

KEY ISSUES : OVERVIEW

[23] There are a number of key issues which we have decided to approach as follows. It appears there are three categories of concern, namely:

- (a) definition;
- (b) effects of the proposal; and
- (c) conditions of consent.

1. *Definitions*

[24] The first issues are about definition, namely:

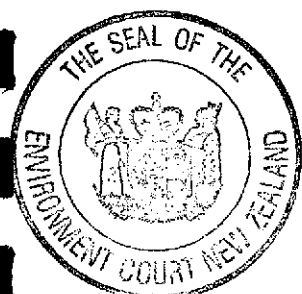
- (a) source of waste;
- (b) residual waste;
- (c) special waste.

[25] These are matters that in our view are largely determined by the scope of the application and accompanying documents which colour the entire consideration of the application. Accordingly, we have concluded that these provisions should be addressed first. However, we accept that even in the event the Court determines that there is no restriction in the application on the source of waste, then that matter could be addressed as part of the conditions if imposed for a proper resource management purpose.

2. *Effects of the proposal*

[26] The second group of issues relates to whether the effects are such that a consent should not be granted. Again, in analysing the evidence and the issues that were raised, we have concluded that there are three critical areas of concern to the appellants on the grant of consent. These are:

- (a) static and seismic stability of the landfill;
- (b) applicability of alternative waste treatment methods;
- (c) potential effects on the marine environment from escape of leachate.



(a) *Static and seismic stability*

[27] In respect of static and seismic stability, these could be summarised to two technical issues. The first is contained in the evidence of Dr I R Brown, alleging a regional lineament in the footprint of the landfill. Dr Brown contends that there is or could be a seismic secondary fault present in the landfill footprint which could result in significant movement in a seismic event. Associated with this argument are the questions of:

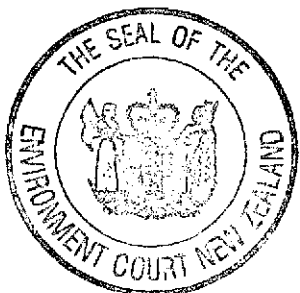
- (a) the sufficiency of the site works to identify any potential fault;
- (b) the alleged presence of an oil seep; and
- (c) the formation and underlying geology of the landfill footprint.

[28] The second stability issue was raised by Dr R M Pyke, a geotechnical and earthquake engineering specialist, and concerned the potential for landfill failure by slipping or slumping. This appeared to relate to three potential situations:

- (a) seismicity;
- (b) high groundwater;
- (c) liner saturation (static failure).

(b) *Alternative waste treatment*

[29] Extensive evidence was given about waste minimisation in the Canterbury region and the consideration of alternative treatment that had been undertaken. The parties, PBBUA in particular, argued that section 104(3) required the Court to be satisfied that alternatives were not available. In this regard evidence was given about particular alternatives including evidence from Mr J G Lawson relating to a resource recovery plant that is currently being installed in Australia and could be installed in Canterbury, which, it was asserted, may be able to utilise much of the waste generated in Christchurch.



[30] Issues were raised by Transwaste as to whether it was appropriate to consider alternatives and/or whether the alternatives proposed were realistic in the current context.

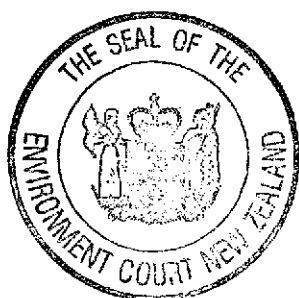
(c) *Leachate effects on the marine environment*

[31] In respect of the potential for damage to the marine environment, the key issue was the potential for leachate to enter the ocean and adversely affect the marine environment. There was no issue that escape of leachate in sufficient quantities into the sea would be of concern to the Regional Council. The issue before this Court was whether that was a real risk.

[32] This brings into play the question of the levels of multiple redundancy in this application and the sufficiency of these methods.

