In the Matter of	the Resource Management Act 1991
And	
In the Matter of	the hearing of submissions and further submissions on the Proposed Land and Water Regional Plan

Evidence of Andrew Mark Purves on behalf of Lyttelton Port Company Limited

Dated: 4 February 2013

1. INTRODUCTION

1.1 My name is Andrew Mark Purves. I hold the qualification of degree of Master of Science with First Class Honours. I am a Full Member of the New Zealand Planning Institute. I am a planning consultant on my own account.

1.2 I have been providing planning advice to Lyttelton Port Company (LPC) for many years, and this has included providing planning advice and evidence on the Canterbury Regional Policy Statements, the Canterbury Regional Coastal Environment Plan, the Natural Resources Regional Plan, the Christchurch City Plan, and on the Banks Peninsula District Plan.

1.3 I have prepared two first generation district plans, and have prepared a considerable number of plan changes, as well having prepared recommending reports on submissions and further submissions to those plans. For most of these I have been involved from the stage of early consultation and policy development through to the resolution of Appeals.

1.4 I have provided advice to LPC on what I saw as the relevant planning issues relating to the Proposed Canterbury Land and Water Regional Plan ('pLWRP').

1.5 I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses (Environment Court Practice Note 1 November 2011). This evidence is within my area of expertise, except where I state that I am relying on facts or information provided to me by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

2. BACKGROUND AND SCOPE OF THE EVIDENCE

2.1 Lyttelton Port is the South Island's major deep water port[1] and is defined under the Canterbury Regional Policy Statement as a regionally significant infrastructure. It is also variously defined as strategic, critical, and essential infrastructure under the Statement.

[1] Details of Lyttelton Port's business, and its economic significance, were provided in evidence to the Commissioners hearing the Proposed Canterbury Regional Statement last year and can again be provided if required.

2.2 Because the principal receiving environment at the Port is the coastal marine area, the pLWRP does not affect LPC's operation and development to the same degree as the Regional Coastal Environment Plan. Nevertheless, there are a number of relevant rules, namely:

a. The rules relating to the discharge of stormwater;

b. The rules relating to hazardous substances; and

c. The rules relating to potentially contaminated land.

2.3 The issues arising from these rules are discussed in turn below. LPC has also asked Mr Potts, an Environmental Scientist, to discuss Rule 5.72 which relate to the discharge of stormwater.

3. RULES ON THE DISCHARGE OF STORMWATER

3.1 Rule 5.72 permits the discharge of stormwater into a river, lake, wetland or artificial watercourse or onto or into land in circumstances where a contaminant may enter water provided a number of listed conditions are met.

3.2 Rule 5.73 states that the discharge of stormwater, which fails to comply with one or more of the conditions listed under Rule 5.72, is to be classified as a non-complying activity.

3.3 LPC has submitted on Conditions 6 (a) and 6 (b) (i) listed under Rule 5.72 and has submitted on the non-complying status specified in Rule 5.73.

3.4 Specifically, LPC Submission Point 283.3 seeks the deletion of condition 6 (a), or alternatively seeks that the areas subject to condition 6(a), excluding land owned by the Lyttelton Port Company, be shown on a map. The reason for the submission is that the condition 6 (a) is unreasonable because there will be many cases where constructed-related stormwater discharges will not involve contaminants other than suspended solids. In such circumstances there should not need to be a test for the determinands set out in Schedule 5. Schedule 5 may in some circumstances be justified (i.e. from some urban areas) but should not apply universally.

3.5 LPC Submission Point 283.4 seeks the deletion of Condition 6 (b) (i), or alternatively that Condition (b) (i) only applies, subject to justification, to specific rivers (streams) in Banks Peninsula which are shown on the planning maps. The reason for the

submission is that there is no clear reason as to why a 50 g/m^3 suspended sediment limit has been set across Banks Peninsula. The submission accepts some rivers (streams) may need to be subject to this limit but not all. Mr Potts has examined this 50 g/m^3 further and considers it is appropriate for a permitted activity threshold and therefore LPC does not intend to pursue this matter.

3.6 LPC Submission Point 283.5 seeks to amend Rule 5.73 so that the status of any activity failing to comply with the conditions of Rule 5.72 is a discretionary activity. The reasons for the submission are that non-complying status of this rule is inappropriate and unduly onerous. The rules implies that all of the conditions in Rule 5.72 are bottom-lines that must be achieved.

