BEFORE THE CANTERBURY REGIONAL COUNCIL

UNDER THE	Resource Management Act 1991
AND	
IN THE MATTER	of application CRC190445 by the Christchurch City Council for a comprehensive resource consent to discharge stormwater from within the Christchurch City area on or into land, into water and into coastal environments

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REBUTTAL EVIDENCE OF

ROBERT BRIAN NORTON FOR CHRISTCHURCH CITY COUNCIL

Dated 30 October 2018

CHRISTCHURCH CITY COUNCIL
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INTRODUCTION

1. My full name is Robert Brian Norton. My qualifications and experience are set out in my evidence in chief (**EIC**) dated 15 October 2018.

2. I confirm that I have read and agree to comply with the Code of Conduct for expert witnesses contained in the Environment Court Practice Note (dated December 2014). I confirm that the issues addressed in the statement of evidence are within my area of expertise. I have not knowingly omitted to consider facts or information that might alter or detract from the opinions expressed. The Council as my employer has agreed that I give this evidence on behalf of the Council.

SCOPE

3. My rebuttal evidence is provided in response to the evidence filed by the following submitters:

    a) Peter Hay for Ravensdown.
    b) Anna Wilkes for Ravensdown.
    c) Trent Sunich for the Oil Companies.
    d) Mark Laurenson for the Oil Companies.
    e) Andrew Purves for Lyttelton Port Company.

PETER HAY FOR RAVENSDOWN

4. In his evidence, Mr. Hay describes the activities of Ravensdown at their 312 Main South Road, Hornby plant and some of the stormwater management improvements that the company have made to their site. Mr. Hay states in his paragraph 6.3 that the lack of clear expectations regarding discharge water quality or receiving environment water quality requirements for industrial sites make it difficult to target outcomes.

5. I agree that no clear standards being set for the Ravensdown site discharge may make it difficult for the organisation to plan and implement improvements

to some extent. I am also cognizant that setting unachievable standards could potentially lead to an unproductive cycle of non-compliance and enforcement. Ms. Valigore has direct experience with the Ravensdown Hornby plant and I refer to her rebuttal evidence.

6. Broadly, however, the Council proposes to use the Bylaw and the Industrial Site Audit process to set site specific standards for industrial sites. It may be that standards for industrial sites differ from one another due various factors including (but not necessarily limited to):

    a) Site activities and materials that are stored, handled and transferred;
    b) Location within the catchment;
    c) Proximity to the receiving environment; and
    d) The presence (or lack) of a CCC stormwater treatment system downstream.

7. Failure to meet specific standards could result in the Council revoking coverage of a site's discharge under its consent, prosecution or other abatement or infringement action that becomes available to the Council.

ANNA WILKES FOR RAVENSDOWN

8. Ms. Wilkes states in her paragraph 5.4 that roof water discharges onto or into land could potentially create a scenario where hardstand water and roof water from the Ravensdown plant discharging into land via the same stormwater management system within the site could potentially be covered by two different consents; this consent (for roofs) and a separate consent with Environment Canterbury for hardstand areas.

9. I agree that this scenario is a potential outcome given how this Application's conditions are structured. I note that the consent is intended to be as enabling as possible, with the approach that discharges from roofs of buildings are unlikely to pose a significant environmental risk.

10. If it were deemed, however, that the Ravensdown site itself (including discharges from roofs) posed a high risk to the environment under Condition 2(a), it is conceivable that both the roof and hardstand areas could be excluded from the consent.

11. Similarly, if the submitter preferred to avoid the complication of holding consents with two separate authorities for different parts of their site, they could voluntarily cover all discharges under a separate consent with Environment Canterbury. If discharges were into land, this consent could continue to cover the site after 2025.

12. Ms. Wilkes again raises a concern in her paragraph 5.7 about Condition 2 not providing certainty with regard to what the Council might consider an 'unacceptably high risk' site. I've acknowledged this issue in my EIC paragraphs 130-133 but consider that industrial sites must be examined on an individual basis. I consider that if Ravensdown were to seek authorisation for its existing discharges from their site under this consent (once issued), it could request this in writing from Council and it could propose that additional conditions providing for this (as suggested by Ms. Wilkes in her paragraph 5.11) are unnecessary. Such a request may compel the Council to make the determination as to whether the site poses an unacceptable risk or, if not, to set specific discharge standards and/or monitoring and reporting conditions.

13. Ms. Wilkes considers in her paragraph 5.14 terms such as 'approval', 'expressly authorised' and 'considered by Council' create uncertainty for business with regard to the pathways and criteria which must be navigated to receive endorsement for discharges. I've described the process by which the Council issues written approvals for discharge in my evidence in chief paragraphs 97-103, but I agree that the terms "approval" and "authorised" have been used somewhat interchangeably throughout the consent. I do not consider that the use of these terms necessarily implies one specific type of process over another.