[33] In terms of a brief overview, the leachate risk reduction steps adopted in this proposal were:

- (a) the removal and collection of leachate from waste and transportation off site;
- (b) the use of multiple layers of impervious liners, with encapsulated bentonite clay to ensure no direct escape of leachate through the liner;
- (c) the installation of a compacted sub-base with low permeability;
- (d) the installation of sub-drains to intercept any groundwater/leachate that may permeate the sub-base;
- (e) staging of development upwards from the base of the valley utilising an engineered toe bund;
- (f) geology underlying the sub-base being of low permeability;
- (g) the natural land fall and underlying geology which would direct any leachate that escaped towards the downstream catchment area;
- (h) the management and treatment of any leachate that may escape, by detention dams and wetlands which would provide for biological breakdown and mechanical mixing;
- (i) use of monitoring sites to identify any groundwater contamination;



- (j) the extensive planting of the site and buffer zone around the landfill creating a biological filter;
- (k) an ongoing reach of waterway beyond the wetlands by which any leachate would have to travel to the sea. This would allow further mixing and biological breakdown to take place;
- (l) the significant level of mixing which would occur once any leachate reached the marine environment, taking into account the nearby Waipara River outlet.

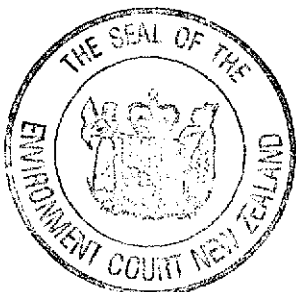
[34] The Regional Council argued strongly that there was no evidence before the Court which could satisfy us that there was any real probability of escape of leachate to the sea and, furthermore, that even if such a risk was calculable, the levels of leachate reaching the sea would be so small as to be undetectable once in the ocean.

3. *Conditions of consent*

[35] Once the Court has considered the issues surrounding the grant of consent itself, it may be necessary for the Court to go on to consider the conditions of consent. Because that enquiry will only be necessary if the Court concludes that a consent is generally acceptable, it could be argued that this should be explored if and when the Court concludes matters in respect of the grant itself.

[36] Unfortunately, the position before this Court is not so simple. In undertaking the integration of various factors required under section 104, the Court has to have particular regard to Part II of the Act. This in turn requires the Court to consider some relatively finely balanced issues, including the levels of avoidance, remedial work and mitigation. That, of course, is influenced by the conditions that could be imposed on the consent and thus it is incumbent on the Court to examine the potential conditions of consent and discuss these before it can make a final decision under Part II of the Act and section 5 in particular as to:

- (a) the grant; and
- (b) the conditions of consent if the grant is to be made.



[37] There are a number of conditions which were appealed, some of which have been largely agreed. The most contentious condition is the preservation of Remnant A which is protected in land use consent RC 020069 condition 13 and special condition 8 to all consents.

(a) *Remnant A*

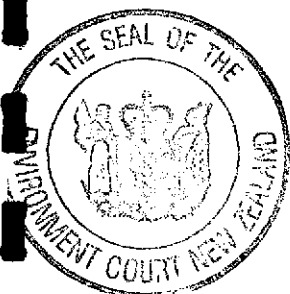
[38] The protection of Remnant A arises pursuant to section 6(c) relating to the protection of areas of significant indigenous vegetation. That Remnant A is an area of significant indigenous vegetation had been conceded by Transwaste before the Commissioners but on appeal the applicant advanced evidence as to whether the area was significant, and as to whether Remnant A was an "area" in terms of that subsection.

[39] Dr C D Meurk, a research scientist, gave evidence on the values of Remnant A under section 6(c) and the District Council sought to uphold the condition based upon the evidence of their witness, Dr P G Simpson, a botanist.