Assessment

3.7 LPC owns some 149 hectares of land at the Port. The port is located on the flat, reclaimed land and associated wharves which are used to serve ships. Stormwater from these areas are either discharged into the Christchurch City Council's reticulated stormwater system or directly into the coastal marine area and are not captured by Rule 5.72.[2]

3.8 Nevertheless, a considerable portion of LPC's land-holding is on the hillside to the east of the Port. This includes LPC's quarry at Gollans Bay and the associated roads that connect the Port and Quarry. A Google Earth Image shows the general area in question (refer to **Appendix A**). The hard-rock quarry is essential to the Port because the rock is used to maintain the seawalls and is a key resource for reclamation.

3.9 The terrain is steep and there are numerous gullies that contain ephemeral streams under heavy rainfall conditions or under moderate rainfall with wet antecedent conditions. As a consequence LPC has previously obtained stormwater discharge permits from Environment Canterbury associated with the quarry and the haul road and in all likelihood new stormwater discharge permits will again be needed for future port development.

3.10 Therefore, the rule is relevant and the conditions need to be workable.

[2] There are rules contained in the Regional Coastal Environment Plan that deal with stormwater discharges into the coastal marine area.

3.11 Mr Potts has discussed the rule and the recommendations made by the Reporting Officer. Mr Potts and I recommend an alternative wording to Condition 2 (d) of Rule 5.72A as recommended by the Reporting Officer, as follows:

> *"(d) (i) The discharge, **other than a discharge directly associated with Earthworks, results in** ~~meets~~ the water quality standards **listed** in **Tables A and B of** Schedule 5 **being met** after reasonable mixing with the receiving waters~~, in accordance with Schedule 5~~.*
>
> ***(ii) The discharge directly associated with Earthworks results in the water quality standards listed in Table A of Schedule 5 being met after reasonable mixing with the receiving waters.***
>
> ***(iii)*** ……"

3.12 It would mean that as a consequential amendment, Schedule 5 would need to be split into Tables A and B with the toxicants column[3] currently in new 'Table A' being transferred to new 'Table B' along with the list of toxicants and the numerical standards.

3.13 The changes would mean a Certificate of Compliance for a proposed stormwater discharge associated with Earthworks, as defined in the Plan, could be obtained without entailing the costs associated with measuring the toxicants listed in new Table B.

3.14 I note that the disturbance of soils within a *HAIL* site[4] is captured by the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations, 2011 ('NES').

3.15 The NES permits only up to 25 m^3 of soil disturbance on per 500 m^2 of land deemed a *HAIL* site (clause 8 (3)), and permits only up to 5 m^3 of soil per 500 m^2 being taken from a *HAIL* site (clause 8 (d) (ii)), otherwise a resource consent is required by the relevant territorial authority. Therefore the above proposed amendment should not cause an issue for such sites. I further discuss the issue of potentially contaminated

[3] As an aside, I could not locate Table WQL17 referred to under the toxicants column and referred to for Ammonia.
[4] Schedule 3 of the pLWRP is taken from the Hazardous Activities Industries List (*HAIL*) prepared by the Ministry for the Environment.

sites as defined in the pLWRP and active discharges in Section 5 of my evidence below.

3.16 Mr Potts also considers further explanation is required as to how Schedule 5 is to be used generally for industrial and contaminated sites. I agree that it would be preferable to clarify this for a potential applicant having to obtain a stormwater discharge permit for any reason.

3.17 Finally, Mr Potts is also concerned with reference to spring-fed rivers in the first clause of the condition relating to suspended solids. As a possible solution, he suggests the Condition 2 (d) (ii), as recommended by the Reporting Officer,[5] could be transferred to a new column in new Table A of Schedule 5. I understand the new column would need to apply to the discharge rather than the receiving water. This amendment would work in with the proposed amendments to Condition 2 (d) (ii) above and I believe there is scope to do this under the LPC submission.

3.18 Turning to Rule 5.73, I note a number of submitters, in addition to LPC, are seeking to amend Rule 5.73 so that the status of any activity failing to comply with the conditions of Rule 5.72 is reclassified as a discretionary activity. I agree with the comments of the Reporting Officer, and I note Mr Potts considers for example that any potential application for a stormwater discharge not being able to meet the thresholds for suspended solids should not be classified as a non-complying activity.

4. RULES RELATING TO THE MANAGEMENT OF HAZARDOUS SUBSTANCES

4.1 LPC Submission Points 283.6 to 283.11 seek to delete Rules 5.162 to 5.167 or alternatively introduce a rule that permits the use of land for the temporary storage of any hazardous substances contained in cargo which is in transit through Lyttelton Port and its associated depots which may otherwise contravene the rules.

4.2 The reason for the submission is that the rules may inadvertently capture hazardous substances that are in transit through the port or through the inland depot at Woolston.

[5] Condition 6 (b) in the pWLRP

4.3 The Reporting Officer (Section 10.4) rejects the submissions because no reason was given by LPC as to why hazardous substances in temporary storage associated with the Port should be exempted from the pLWRP rules.

Assessment

4.4 Hazardous substances routinely transit through the Port. Most are transported in shipping containers. They are subject to the requirements under the Hazardous Substances and New Organisms Act, 1996. I understand these requirements relate to matters such as labelling, packaging, separation distances and the length of time hazardous substances are stored at the Port. I am also advised that LPC also has an emergency response plan in the event of any accidental spillages.

4.5 All cargo is transited through the Port as quickly as possible for both commercial and container terminal efficiency reasons, and I understand it would be an exceptional circumstance if any hazardous substances in transit would be stored at the Port or at Woolston for longer than three days.

4.6 My reading of the conditions attached with the rules is that they are not attempting to capture the transiting of hazardous substances through various transportation gateways.

4.7 Rule 5.162 for example appears to have been introduced to manage portable diesel tanks on construction sites. Nevertheless, given there is no definition of a portable container it means that a shipping container which holds any hazardous substances could be interpreted to be a portable container and thereby be caught unintentionally by the rule.

4.8 The Reporting Officer has recommended that the term ‘portable container’ be defined in the Plan. I agree with the Officer that the definition proposed, if adopted, would mean hazardous substances contained in a shipping container would no longer be caught by the rule.

4.9 Rule 5.164 includes Condition 4 (b) which requires stock reconciliations to be undertaken within the first 24 hours and thereafter on a fortnightly basis. This is clearly concerned with leakages occurring with substances that are stored on a site for a longer period of time. Condition 3 also requires a monthly inspection of all

areas or installation used to store hazardous substances which again is, in my opinion, not relevant for transiting cargo.

4.10 Those matters set out in Conditions 5 and 6 of Rule 5.164 as far as I am aware are not relevant to the Port or the Woolston Depot.

4.11 The Reporting Officer has recommended, in response to other submissions, that the conditions be amended to relax the stock reconciliation requirements. Notwithstanding, the amended conditions still include a requirement for the reporting of any physical loss of product (Condition 4 (a)), the keeping of recent stock reconciliations records (Condition 4 (b)), as well as the requirement for a monthly inspection (Condition 3) that in my opinion are still unnecessary for transiting cargo.

4.12 Having said that, I have spoken to LPC staff and they could live with Conditions 4 (a) and (b), as amended by the Reporting Officer, given reconciliations are completed under the HAZNO Legislation in any event. However, the monthly inspection requirement under Condition 3 would be placing an additional requirement on transiting cargo for no resource management reason.

4.13 Rule 5.165 is concerned with the use of land for the decommissioning of a container located in or under land. While the word 'decommissioning' is not defined, the reference to containers 'in' or "under land' would exclude shipping containers which sit on land. Therefore, I consider no exemption is required for this rule. On the basis that the recommendations made by the Reporting Officer are adopted, then the submission of LPC could be amended so that it applies only to Condition 3 of Rule 5.164 i.e.

Condition 3 does not apply to the use of land for the temporary storage of any hazardous substances contained in cargo which is in transit through Lyttelton Port and its associated depots.

4.14 If for any reason the recommendations by the Reporting Officer are not adopted then in my opinion the following exemption sought by LPC should apply:

The use of land for the temporary storage of any hazardous substances contained in cargo which is in transit through Lyttelton Port and its associated depots which may otherwise contravene Rules 5.162 or 5.164 is a permitted activity.

5. RULES RELATING TO POTENTIALLY CONTAMINATED LAND

5.1 The Oil Companies[6] have provided detailed submissions on the management of contaminated land. LPC has lodged further submissions in support of the oil companies that seek to:

a. Delete the definition of Potentially Contaminated Land;[7]

b. Delete the conditions that refer to potentially contaminated land that are found in the rules; and

c. Introduce a new rule that addresses passive or legacy discharges.

5.2 The Reporting Officers have rejected the approach sought by the Oil Companies. This is discussed further below.

Assessment

5.3 Rules 5.7, 5.9, 5.35, 5.55, 5.69, 5.72 and 5.77 permit various types of discharges provided they comply with the conditions. None of these discharges are permitted if they are into or onto land that is deemed potentially contaminated, or from potentially contaminated land that may then enter water.