TRENT SUNICH FOR THE OIL COMPANIES

14. Mr Sunich in his paragraph 3.1(b) considers that Oil Company sites that are compliant with the Ministry for the Environment *Environmental Guidelines for Water Discharges from Petroleum Industry Sites in New Zealand* (**Guideline**) are demonstrating best practice and should not be excluded from being authorised by this application.

15. While I agree that the Guideline is useful for petrol station sites controlling their discharge of total petroleum hydrocarbons (**TPH**) through various mechanisms (summarised in paragraph 6.12 of Mr. Sunich's evidence), the Guideline does not address other urban contaminants such as dissolved zinc or copper generated from sites, particularly *Category 1* parts of the site (that is, paved open areas utilised for vehicle movement, driveways and parking) that are directly exposed to rainfall and bypass the oil/water separator systems. The Guidelines also do little to address the potential for spillage from *Category 1* parts of the site or tracking of TPH or other contaminants from *Category 2 or 3* parts of the site onto *Category 1* areas where they may become entrained in stormwater and discharge directly into the stormwater network without treatment.

16. I therefore consider that compliance with the Guideline alone will not guarantee that the discharge will not affect the ability of the Council to improve the quality of its stormwater discharges (a primary objective of the consent).

17. Mr. Sunich discusses in section 6 and 7 of his evidence some of the measures that Oil Company sites undertake to minimise risk to the environment. He considers that Oil Company sites which are operating compliant systems do not present a risk akin to the purpose identified in Condition 2(a) of the conditions. I agree that some Oil Company sites may not fall into the category of "unacceptably high risk". Others may, however.

18. Mr. Sunich refers in his paragraph 8.1, to Section 9.1.7 of the Application which states that it is proposed that the water quality of stormwater discharges into the Council's network from industrial sites will be required to be equivalent

to the discharges from residential areas. He questions whether this requirement is aspirational or whether actual water quality targets would be applied to industry groups or individual sites. He disagrees with this statement in his paragraph 8.2 on the basis that discharges from industrial sites may differ substantially in content from residential discharges.

19. I agree that the expected concentrations and types of contaminants discharged from industrial sites are known to differ from residential sites, however I consider Paragraph 95 of my EIC (which references Table 6-2 of the WWDG) can be used as a guide for characterising what residential quality discharges might be expected to look like. I have given evidence (paragraph 89 of my evidence in chief) on how Council may set minimum discharge standards for new sites through the Bylaw. I note that Table 6-2 consists primarily of contaminants of concern that are typically generated from residential areas. Specific standards for industrial sites may require additional standards for site-specific contaminants (such as TPH from petrol stations).

20. If the Council were to consider, for example, a new discharge application from a petrol station, and it considered the site was going to be managed in such a way that it could be considered a 'low risk', the Council may choose to issue a written approval for discharge under the Bylaw that included specific discharge targets for TSS, zinc, copper, lead and TPH. The site developer then may consider that pre-treatment of their stormwater runoff using a rain garden or proprietary treatment device would be necessary to meet the specific targets prior to discharge into the Council network. The Council would then be satisfied that the discharge would be acceptable and approve the application.

MARK LAURENSON FOR THE OIL COMPANIES

21. Mr. Laurenson suggests (in paragraph 7.5) changes to the definition of **Re-development site**.

22. Mr. Laurenson suggests removing the word 'site' from the definition. I agree with this proposed change because the word 'site' does not always follow the

word ‘re-development’ in the conditions of the consent and would therefore add overall clarity.

23. Mr. Laurenson seeks at paragraph 7.5 to include some additional wording to the definition of re-development to clarify that changes to a site that reduces the potential for adverse environmental effects should not be considered a ‘re-development’. I agree with his proposed changes in principle, because the definition of re-development was intended to capture sites where changes to the site or site activities would alter either the rate of discharge (water quantity) or the load of contaminants (water quality) for the worse. I suggest the following wording which I consider will address Mr. Laurenson’s concerns (words removed in ~~strikeout~~ and words changed or added in *italics*):

> **re-development** ~~site~~ means a change to a developed site or a site activity that results in a stormwater discharge that *has the potential to increase the* scale*,* intensity or *contaminant content of* the discharge that existed prior to the commencement of this consent.

24. Mr. Laurenson considers at paragraph 8.2, based on his reading of the working version of the conditions, that new and re-developments of Oil Company sites will require operational stormwater consents from Environment Canterbury prior to 2025.

25. I do not necessarily consider this to be the case, as an assessment of the site would have to conclude the site poses an “unacceptably high risk” to be excluded under Condition 2(a). In paragraph 17 above, I have stated that I do not consider all Oil Company sites would necessarily fall into this category.

26. Mr. Laurenson in his paragraph 8.5 states that he does not consider MfE Guideline compliant discharges should be automatically excluded pre-2025. I agree with this statement, however would qualify it by saying that I also do not consider MfE Guideline compliant discharges should be automatically considered “low risk” discharges.