[40] Transwaste advanced evidence through Associate Professor D A Norton, also a botanist. Transwaste also argued on a legal basis that Remnant A could be removed as of right and this formed the baseline against which the assessment of effects under Part II and section 104 must take place. Transwaste produced to the Court a Certificate of Compliance which permitted the removal of Remnant A and thus argued that the Court could not take into account any adverse effects in assessing matters under Part II or section 104 of the Act. That position was not accepted by the other parties.

(b) *Waste separation*

[41] Other conditions were argued before this Court relating to waste separation. Conditions 3, 7 and 8 of CRC 021913 deal with separation of waste. This issue related to a method adopted by the Commissioners for waste minimisation. That method effectively gave a time limit after which no green waste and no hazardous waste could be received at the landfill. Transwaste disputed the appropriateness of these conditions, while PBBUA and CTGTW argued the continued appropriateness of them, as did the



Regional Council. In our view these arguments are related to the source of waste and definitions of waste which we have discussed earlier. We will examine these matters in more detail later in the decision.

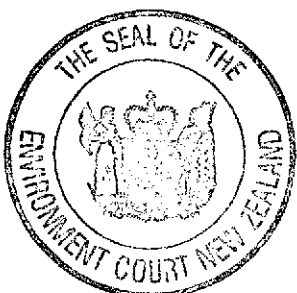
(c) *Other conditions*

[42] In respect of other conditions of consent, there was some level of agreement. These can be summarised as follows:

- (a) General condition 13 Peer Review Panel. It appeared to be acknowledged that condition 13 was inappropriate by most parties, with the exception of PBBUA.
- (b) General condition 33 (iii). Although the Councils accepted the words *or reduce waste volumes to the landfill* should be deleted, PBBUA and CTGTW seek to retain the entire condition. The question arises as to the appropriate resource management purpose that is served by this particular condition.
- (c) Condition 12 RC 020067. The applicant has proposed an amended condition, which was not disputed by any party.
- (d) Condition 2 RC 020069 Compacting of Refuse. A practical difficulty was raised by Transwaste as to whether all refuse should or can be compacted. Again it appears that the parties may now have reached an agreement that, if consent is otherwise granted, compaction should take place where possible. An amended condition has been put forward.
- (e) Condition 4 RC 020069 Hours of Operation. Again, during the course of this hearing, it appeared that the parties had reached a position where a condition could be imposed and a new condition 4 inserted. This would read:

Prior to first acceptance of waste:

- (a) *heavy vehicles associated with construction work on the landfill site shall not have access to the site before 6 am or after 8 pm Monday to Friday inclusive, or before 7 am or after 6 pm on Saturday, Sunday and public holidays.*



- (h) Special condition 3 CRC 021919 Batter Slope Stability. An amended condition is proposed and agreed to by the Regional Council. Mr A P Kortegast, for Transwaste, and Dr Pyke, for CTGTW, also agreed that the amendment was appropriate. We did not understand this condition to be in dispute if consent was otherwise appropriate.
- (i) Special condition 4 CRC 021919 Surface Water Bypass Drains. There appears to be agreement between the parties that this condition could be deleted if consent is otherwise appropriate.

[43] In addition, Transwaste offered several new conditions during the course of hearing which are directly relevant to the landfill stability and groundwater issues. We shall address those issues later. There was also a suggested additional provision relating to seismic stability and landfill stability design factors. We therefore attach and mark "C" Transwaste's proposed conditions of consent (excepting special conditions), highlighting those provisions which parties sought to be deleted or amended.

THE PLANNING FRAMEWORK : OVERVIEW

Scope of hearing

[44] The applications are for consents which are all discretionary. Their discretionary status brings into consideration the provisions of section 104(1)(a)-(i) and Part II of the Act. Because the parties agreed to limit the hearing as we have described, the Court did not hear all of the evidence on all of the matters relevant to the application. That evidence was provided to the Court but, with the specific agreement of the parties, was not read by the Court.

[45] To that extent the parties agreed to limit the scope of the hearing, while recognising that the Court is required to make a general evaluation under section 104 and Part II of the Act. Section 120(1) of the Act provides:

