

*Tabled a Hearing  
11/11/2015 - Ravensdown*

**BEFORE THE CANTERBURY REGIONAL COUNCIL**

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of the Proposed Canterbury Air Regional Plan (PCARP)

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**LEGAL SUBMISSIONS ON BEHALF OF  
RAVENSDOWN LIMITED**

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**MAY IT PLEASE THE COMMISSIONERS:****INTRODUCTION**

- 1 Ravensdown Limited (Ravensdown) made a submission and further submission on the Proposed Canterbury Air Regional Plan (PCARP).
- 2 Ravensdown is a co-operative company and is New Zealand's largest manufacturer of superphosphate. Superphosphate is the most important fertiliser used on New Zealand soils, providing essential phosphate and sulphur inputs. These in turn allow our primary production sector to be much more productive, producing agricultural products for local consumption and particularly for export. This creates significant income<sup>1</sup> and employment.
- 3 Superphosphate is manufactured by Ravensdown at three factories in New Zealand. One of the factories is at Hornby in Christchurch (the Hornby Works) and is directly relevant to the PCARP. The Hornby Works are located at 312 Main South Road. Construction of the Hornby Works commenced in 1919, and the Hornby Works have been operating continuously since 1922 when the manufacturing of sulphuric acid and fertiliser commenced.
- 4 The Hornby Works presently operates pursuant to an air discharge permit granted by Environment Canterbury (ECan)<sup>2</sup>. The air discharge permit commenced on 4 February 2010 and expires on 4 February 2030. A copy of the air discharge permit is attached to the evidence of Mr Peter Hay.
- 5 As the Commissioners will be aware, the notified version of the PCARP has generated a significant amount of concern from Canterbury industry. In its notified form the PCARP represents a fundamental shift in policy positioning by ECan and effectively signals that major and important industrial operations such as Ravensdown's Hornby Works are no longer appropriate. In particular, Policy 6.21 and Rule 7.18 combine to make the future consenting of a facility like the Hornby Works unlawful.

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<sup>1</sup> \$4.5 billion in primary products are exported from Christchurch annually according to the Canterbury Development Corporation's summary report "Christchurch and rural sectors relationship analysis", N Brunson, April 2014

<sup>2</sup> CRC080001

- 6 While Ravensdown has the benefit of an existing resource consent, it nevertheless has significant concerns with what ECan now proposes. In my submission those concerns are legitimate having regard to the potential for ECan to initiate a review of the consent<sup>3</sup> or the possibility that Ravensdown may in the future alter its operations or otherwise seek a new consent or a variation of its existing consent<sup>4</sup>.
- 7 As described in Mr Peter Hay's evidence, the Hornby Works operates to a very high environmental standard, operating in accordance with the best practicable options and with due regard for the nature of the surrounding environment. The way the Hornby Works operates, and the nature of its effects on the environment were subjected to detailed scrutiny by ECan in the resource consent process. That process concluded with the granting of an air discharge permit which confirms that the ongoing operation of the Hornby Works in accordance with the standards set in the resource consent represents an activity which promotes sustainable management. In that process due regard was had to the Ministry for the Environment Ambient Air Quality Guidelines (AAQG), National Environmental Standard for Air Quality (NESAQ), and to localised air quality effects.
- 8 ECan has notified a proposed plan which fails by its own analysis to deliver the outcomes sought. At page 13-2 of the Section 42A Report it is stated:
- The outcomes sought from the pCARP, as applied to industry and large scale discharges, can be explained as follows:*
1. *Inside polluted airsheds – reducing emissions from home heating sources, together with requiring industry to upgrade to cleaner technology and practises through adopting the "Best Practicable Option" (BPO) over time.*
  2. *Outside of polluted airsheds – ensuring that "Best Practicable Option" is applied to maintain air quality, and prevent the creation of additional pockets of air pollution, and further polluted airsheds.*
- 9 At page 13-7 of the Section 42A Report Policy 6.21 is discussed. It is stated:
- While it is the intention of the Policy to implement the air quality objectives, when read in conjunction with Rules 7.17 and 7.18, it does not provide sufficient discretion to apply BPO and enable industrial and*