5.4 Any site that has or had an activity listed in Schedule 3 is deemed potentially contaminated unless a detailed site investigation proves otherwise. The activities listed in Schedule 3 are broad and includes land used for port activities as well as transportation depots.

5.5 As noted earlier in my evidence, although the majority of the stormwater discharges from the Port are directed to the coastal marine area,[8] any decisions made here could potentially flow into a review of the coastal plan that is proposed to commence shortly.

5.6 The pLWRP approach has been lifted from the NES as described earlier. Clause 5 (9) of the NES states that the regulations do not apply to a piece of land described in

[6] Mobil Oil NZ Ltd, BP Oil NZ Ltd and Z Energy Ltd

[7] LPC wrote a letter a Environment Canterbury (dated 14 November) withdrawing its submission on the definition.

[8] However some stormwater discharges could be captured by these rules if they cannot be accepted into the City Council's stormwater system.

clause 5 (7) or 5 (8)[9] where a detailed site investigation has been completed and reported, and demonstrates that any contaminants in or on the piece of land are at, or below, background concentrations.

5.7 The Oil Companies oppose the approach of the NES being imported into the pWLRP in the manner proposed. They consider that it is inappropriate to use the background concentrations in the NES as a threshold to determine whether consent is required for an active discharge onto land or into water. This is because the NES limits serve a different purpose: the management of soil contaminants to protect human health. The Oil Companies' consider there will be many examples where the quality of the stormwater is not impacted by presence of contaminants above the background levels as determined by the NES.

5.8 Furthermore, the Oil Companies also note that stormwater discharges from a Schedule 3 site may not necessarily be in contact with any contaminated soil, particularly if that land has be sealed or capped.

5.9 The Reporting Officer (page 136) rejects the submissions from the Oil Companies to delete the definition of potentially contaminated land because similar rules are contained in the Natural Resources Regional Plan and also because the NES at least contains a methodology for assessment. However, in my view the Reporting Officer has not critically assessed the very detailed submission of the Oil Companies in terms of Section 32 of the RMA.

5.10 The Oil Companies instead propose a rule which is to apply to passive discharges. As I understand the rule would trigger the need for a discharge permit where the concentration of contaminants beyond a specified location within a site exceeds the Drinking Water Standards (2005), or exceeds the threshold level of protection for 80% of species using the ANZECC Guidelines (2000) for water that is not being used or could be potentially used by humans. If a site requires consent, they anticipate the owner would surrender its consent or at least cease monitoring once the relevant thresholds have been achieved.

5.11 The Oil Companies also consider that in addition to the proposed passive discharge rule, Environment Canterbury has a 'backstop' rule in the event that an active

[9] Sub-clauses 5 (7) and 5 (8) in summary refer to a piece of land that has, or had, an activity or industry described in the *HAIL*, or to a piece of production land in certain circumstances.

discharge happens to be causing a contaminant issue. This is the catch-all Rule 5.6 that deals with any discharge of contaminants that is not listed as a permitted, controlled, restricted discretionary, discretionary, non-complying or prohibited activity but which would otherwise contravene Section 15 (1) of the Act.[10]

5.12 The Reporting Officer (page 200) rejects the proposed passive discharge rule because it is not considered to be adequate or appropriate in terms of the requirements set out in section 70 of the RMA and would be difficult to administer.

5.13 While I do not have the expertise to comment on whether the New Drinking Water Standards (2005) or the relevant ANZECC Guidelines are the appropriate limits for the conditions of the proposed passive discharge rule to be based on, the overall approach in my opinion would better achieve the requirements of Section 32 of the Act if it eliminates the costs of obtaining unnecessary consents while providing a mechanism to adequately capture any sites that cause issue.

5.14 I accept that the passive discharge proposed rule will need to be workable and if the Commissioners are still of a mind to continue the active discharge rules applying to potentially contaminated land then at least in my view better guidance could be given in the pLWRP on the types of conditions that are likely to be imposed on resource consents. This issue was noted by Mr Potts in terms of the toxicants listed in Schedule 5, as discussed earlier.

Andrew Purves
4 February 2013

[10] This is in the context of Environment Canterbury having an oversight on a Schedule 3 site because of the site investigation work needed to be carried out under Rule 5.167, or the forwarding of site investigation required under the NES to Environment Canterbury under Rule 5.168.

Appendix A: Oblique Google Earth Image showing Sumner Road (yellow) running up to Evan Pass (currently closed) and Gollans Bay Quarry. Lyttelton Port Company's owns the Quarry and most of the land below Sumner Road.