NEW SOUTH WALES LAND AND ENVIRONMENT COURT

CITATION:
Hub Action Group Incorporated v Minister for Planning and Orange City Council [2008] NSWLEC 116
This decision has been amended. Please see the end of the judgment for a list of the amendments.

PARTIES:
APPLICANT
Hub Action Group Incorporated

FIRST RESPONDENT
Minister for Planning

SECOND RESPONDENT
Orange City Council

FILE NUMBER(S):
10112 of 2007

CATCHWORDS:
Development Application :- waste disposal facility - consent not to be granted unless consent authority satisfied development will not have an adverse effect on the long term use for sustained agricultural production of prime crop and pasture land - whether so satisfied - whether likely adverse effect on beekeeping on adjacent land - proposed development dependent on a resource reprocessing facility not included as part of development application and which would require separate approval - whether development application should be approved in such circumstances - sustainability of development dependent on adoption and implementation off-site of waste minimisation strategy in two local government areas - whether able to be required by conditions of consent

LEGISLATION CITED:
Environmental Planning and Assessment Act 1979 Pt 4, s 79C, s 98
Environmental Planning and Assessment Regulation 2000 Sch 2
Local Government Act 1919 s 541A
Waste Avoidance and Resource Recovery Act 2001 s 3

CASES CITED:
Ansett Transport Industries (Operations) Pty Ltd v The Commonwealth (1977) 139 CLR 54
Attorney-General (NSW) v Quin (1990) 170 CLR 1
Bungendore Residents Group Inc v Palerang Council & Anor (No 3) [2007] NSWLEC 251
Clifford v Wyong Shire Council (1996) 89 LGERA 240
Coffs Harbour City Council v Arrawarra Beach Pty Ltd (2006) 148 LGERA 11

Currey v Sutherland Shire Council (1998) 100 LGERA 365
Eaton & Sons Pty Ltd v Warringah Shire Council (1972) 129 CLR 270
Franklins Ltd v Penrith City Council [1999] NSWCA 134
Hortis v Manly Council (1999) 104 LGERA 43
Manly Council v Hortis (2001) 113 LGERA 321
Newbury District Council v Secretary of State of the Environment [1981] AC 578
Parramatta City Council v Shell Co of Australia Ltd [1972] 2 NSWLR 632
Ryde Municipal Council v The Royal Ryde Homes (1970) 19 LGRA 321
Schroders Australia Property Management Ltd v Shoalhaven City Council [2001] NSWCA 74
Western Australian Planning Commission v Temwood Holdings Pty Ltd (2004) 221 CLR 30
Winn v Director-General of National Parks and Wildlife Service (2001) 130 LGERA 508

CORAM:
Preston CJ

DATES OF HEARING:
9, 10, 13, 14, 15 and 24 August 2007, 10, 11, 12, 13, 14, 19 and 20 December 2007, 11 January 2008

JUDGMENT DATE:
17 March 2008

LEGAL REPRESENTATIVES

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Environmental Defenders Office
FIRST RESPONDENT
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JUDGMENT:

THE LAND AND ENVIRONMENT COURT

OF NEW SOUTH WALES

PRESTON CJ

17 MARCH 2008

10112 OF 2007

HUB ACTION GROUP INC v MINISTER FOR PLANNING and ORANGE CITY COUNCIL

JUDGMENT

1 **HIS HONOUR**: The need for development to be ecologically sustainable is no longer seriously in debate. The principles of ecologically sustainable development are reasonably settled. They include: sustainable use of natural resources; integration of economic, environmental and social considerations in decision-making; the precautionary principle; inter-generational equity and intra-generational equity; conservation of biological diversity and ecological integrity; and internalisation of external, environmental costs by use of improved valuation, pricing and incentive mechanisms.

2 In order to achieve sustainability, however, hortatory statements of principle and aspirational goals are insufficient; the grand strategy must be translated into action. This involves not only institutionalising the principles of ecologically sustainable development in policies and laws, but also ensuring that functions under those policies and laws are exercised in a way so as to promote and implement the principles of ecologically sustainable development. This involves good governance.

3 Implementing sustainability also requires that the principles of ecologically sustainable development inform project design, including the nature, scope, extent, life and other features of a proposed development and its location.

4 Translating grand strategy into action is often difficult. It is easier to devise ideas for sustainability, then it is to convert those ideas into reality. As T S Elliot perceptively observed in his poem, "The Hollow Men":

> "Between the idea
> And the reality
> Between the motion
> And the act
> Falls the Shadow
>
> …
>
> Between the conception
> And the creation
> Between the emotion
> And the response
> Falls the Shadow"

5 This case is an illustration of the problem of converting ideas for sustainability into reality.

6 Two local government authorities, Orange City Council and Cabonne Shire Council, conceived of the idea to create a waste disposal facility which would promote sustainability, both by its own features and by being part of a broader strategy for waste minimisation. Orange City Council purchased a site five kilometres out of Molong, a town in the Cabonne local government area. The idea was for a waste disposal facility that could be carried out in three stages: first, the operation of a conventional municipal land fill for waste from Cabonne local government area for a period of time; second, the construction of a resource reprocessing facility; and third, after construction of the resource reprocessing facility, the continued operation of the landfill for waste from Cabonne and Orange local government areas for the balance of the life of the project, the total project life being estimated to be 40 years. However, the second stage of a resource reprocessing facility was in concept only. The precise nature and the detail of the facility was undeveloped. The third stage was to be made contingent upon the second stage being approved, constructed and commencing operation.

7 The waste disposal facility was conceived to operate in a broader context of developing and implementing a waste minimisation strategy in the two local government areas including reducing, reusing, reprocessing and recycling waste. The waste minimisation strategy would be consistent with the waste hierarchy in s 3(b) of the *Waste Avoidance and Resource Recovery Act* 2001. Resource management options are considered against a hierarchy in the following order:

(a) avoidance of unnecessary resource consumption (and thus waste creation);

(b) resource recovery (including reuse, reprocessing, recycling and energy recovery); and

(c) disposal as the last resort.

8 To move from the conception of the idea to the creation of the waste disposal facility, Orange City Council needed to apply for and obtain development consent under Part 4 of the *Environmental Planning and Assessment Act* 1979 (the Act). The development of a waste disposal facility is classified as designated development under that Act. A development application for designated development needs to be accompanied by an environmental impact statement. That statement is required to contain a full description of the development, the likely impact on the environment of the development and the measures proposed to mitigate any adverse effects of the development on the environment, amongst other matters: see cl 4 in Schedule 2 of the *Environmental Planning and Assessment Regulation* 2000.

9 Orange City Council's development application was approved by the Minister for Planning on 15 January 2007. Concerned local residents and nearby farmers, through the vehicle of an incorporated association, Hub Action Group Inc, appealed against the Minister's decision to this Court under s 98 of the *Environmental Planning and Assessment Act* 1979. The Court exercises the functions of the consent authority on the appeal and can determine whether to grant or refuse development consent to Orange City Council's development application.

10 The Action Group is concerned that the proposed development, as formulated, has not been established to be environmentally acceptable and sustainable on the selected site which is prime crop and pasture land. In particular, the Action Group raises the following issues, all of which challenge the sustainability of the proposed development:

"1. The proposal will have an adverse impact on the long term use, for sustained agricultural production, of prime crop and pasture land contrary to cl 10 of Cabonne Local Environmental Plan 1991 ("Cabonne LEP").

2. The proposal will act as a disincentive to waste minimisation and recycling, and is likely to result in an unacceptable proportion of waste from Orange City Council and Cabonne Shire being landfilled rather than being recycled, reused or reprocessed.

3. Orange City Council has failed to demonstrate that there is a justifiable demand for the proposal, contrary to cl 12(a) of SEPP 48.

4. The proposed landfill is likely to have unacceptable impact on greenhouse gas emissions compared to other waste disposal alternatives.

5. The proposal is not justified on economic grounds.

6. The proposal is inconsistent with the principle of intergenerational equity, which is one of the principles of ecologically sustainable development.

7. The proposal will have an unacceptable impact on bee-keeping in the vicinity of the subject site."

11 Relevant to a number of these issues is another fundamental issue raised by the Action Group. The development proposed in the development application does not include any resource reprocessing facility, notwithstanding that such facility is critical in order for the waste disposal facility to achieve sustainability and Stage 3 (which comprises over 87.5% of the life of the project) is dependent on the design, approval and construction of such a resource reprocessing facility.

12 In short, the Action Group contends that between the idea of a sustainable waste disposal facility as part of a waste minimisation strategy, and the reality of the particular development proposed on the particular site selected, there falls a shadow. That shadow is of sufficient darkness that no amount of amendment of the proposal (as did occur throughout the proceedings) can make the proposal sufficiently acceptable to be granted consent.

13 I agree that Orange City Council's proposed development on the proposed site is unacceptable and ought not to be approved. My reasons are essentially fourfold:

(a) The site selected for the proposed development is prime crop and pasture land, the development of which, for the waste disposal facility proposed, will have an adverse effect on the long term use, for sustained agricultural production, of the site and adjoining prime crop and pasture land;

(b) The proposed development is likely to adversely affect the sustained use of adjoining land for beekeeping;

(c) The proposed development fails to include a component critical to achieving sustainability, namely the resource reprocessing facility; and

(d) The proposal is dependant, in order to establish sustainability, on the implementation off site, in two local government areas, of a broader waste minimisation strategy, which may

not be able to be imposed or enforced by conditions on any development consent for the proposed development.

14 The first reason corresponds with issues 1 and 4, the fourth reason with issues 7 and 4 and the third reason with the general or underlying issue raised by the Action Group. The fourth reason is responsive to the development proposed by Orange City Council and the suggested conditions of approval.

15 I will deal with each of these reasons. Before doing so, however, I will summarise the development as finally proposed.

THE DEVELOPMENT

16 During the course of the proceedings, Orange City Council amended the proposed development a number of times. This required a supplementary environmental impact statement, re-notification and re-exhibition of the amended development, and the adjournment of the hearing.

17 In the end, the essential aspects of the proposed development are as set out in the following paragraphs, drawn from the EIS Supplement, September 2007, as further amended during the hearing. An aerial schematic of the proposal is appended to this judgment to provide an appreciation of the site and its proposed layout.

18 Stage 1 of the project involves construction and operation of the initial stage of the landfill and associated infrastructure (including site entrance and access road, site office and weighbridge, waste receival hall, and workshop/maintenance and fuel storage buildings) and receival and disposal of waste from Cabonne Shire (other than recyclables which would be diverted to the Orange City Council's Ophir Road Materials Recovery Facility during Stage 1). By the close of the hearing, Stage 1 had been reduced to a period of five years.

19 Stage 3 involves extension and ongoing use of the landfill and receiving and disposing of Orange City Council's and Cabonne Shire's residual waste stream, after such processing as would be undertaken at a resource reprocessing facility proposed for the site (the Stage 2 element). Stage 3 was predicted to operate from years 6 to 40. Stages 1 and 3 are the subject of the development application.

20 The landfill area (for both Stages 1 and 3) will be 20.7 ha. The landfill area perimeter bund will comprise a further 5.7ha.

21 Stage 2 involves the construction and commencement of operation of a resource reprocessing facility for elements of the waste stream of both Councils which are capable of being composted. This stage is not encompassed in the development application and would require a separate development application and development consent.

22 Leachate collection systems are provided, including a leachate pumping facility and leachate evaporation ponds to the north of the landfill area. The leachate evaporation ponds have an area of 1.8 ha. A new freshwater dam is proposed to catch and use clean surface runoff. It is located in the north-western corner of the site. Although no landfill gas capture system is included in the development application, it could be retrofitted if required.

23 Vegetation screens will be planted to screen the landfill area from various public and private viewing points. A vegetation screen (20 m wide) will be planted along Euchareena Road, the site access road, a small section to the south of the landfill area, and an extensive section to the east and north of the landfill

area. Vegetation plantings will be on a visual amenity bund to the north of the landfill area along Shades Creek Road (an area of 1.4 ha) and on the landfill area perimeter bund (5.7 ha in area)).

24 A stock movement corridor (15 m) is to be provided along the Euchareena Road frontage of the site (2.35 ha in area) to provide for movement of stock and farm equipment across the site between local properties instead of within the Euchareena Road reserve which might be unsuitable by reason of traffic associated with the landfill.

25 Finally, the Council proposes to fence off and revegetate two woodland areas which are presently grazed, the north eastern woodland (51.1 ha) and the western woodland (31.9 ha). These areas also serve as a visual screen to the landfill area and associated buildings and infrastructure, supplementing the vegetation screens to be planted and the visual amenity bunds.

26 An area to the south of the site, originally intended to be used as a stockpile area, now is proposed to be retained for grazing. This is an area of 42.3 ha.

27 These site-related elements of the proposal are to be accompanied by the development and implementation of a waste minimisation strategy for both local government areas, necessarily to be implemented off-site. This strategy implements the waste hierarchy, including waste avoidance and resource recovery activities.

28 During Stage 1, Cabonne Shire Council would be the sole operator of the landfill, but under the management of Orange City Council. Orange City Council would be solely responsible for the design, obtaining consent, construction, commission and operation of the resource reprocessing facility (Stage 2). Orange City Council would become the operator of the landfill from Stage 3.

29 The above outline does not attempt to be a detailed analysis of the revised proposal, merely a thumbnail sketch. The relevant details of the revised proposal are discussed as necessary in more detail later in this decision.

NON-COMPLIANCE WITH CL 10 OF THE CABONNE LEP

The regulatory controls outlined

30 The site is in Zone No 1 (a) General Rural (the zone) under the *Cabonne Local Environmental Plan 1991* (the LEP).

31 Pursuant to the uses for the zone in the development control table in cl 9 of the LEP, a waste disposal facility is neither permitted without consent nor prohibited. It is, therefore, permitted with consent as an innominate use in this zone.

32 The objectives for the 1(a) zone are:

> "The objective of this zone is to promote the proper management and utilisation of resources by:
>
> (a) protecting, enhancing and conserving:
>
> (i) agricultural land in a manner which sustains its efficient and effective agricultural production potential,

(ii) soil stability by controlling and locating development in accordance with soil capability,

(iii) forests of existing and potential commercial value for timber production,

(iv) valuable deposits of minerals, coal, petroleum and extractive materials by controlling the location of development for other purposes in order to ensure the efficient extraction of those deposits,

(v) trees and other vegetation in environmentally sensitive areas where the conservation of the vegetation is significant to scenic amenity or natural wildlife habitat or is likely to control land degradation,

(vi) water resources for use in the public interest,

(vii) areas of significance for nature conservation, including areas with rare plants, wetlands and significant habitat, and

(viii) places and buildings of archaeological or heritage significance, including the protection of Aboriginal relics and places,

(b) preventing the unjustified development of prime crop and pasture land for purposes other than agriculture,

(c) ensuring that any allotment created for intensive agricultural purposes is potentially and physically capable, on its own, of sustaining a range of such purposes or other agricultural purposes as a commercial agricultural operation suitable to the locality,

(d) facilitating farm adjustments,

(e) minimising the cost to the community of:

(i) fragmented and isolated development of rural land, and

(ii) providing, extending and maintaining public amenities and services,

(f) providing land for future urban development, for rural residential development and for development for other non-agricultural purposes, in accordance with the need for that development,

(g) providing for a range of rural living styles in appropriate locations within the area to which this plan applies, and

(h) encouraging the establishment of rural and related industries within the area to which this plan applies."