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<sup>3</sup> Section 128 RMA

<sup>4</sup> Section 127 RMA

*large scale discharges where they are appropriate. Therefore amendments are recommended.*

10 Recommendation R-6.21<sup>5</sup> states "*Policy 6.21 is amended to provide clear guidance as to what is to be achieved in applying BPO in different receiving environments and to refer to the NESAQ as well as Ambient Air Quality Guidelines.*" No amended wording is proposed.

11 Recommendations R-7.17 and R-7.18<sup>6</sup> are as follows:

*Rule 7.17 is deleted and replaced with a new rule or rules that enable application of BPO as appropriate to the receiving environment, to implement the Objectives and Policies of the Plan.*

*Rule 7.18 is deleted and replaced with a new rule or rules that enable application of BPO as appropriate to the receiving environment, and in line with the Objectives of the Plan.*

12 No replacement wording is proposed.

13 Ravensdown is at a disadvantage (along with other submitters) in that while the Officers acknowledge that there are problems with the policies and rules in the PCARP relating to industrial discharges they have failed to provide the Commissioners with recommended policies and rules<sup>7</sup>. This failure on the part of the Officers to provide policy and rule wording which they consider appropriate creates difficulty for both submitters and the Commissioners. You have been presented with several different proposed formulations of policies and rules by submitters, and do not have the benefit of a satisfactory section 32 analysis by ECan staff. This deficiency is capable of rectification through the section 32AA further evaluation requirement, and in my submission an option for the Panel is to direct the Officers to prepare such an evaluation and make it available for submitters to comment on. It may be that in the circumstances a round of expert conferencing will be helpful to allow the planning experts the opportunity to see whether they can agree on the appropriate wording of the industrial policies and rules which ECan has failed to draft. Ravensdown would support such an approach.

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<sup>5</sup> Page 13-8 of the Section 42A Report

<sup>6</sup> Page 13-8 and 13-9 of the Section 42A Report

<sup>7</sup> In particular Question 8 of the Panel questions for ECan Officers and the Officers' response at paragraphs 11 and 12.

- 14 In these submissions I now focus on the following matters:
- (a) The Canterbury Regional Policy Statement (RPS) and the requirement to appropriately address localised and ambient air quality in Canterbury;
  - (b) The appropriate use of the AAQG<sup>8</sup>; and
  - (c) Reverse sensitivity and recognition of significant existing industry.

### **CANTERBURY REGIONAL POLICY STATEMENT (RPS)**

- 15 The RPS is operative. The PCARP must give effect to it<sup>9</sup>.
- 16 Chapter 14 of the RPS deals with air quality. The Introduction to that Chapter notes:

*The two principal regional air quality considerations in Canterbury are:*

- (1) *low or reduced ambient air quality, principally associated with discharges to air from combustion processes associated with home heating and industry.*
  - (2) *localised effects on air quality within the vicinity of a discharge to air, including odour and dust nuisance, particularly from industrial and trade processes, outdoor burning, small- and largescale fuel burning devices, transport, rural activities and waste management processes.*
- 17 The RPS then goes on to deal with ambient air quality issues, and localised effects on air quality resulting from discharges, as separate issues. There are two air quality objectives in the RPS. Objective 14.2.1 relates to ambient air quality and states:

***Objective 14.2.1 — Maintain or improve ambient air quality***

*Maintain or improve ambient air quality so that it is not a danger to people's health and safety, and reduce the nuisance effects of low ambient air quality.*

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<sup>8</sup> Air Quality Report Number 32 prepared by the Ministry for the Environment and the Ministry of Health, May 2002