27. Mr. Laurenson suggests in his paragraph 8.6 a condition relating specifically to petroleum industry sites. I share Ms. West's view on this matter expressed in her rebuttal evidence and do not support such a condition to apply to any specific industry or site within a comprehensive discharge consent of this nature. Such a condition would not provide for the variation of petroleum industry sites, their locations, their discharges and different receiving environments.

28. Mr. Laurenson disagrees in his paragraph 10.2 with Mr. Tipper's suggestion of a single TSS limit for discharges and considers a method-based specification for the most appropriate means of targeting a limit. Although I am not clear on what exactly Mr. Laurenson proposes, I refer to my own views as expressed in my EIC paragraphs 212-215 that proposes TSS limits to be set on a site-by-site basis using a risk matrix.

29. Mr. Laurenson, on behalf of the Oil Companies recommends deletion of my proposed definition of hardstand, which was suggested in response to the Oil Companies submission in paragraph 183 of my EIC. I do not consider a definition of hardstand to be necessary for the functioning of the consent conditions as proposed and agree for it not to be included.

30. Mr. Laurenson recommends in his paragraph 12.5 minor amendments to the definition of industrial site. In the consent conditions, the use of the term 'industrial site' is almost exclusively in the context of the industrial site audits (Condition 41). I do not consider that limiting the definition of industrial sites as proposed my Mr. Laurenson adds any clarity to the consent and would only serve to unnecessarily restrict the types of sites that the consent holder may wish to audit under Condition 41. This could have the unintended effect of excluding sites from audit that may pose an actual high risk to the environment.

31. Mr. Laurenson recommends removal of the term 'high-use site' from the definitions section of the consent because he asserts that it is not used in the conditions. The term 'high-use site' is used in Schedule 3 of the consent and therefore I do not agree that it should be deleted.

ANDREW PURVES FOR LYTTELTON PORT COMPANY

32. Mr. Purves seeks (paragraph 33) to replace Condition 1 to "better demarcate the discharges of stormwater to the CCC network and those directly to land within the network area" and include a map to establish the spatial scope of the consent.

33. The proposed replacement of Condition 1 appears to achieve essentially the same scope as the currently proposed condition, but lacks the specificity of the discharges. I do not consider that Mr. Purves' proposed change to Condition adds any substantial improvement to the current Condition 1 and may, on closer inspection, inadvertently include or exclude some discharges that have already been considered carefully in the development of the current conditions.

34. In summary, I do not consider a map to be a useful or helpful tool for the following reasons:

    a) The consent already covers the whole of Christchurch City and the settlement areas of Banks Peninsula. These are areas identified in a multitude of existing plans, including the Christchurch City Council District Plan.
    b) In practice, maps of this scale are difficult to read in the resolution required for a consent record. This invariably leads to confusion near the boundaries of delineated areas. I have experienced this confusion first hand with maps attached to previous Stormwater Network discharge consents CRC120223, CRC131249 and CRC090292.
    c) If the map were to be made 100% accurate, it would exclude boundaries of sites that discharge directly to the Coastal Marine Area and industrial sites that discharge into land through their own private stormwater networks. Such a map would be nearly impossible to read, difficult to produce accurately and could change throughout the life of the consent, requiring a variation to the consent to update.

35. Mr. Purves seeks further substantial changes (paragraph 30) to the proposed Conditions 2 and 3. He recommends deletion of Conditions 2 and 3 and replacement with a series of 15 new conditions, which include specific reference to the industrial site audit process.

36. I agree with Ms. West and Ms. Valigore that this recommendation should be rejected, for the reasons set out in their rebuttal evidence. The industrial site programme is meant to be a separate work programme designed specifically to help the Council understand and manage existing industrial discharges that may not be subject to review or investigation under other processes (that is, new or re-development sites applying for discharge authorisations, triggered by land use or building consent, or those sites already operating under a current Environment Canterbury consent subject to the transition process described in Condition 3).

37. I agree with Mr. Purves in his paragraph 57 that a TSS standard of 100g/m3 could be problematic. I therefore have recommended a new condition that requires the Christchurch City Council as consent holder to set site-specific TSS limits on development sites using a risk matrix that takes into account the criteria listed in my EIC paragraph 213:

> *The consent holder shall develop a risk matrix for development sites and use it to set a maximum wet-weather TSS limit on development site discharges into the Christchurch City Council Stormwater Network as part of the written authorisation for the discharge.*

38. Mr. Purves in his paragraph 56 suggests that additional conditions would better demarcate between operational and construction phase stormwater. I agree with Ms. West that separate definition of 'construction phase stormwater' is unnecessary in terms of the conditions of this consent as the references to discharges from 'development sites' is essentially achieving the same demarcation. Conversely, 'operational phase' discharges need not be separately defined because they amount to all other stormwater discharges that do not originate from a *development site*. I recommend that these suggested changes be rejected.

BRIAN ROBERT NORTON

Dated 30 October 2018