33 Clause 10 *General considerations for development within rural zones* of the LEP provides, in broad terms, the mechanism for Cabonne Shire Council's consideration and determination of whether or not a development does not fall foul of objective (b) of the zone objectives for the rural zone. The clause provides:

"(1) The Council shall not consent to an application to carry out development on land within Zone No 1 (a), 1 (c) or 7 (c) unless it has made an assessment, where relevant, of the effect of the carrying out of that development on:

(a) the present and potential use of the land for the purposes of agriculture,

(b) vegetation, timber production, land capability (including soil resources and soil stability), water resources (including the quality and stability of water courses and ground water storage and riparian rights),

(c) the future recovery of known or prospective areas of valuable deposits of minerals, coal, petroleum, sand gravel or other extractive materials,

(d) the protection of areas of significance for nature conservation or of high scenic or recreational value, and places and buildings of archaeological or heritage significance, including aboriginal relics and places,

(e) the cost of providing, extending and maintaining public amenities and services to the development, and

(f) future expansion of settlements in the vicinity,

and the Council is satisfied that the development will not have an adverse effect on the long term use, for sustained agricultural production, of any prime crop and pasture land.

(2) In assessing the effect referred to in subclause (1), the Council shall have regard not only to the land the subject of the application but also to land in the vicinity."

The Action Group's contentions of non-compliance

34 The Action Group contends, in its Amended Statement of Issues, that "The proposal will have an adverse impact on the long term use, for sustained agricultural production, of prime crop and pasture land contrary to cl 10 of Cabonne Local Environmental Plan 1991". It provided particulars of this contention, dealing both with a general assertion of non-compliance with cl 10(1) as a result of what it says are the changes to the characteristics of the site during and after the operational life of the proposed facility, and with specific non-compliance, by reference to cl 10(2), as a result of what it says are the impacts on beekeeping and honey production in the near vicinity of the site. The latter topic is discussed in a separate section of this decision.

35 The Action Group provided particulars for the general contention concerning non-compliance with cl 10 in the following terms:

"(a) The majority of the subject site is Class 3 land under the NSW agricultural land classification system.

(b) The proposed landfill on the site will occupy 21 ha of Class 3 land.

(c) A further 28 ha of Class 3 land will be disturbed as a result of the proposed development.

(d) The anticipated life of the landfill on the site is 40 years.

(e) During the life of the landfill, the site will not be able to be used for agricultural production.

(f) After closure of the landfill, the site will not be able to be used for cropping.

(g) After closure of the landfill, some or all of the site will not be suitable for commercial grazing."

36 "Prime crop and pasture land" is defined in cl 5(1) of the LEP as:

> "**Prime crop and pasture land** means land within an area identified, on a map prepared by or on behalf of the Director-General of the Department of Agriculture and Fisheries and deposited in the office of the Council, as Class 1, Class 2 or Class 3 or as land of merit for special agricultural uses, but does not include land which the Director-General has notified the Council in writing is not prime crop and pasture land for the purposes of this plan."

Preconditions to granting consent

37 Clause 10(1) of the LEP imposes two preconditions to a consent authority exercising the power to grant consent to development on land to which the clause applies:

(a) the consent authority has made an assessment of the effect of carrying out the development on the matters specified in paragraphs (a) to (f), the first of which is "the present and potential use of the land for the purposes of agriculture"; and

(b) the consent authority is satisfied that the development will not have an adverse effect on the long term use, for sustained agricultural production, of any prime crop and pasture land.

