 of the Resource Management Act, does not exceed the Allocation Limit specified in Policy 4.1 for the Groundwater Allocation Zone within the zones in Map 2 unless the activity undertaken relates to the dewatering of sites for excavation and construction or geotechnical testing or maintaining, repairing or replacing existing infrastructure;

4.16 In the event that the prohibited rule is retained and the amendment to 7.2a) is not accepted Rule 8.1 could be reworded as follows:

Unless specified as a permitted activity or restricted discretionary activity or prohibited activity or relates to the dewatering of sites for excavation and construction or geotechnical testing or maintaining, repairing or replacing existing infrastructure that is not provided for in Rule 7.2(a), the taking and use of groundwater from any Groundwater Allocation Zone in Map 2, is a non-complying activity.

Nitrogen and Phosphorus

4.17 The Oil Companies sought a modification to Rule 10.1 so that the resultant discharges from land uses were clearly focused on the intent of the provisions (i.e. nitrogen and phosphorous discharges), otherwise all land uses would be required to

develop various plans or agreements that may not be related to the effects to be managed.

4.18 The staff report has addressed the issues as follows:

550. Z Energy Ltd, BP Oil NZ Ltd, Mobil Oil NZ Ltd and Caltex NZ Ltd (Submitter 14) seeks that Rule 10.1 be amended so that it only applies to land uses that result in discharges of nitrogen or phosphorus which may enter water. Similar concerns are raised by Independent Irrigators Group (Submitter 92). I note that Rule 10.1 as currently written would require any land use in the Nutrient Management Area (NMA) shown on Map 4 to implement one of the defined systems, plans or agreements. The NMAs are those areas within the zone that are not identified within the Hurunui District Plan as urban areas, and therefore encompass all rurally-zoned land. In my view it is not efficient or effective for all land uses in the rural area to be required to implement one of the defined ASM programmes, given that there may be land uses that do not result in discharges of nitrogen or phosphorus which may enter water. As such, I agree with the amendments sought by the submitter, and recommend that the stem of Rule 10.1 (and similar consequential changes to Rule 11.1) is amended as follows:

Rule 10.1

Any existing land use as at 1 October 2011, that results in a discharge of nitrogen or phosphorus which may enter water in the Nutrient Management Area shown on Map 4, is a permitted activity provided that ....

4.19 I agree with the staff report. In my opinion the intent of the rule framework (10.1-12.1) is to clearly address farming practices. It would not be efficient or effective to require other land uses not generating such nutrients to be subject to these specific set of rules. I note that the suggested amendment to Rule 10.1 made by the Companies is recommended to be included in 10.1. While the Companies sought the retention of 10.2, 11.1 and 11.2, I note the redline version of the Plan (S42A report L White Appendix 2) includes various changes to those rules. I am neutral on those changes as their effect would be predetermined by the change to 10.1. As a consequence I consider the staff recommendations adequately address the Oil Companies concerns and commend those changes to you.

5.0 OTHER MATTERS

5.1 The Companies sought the retention of the statement from *Part 1 – Introduction, Scope of this Plan and the area to which it applies* as follows:

> *Where an activity is expressly provided for in this Plan, the provisions of this Plan apply. For all other activities, the provisions in the Natural Resources Regional Plan apply.*

5.2 I note in the redline version of the Plan (refer 42A report L White Appendix 2) that no change has been made to the provisions. I also note the phrase also occurs under Part 3. I support retention of those provisions without further amendment.

5.3 I also note there is no definition of "infrastructure" in the Plan. In the Proposed Land and Water Plan the definition of infrastructure refers to section 30 of the RMA. The issues I have raised in relation to rule 6.4 appear to arise from the application of the RMA meaning of infrastructure. It may be that the intention of Rule 6.4 was to apply to a narrower definition of infrastructure, indeed the definition of infrastructure development plan only seems to apply to irrigation and hydro-electric proposals. If this is the case the Committee may wish to take the opportunity to clarify and confirm the scope of the application of "infrastructure" in this Plan to water related infrastructure.