<sup>9</sup> Section 67(3)(c) RMA

- 18 Objective 14.2.2 relates to localised air quality effects and states:  
**Objective 14.2.2 — localised adverse effects of discharges on air quality**  
*Enable the discharges of contaminants into air provided there are no significant localised adverse effects on social, cultural and amenity values, flora and fauna, and other natural and physical resources.*
- 19 Relevantly from Ravensdown's perspective, Objective 14.2.1 is implemented by Policy 14.3.1 and Objective 14.2.2 is implemented through Policy 14.3.3. Those policies are set out below:  
**Policy 14.3.1 – Maintain and improve ambient air quality**  
*In relation to ambient air quality:*
- (1) *To set standards to maintain ambient air quality in Canterbury based on concentrations of contaminants that cause adverse health effects and nuisance effects.*
  - (2) *Where existing ambient air quality is higher than required by the standards set, to only allow the discharge of contaminants into air where the adverse effects of the discharge on ambient air quality are minor.*
  - (3) *To give priority to ensuring that PM<sub>10</sub> ambient air quality improvements are achieved in Rangiora, Kaiapoi, Christchurch, Ashburton, Timaru, Geraldine and Waimate.*
- Policy 14.3.3 — Avoid, remedy or mitigate localised adverse effects on air quality**  
*To set standards, conditions and terms for discharges of contaminants into the air to avoid, remedy or mitigate localised adverse effects on air quality.*
- 20 The RPS therefore clearly approaches localised air quality and ambient air quality as related, but different issues. Each needs to be managed appropriately for the purpose of promoting the sustainable management of natural and physical resources – including the air resource, but also for the purpose of enabling activities (such as important industry) which have effects on air quality.
- 21 Implicit in the RPS is the understanding that localised air quality effects associated with a discharge and the resulting concentrations of contaminants in the air in the immediate vicinity of a discharge may be different from (and greater than) the ambient concentrations to be found in areas away from the direct influence of a particular discharge.
- 22 The PCARP has abandoned this distinction and seeks to manage localised air quality effects from discharges according to standards and

guidelines appropriate for ambient air quality. In doing so the PCARP fails to give effect to the RPS.

- 23 Mr Roger Cudmore discusses the problems caused by the PCARP's approach at paragraphs 57 and 58 of his evidence and notes that the principal difficulty is caused by a definition of Ambient Air which does not exclude effects on localised air quality. The implication is that industrial discharges will be expected to meet ambient air quality guideline values in the localised area directly impacted by the discharge.
- 24 Mr Cudmore goes on to say at paragraph 59 of his evidence:
- In my opinion it is important to have policies in the plan that are applied to ambient air quality that is representative of the airshed and that is not significantly impacted by localised industrial discharge effects. Further, a separate policy is required for managing localised air quality effects from industry. To achieve both of the above (effectively a dual management regime) it is essential to enable industrial activity in both rural and urban airsheds. As such it is important for the pCARP to provide distinctions between wider airshed air quality and that which is significantly influenced by localised industrial impacts.*
- 25 In my submission the failure to provide for localised air quality effects means that the PCARP as notified does not give effect to the RPS. I note that in opening submissions counsel for ECan stated at paragraph 38:
- The CRPS does seek management of localised and maintenance and/or improvement of ambient air quality effects. However, it does not require that these effects be addressed separately through the Regional Plan.*
- 26 He also said "*The... Canterbury Regional Policy Statement ("CRPS") distinguish(es) between local and ambient air quality. The pCARP seeks to manage all air quality as "ambient air quality" inside and outside of polluted airsheds.*"<sup>10</sup>
- 27 In my submission this approach is wrong, and leads to a failure to give effect to Objective 14.2.2 and Policy 14.3.3 of the RPS.
- 28 In his planning evidence Mr Hansen suggests more appropriate wording.