38 The first precondition prescribes a process that must be undertaken: the making of an assessment of the kind specified. The second precondition requires the consent authority to form the requisite opinion of satisfaction. Both preconditions must be satisfied before the weighing of the merit considerations under s 79C(1) of the Act. Making the requisite assessment and forming the requisite opinion of satisfaction enlivens the power to grant consent to the development: see, in relation to the first type of precondition, *Bungendore Residents Group Inc v Palerang Council & Anor (No 3)* [2007] NSWLEC 251 (15 May 2007) at [69] and [70] and in relation to the second type of precondition, *Clifford v Wyong Shire Council* (1996) 89 LGERA 240 at 249, 251-252; *Currey v Sutherland Shire Council* (1998) 100 LGERA 365 at 372, 374; *Franklins Ltd v Penrith City Council* [1999] NSWCA 134 (13 May 1999) at [18], [27], [28] and [35]; *Hortis v Manly Council* (1999) 104 LGERA 43 at 87 affirmed *Manly Council v Hortis* (2001) 113 LGERA 321 at 329-330; *Schroders Australia Property Management Ltd v Shoalhaven City Council* [2001] NSWCA 74 (20 April 2001) at [7]; and *Coffs Harbour City Council v Arrawarra Beach Pty Ltd* (2006) 148 LGERA 11 at 22 [42]-[44].

Assessment of effect on present and potential agricultural use

39 The Agriculture and Fisheries Division of the NSW Department of Primary Industries publishes an information series under the title "*Agfacts*". One of these Agfacts is entitled "Agricultural Land Classification" (the Agfact). The Agfact was published in October 2002. It provides an overview of the agricultural land classification system in the following terms:

> "This five class system used by NSW Agriculture classifies land in terms of its suitability for general agricultural use. This system was developed specifically to meet the objectives of the Environmental Planning and Assessment Act 1979, in particular 5(a) (i) 'to encourage the proper management, development and conservation of natural and man-made resources, including agricultural land ... for the purpose of promoting social and economic welfare of the community and a better environment'.
>
> Agricultural land is classified by evaluating biophysical, social and economic factors that may constrain the use of land for agriculture. In general terms, the fewer the constraints on the land, the greater its value for agriculture. Each type of agricultural enterprise has a particular set of constraints affecting production. A comprehensive list of all the constraints affecting each form of agriculture would be expensive to compile and unwieldy to use. Consequently, agricultural land classification is based on a set of constraining factors common to most agricultural industries. Section 6.3iii 'Factors that influence agricultural suitability' lists these factors." (p 3)

40 This publication sets the assessment criteria for the mapping process referred to in the definition of "prime crop and pasture land" in the LEP.

41 Although parts of the site are agreed by the relevant experts for the Action Group and the Council to be class 4 land, they also agreed that the portion of the site which will be disturbed by the operational landfill and ancillary works will be class 3 land. However, for the purposes of the LEP, this is irrelevant as the whole of the site is mapped as being class 3 and thus the whole site falls with in the definition of "prime crop and pasture land" for the purposes of the LEP.

42 Three of the five classes of agricultural land, classes 2, 3 and 4, are relevant in my consideration of the site, the proposed use and whether or not permitting the proposed use would be compliant with cl 10 of the LEP or not. The Agfact provides a short summary of these classes in the following terms:

> "Class 2: Arable land suitable for regular cultivation for crops, but not suited to continuous cultivation. It has a moderate to high suitability for agriculture but edaphic (soil factors) or environmental constraints reduce the overall level of production and may limit the cropping phase to a rotation with sown pastures.
>
> Class 3: Grazing land or land well suited to pasture improvement. It may be cultivated or cropped in rotation with sown pasture. The overall production level is moderate because of edaphic or environmental constraints. Erosion hazard, soil structural breakdown or other factors, including climate, may limit the capacity for cultivation and soil conservation or drainage works may be required.
>
> Class 4: Land suitable for grazing but not for cultivation. Agriculture is based on native pastures or improved pastures established using minimum tillage techniques. Production may be seasonally high but the overall production level is low as a result of major environmental constraints." (p 4)

43 The Agfact also includes specific definitions, in some detail, of the various classes of agricultural land. The detailed definition of classes 2, 3 and 4 are as follows:

> "Class 2
>
> Arable land suitable for regular cultivation for crops but not suited to continuous cultivation. It has a moderate to high suitability for agriculture but edaphic (soil factors) or environmental constraints reduce the overall level of production and may limit the cropping phase to a rotation with sown pastures.