6.0 CONCLUSION

6.1 I largely support the staff recommendations in relation to the Oil Companies submissions. However the only area where there is a significant difference of opinion relates to the potential for activities unable to comply with permitted Rules 6.3 (and 6.4) being unable to seek a consent if the prohibited activity rule is to remain and the limits set out in Policy 4.1 are reached. As indicated I do not consider that the Oil Companies activities will be unduly affected but other construction activities or more likely, takes around maintenance activities for infrastructure may be affected. It seems sensible to me that the Plan needs to be cautious about unduly fettering these activities. I have set out the provisions I support in Attachment 1 and my preferred option for the wording of the rules cascade for Rules 6.3 and 6.4.

D.W. le Marquand

12th October 2012

Agreement with Staff Report Recommendations

1. Retain Policy 4.1 without further amendment.

Policy 4.1 *No resource consent to take and use groundwater shall be made or granted if the proposed activity will result in the following annual allocation limits being exceeded:*
(a) 52.8 Mm3 in the Culverden Hurunui Groundwater Allocation Zone as shown in Map 2;
(b) 3.7 Mm3 in the Domett Groundwater Allocation Zone as shown in Map 2;
(c) 7.1 Mm3 in the Waikari Groundwater Allocation Zone as shown in Map 2;
(d) 8.6 Mm3 in the Hanmer Groundwater Allocation Zone as shown in Map 2;
(e) 33.4 Mm3 in the Culverden Waiau Groundwater Allocation Zone as shown in Map 2;
(f) 6.5 Mm3 in the Parnassus Groundwater Allocation Zone as shown in Map 2; and,
(g) 2.6 Mm3 in the Jed Groundwater Allocation Zone as shown in Map 2.

2. Retain Rule 6.3 without further amendment

Rule 6.3 *The taking of groundwater for the purposes of de-watering of sites for carrying out excavation, construction and geotechnical testing, is a permitted activity provided the following conditions are complied with:*
(a) the take shall continue only for the time required to carry out the work but not exceeding nine months;
(b) the take shall not lower the groundwater level more than eight metres below the ground level of the site;
(c) the take shall not, in combination with other takes cause ground subsidence;
(d) the take shall not have a moderate, high or direct hydraulic connection to a surface water body, determined in accordance with Policy WQN7(1)(a) of the Natural Resources Regional Plan;
(e) the take shall not cause a reduction in the rate and volume of water available from a community supply or private drinking water bore; and,
(f) the take shall not cause a wetland to be de-watered, except where it is authorised under Rule WTL2 of the Natural Resources Regional Plan as a permitted activity

3. Retain the following statement from Part 1 – Introduction, Scope of this Plan and the area to which it applies:

Where an activity is expressly provided for in this Plan, the provisions of this Plan apply. For all other activities, the provisions in the Natural Resources Regional Plan apply.

4. Amend Rule 10.1 to read as recommended in the staff report as follows:

Rule 10.1 *Any existing land use as at the date the Plan is made operative that results in a discharge of nitrogen or phosphorus which may enter water, in the Nutrient Management Area shown on Map 4, is a permitted activity provided that:*

Recommended options for dealing with the Rule cascade from Rules 6.3 and 6.4:

5. In the event that the prohibited rule for allocation that exceeds the limits set in Policy 4.1 is retained preferably include an amendment to 7.2a) as follows:

the maximum annual volume of take, in addition to all existing resource consented takes, including expired resource consents continuing to be operated under section 124 of the Resource Management Act, does not exceed the Allocation Limit specified in Policy 4.1 for the Groundwater Allocation Zone within the zones in Map 2 unless the activity undertaken relates to the dewatering of sites for excavation and construction or geotechnical testing or maintaining, repairing or replacing existing infrastructure;

Or, in the alternate, allow a cascade to a non-complying activity Rule 8.1 and amend that rule as follows:

Unless specified as a permitted activity or restricted discretionary activity or prohibited activity or relates to the dewatering of sites for excavation and construction or geotechnical testing or maintaining, repairing or replacing existing infrastructure that is not provided for in Rule 7.2(a), the taking and use of groundwater from any Groundwater Allocation Zone in Map 2, is a non-complying activity.

And include a policy along the following lines:

9.X To facilitate groundwater abstractions that relate to dewatering of sites for excavation and construction or geotechnical testing or maintaining, repairing or replacing existing infrastructure within the Hurunui and Waiau River catchments, where any adverse effects are temporary and have less than minor adverse effect on long-term decline in groundwater levels and surface water flows.