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<sup>10</sup> Opening Legal Submissions of Counsel for Canterbury Regional Council, 27 October 2015, paragraph 33

## AMBIENT AIR QUALITY GUIDELINES (AAQG)

- 29 In opening submissions counsel for ECan said "*Achievement of the NESAQ standards has been a key driver for the promulgation of the pCARP.*"<sup>11</sup>
- 30 The NESAQ must be observed and enforced by ECan as described to you in Mr Maw's submissions, and I respectfully agree with what he told you about ECan's statutory obligations in that regard.
- 31 Mr Maw does not mention the AAQG in his submissions, even though the AAQG are prominent within the PCARP<sup>12</sup>.
- 32 The AAQG are not a formal RMA document and nor do they have any other statutory or regulatory force. The AAQG do not form part of the higher order statutory framework and are correctly omitted from the list of instruments Mr Maw describes at paragraph 8 of his opening submissions.
- 33 While the AAQG do not constitute a formal RMA planning document they are nevertheless well accepted by air quality professionals and are afforded considerable weight in plan / policy-making. They are also often referred to in the context of resource consent applications. In this latter context they are used as triggers for conducting more detailed site-specific effects modelling and / or monitoring. The way the AAQG are used is discussed in more detail in Mr Cudmore's evidence<sup>13</sup>.
- 34 In my submission the PCARP uses the AAQG inappropriately. This error is closely related to the failure to distinguish between ambient air and localised air quality discussed earlier.
- 35 The AAQG document is unequivocal about the circumstances in which the guideline values are not to be used. It is stated:
- As was stated in the 1994 Guidelines, the ambient guideline values are not designed to be used to assess the environmental and health impacts of individual discharges to air as required by the RMA, or a regional or district plan. Individual discharges include point, area or line sources from activities such as industries, roads and sewage-treatment plants.*<sup>14</sup>

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<sup>11</sup> Ibid, paragraph 12

<sup>12</sup> Policies 6.2, 6.3 and 6.21 and Rules 7.17 and 7.18

<sup>13</sup> At paragraph 44ff

<sup>14</sup> AAQG, section 3.7, page 40



- 36 In my submission the PCARP does precisely what the AAQG says it should not do.
- 37 Policy 6.2.1 is clearly directed toward individual discharges and sets up a pass / fail test of compliance with the concentrations of contaminants set out in the AAQG. This misuse of the AAQG combined with the failure to distinguish between ambient and localised air quality effects as discussed above is not enabling for industry and fails to give effect to the RPS.
- 38 Further, the use of "avoidance" as the only response in the policy translates into prohibited activity status in Rule 7.18, thereby exacerbating the problem.
- 39 As discussed earlier, while in the Section 42A Report and responses to the Panel's questions the Officers acknowledge the provisions need to be amended, submitters have still not seen and had the opportunity to comment on what they now propose. In that vacuum, Mr Hansen has suggested appropriate wording.

#### REVERSE SENSITIVITY

- 40 The concept of reverse sensitivity – when existing lawful activities can become threatened by changing land use patterns whereby new land uses sensitive to the effects of nearby activities establish and then express discontent with the effects with which they have chosen to co-locate – is well-established in law and planning practice.
- 41 The RPS contains a policy directed at this issue. Policy 14.3.5 states:
- Policy 14.3.5 – Relationship between discharges to air and sensitive land-uses***
- In relation to the proximity of discharges to air and sensitive land-uses:*
- (1) *To avoid encroachment of new development on existing activities discharging to air where the new development is sensitive to those discharges, unless any reverse sensitivity effects of the new development can be avoided or mitigated.*
  - (2) *Existing activities that require resource consents to discharge contaminants into air, particularly where reverse sensitivity is an issue, are to adopt the best practicable option to prevent or minimise any actual or likely adverse effect on the environment.*
  - (3) *New activities which require resource consents to discharge contaminants into air are to locate away from sensitive land uses*

*and receiving environments unless adverse effects of the discharge can be avoided or mitigated.*

- 42 Policy 14.3.5(2) of the RPS is particularly relevant in the context of the way existing industrial activities, such as the Hornby Works, are managed under the PCARP.
- 43 Policy 6.7 of the PCARP states:  
*Where, as a result of authorised land use change, land use activities within the neighbourhood of a discharge into air are significantly adversely affected by that discharge, it is anticipated that within a defined time frame the activity giving rise to the discharge will reduce effects or relocate.*
- 44 It is submitted that the apparent intent of this policy is to address situations where sensitive activities have lawfully established near to industry. The policy is therefore purporting to give effect to Policy 14.3.5(2) of the RPS.
- 45 In my submission Policy 6.7 of the PCARP corrupts the concept of reverse sensitivity and fails to properly give effect to Policy 14.3.5(2) of the RPS by stating that existing industry which finds itself exposed to reverse sensitivity will be required to reduce effects or relocate within a "defined timeframe". Rule 7.18 cannot be reconciled with this policy as the "defined timeframe" is in fact no time at all – the activity will be prohibited if it does not meet the AAQG standards in the localised air environment.
- 46 The justification given in the Section 42A Report<sup>15</sup> for inclusion of Policy 6.7 is to deal with 'legacy' reverse sensitivity issues. Legacy reverse sensitivity issues arise where sensitive land use are allowed to establish and perhaps with the benefit of hindsight should not have been approved.
- 47 Policy 6.7 seeks to resolve this situation in favour of the sensitive land use by effectively saying to existing industry "we have failed to protect you from encroachment by incompatible land uses, so you are going to have to reduce your emissions or move / close down".
- 48 In my submission the policy sets up potential problems for an operation like the Hornby Works and is neither necessary nor appropriate in its notified form.

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<sup>15</sup> Page 10-7 of the Section 42A Report

- 49 I submit that when applying for consent to discharge the Hornby Works, and other existing industry, must take the lawful existing receiving environment as they find it. That is what happened when Ravensdown applied for the air discharge permit that ECan granted in 2000. An appropriate assessment of the effects of the existing activity on that environment, including any sensitive receptors, is required. Where the air quality is impaired industry needs to adopt the Best Practicable Option (BPO). Where the assessment concludes that even with the adoption of the BPO the discharge will have unacceptable adverse effects in the receiving environment the consent authority ultimately has the ability to decline consent.
- 50 All this happens without reference to a reverse sensitivity policy which as currently drafted requires reduction in effects (without reference to the BPO) or relocation.
- 51 It is therefore submitted that Policy 6.7 serves no useful purpose and does not give effect to Policy 14.3.5(2) of the RPS.
- 52 As Mr Hansen explains in his planning evidence<sup>16</sup> the PCARP can do much better in the area of reverse sensitivity by providing for co-ordination between the district and regional councils and their respective functions to regulate land use and discharges. Mr Hansen recommends a number of changes to the PCARP in this regard<sup>17</sup> and in my submission these changes are appropriate and better give effect to the RPS and the PCARP's overall objectives.

### **RECOGNITION OF SIGNIFICANT EXISTING INDUSTRY**

- 53 Existing industry plays an important role in providing for the social and economic wellbeing of Canterbury people and communities and in its notified form the PCARP has lost sight of that – with no appropriate recognition in the explanatory text nor in the relevant objectives, policies and rules. Some recognition is afforded to Canterbury's infrastructure (which Ravensdown supports) and this provides a suitable context for discussing the important role of industry – including industry that unavoidably has air discharges.

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<sup>16</sup> Chris Hansen, Evidence in Chief, paragraphs 23-42

<sup>17</sup> Objective 5.9, Policy 6.7 and Policy 6.8

54 Mr Hansen<sup>18</sup> suggests appropriate modifications to the PCARP to address the current deficiencies. In my submission these amendments are appropriate.

**DATED** this 11th day of November 2015



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S W Christensen  
Counsel for Ravensdown Limited

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<sup>18</sup> Chris Hansen, Evidence in Chief, paragraph 21