Class 2 lands have all, or nearly all, of the following features:

- Productivity is high to very high for a wide range of field crops adapted to the area.
- Access to local and export markets is satisfactory.
- Local or regional infrastructure to support intensive forms of agriculture is present and a ready supply of suitable labour is available, if required.
- Potential for land use conflict with neighbours as a result of standard agricultural practices is low.
- Slopes are level to gently inclined.
- Soils are deep to moderately deep.
- The land is capable of sustaining regular cultivation; however, conservation tillage practices may be required.
- The soil profile is either moderately well drained or rapidly drained.
- Erosion hazard is low to moderate, so soil conservation measures may need to be adopted to avoid erosion.
- Any soil physical and chemical constraints are capable of being economically overcome for a wide range of field crops.
- Recurrent extremes of climate are unlikely to affect productivity.
- Potential economic losses due to flooding are low, in the long term.
- The level of economic constraint from factors such as weeds, site contamination, standing timber and feral animals is low.

Class 3

Grazing land or land well suited to pasture improvement. It may be cultivated or cropped in rotation with sown pasture. The overall production level is moderate because of edaphic factors or environmental constraints. Erosion hazard, soil structural breakdown or other factors including climate may limit the capacity for cultivation, and soil conservation or drainage works may be required.

Class 3 lands have generally moderate levels of social, economic or physical limitations, restricting the extent of arable agriculture. For example, erosion hazard, soil structural breakdown or other factors including climate may limit the capacity for cultivation, and soil conservation or drainage works may be required. However, a high to very high level of one particular characteristic may result in an area being classified as Class 3 even where other limitations are absent.

Class 3 lands are characteristically lands with the following features:

- Productivity is high for locally adapted pastures and moderate for crops well suited to the area.
- Access to local and export markets is satisfactory.
- Local and regional infrastructure to support extensive forms of agriculture is present, and a ready supply of suitable labour is available.
- Potential for land use conflict with neighbours as a result of standard agricultural practices may restrict agricultural activities.
- Slopes are level to moderately inclined.
- Soils are moderately deep to shallow
- The land has moderate to limited suitability for cultivation, so cultivation is only sustainable in rotation with pastures.
- The soil profile is well drained to imperfectly drained.
- Erosion hazard is low to high, so intensive measures of soil conservation may be required to control erosion in the long term.
- Soil physical and chemical properties may limit crop and pasture productivity.
- Recurrent extremes of climate may affect productivity.
- Potential economic losses due to flooding are moderate, in the long term.

· The level of economic constraint from factors such as weeds, site contamination, standing timber and feral animals is moderate.

> Class 4
> Land suitable for grazing but not for cultivation. Agriculture is based on native pastures or improved pastures established using minimum tillage techniques. Production may be seasonally high, but the overall production level is low as a result of major environmental constraints.
>
> Class 4 lands have generally moderate to high levels of social, economic or physical limitations, restricting the agricultural productivity. The inability for the preparation of a cultivated seedbed on these lands typifies their limitations. It should be noted that a severe to extreme level of one particular characteristic may result in an area being classified as Class 4 even where other limitations are absent.
>
> Class 4 lands are characteristically lands with the following features:

· Productivity levels for locally adapted pastures are low to moderate; however, productivity for selected tree crops may be high.
· Access to local and export markets may be restricted by location.
· Local infrastructure to support extensive forms of agriculture is present, however suitable labour resources may be limited.
· Potential for land use conflict with neighbours as a result of standard agricultural practices may restrict agricultural activities.
· Slopes are level to steeply inclined.
· Soils are mostly shallow.
· The land is unsuitable for cultivation, but minimum tillage techniques can be used to establish perennial pastures.
· The soil profile is well drained to poorly drained.
· Erosion hazard is low to very high; intensive measures of soil conservation may be required, but erosion may still be significant in the long term.
· Soil physical and chemical properties limit crop and pasture growth, and low productivity levels limit the ability to economically manage this constraint.
· Recurrent extremes of climate are likely to affect productivity.
· Potential economic losses due to flooding are high, in the long term.
· The level of economic constraint from factors such as weeds, site contamination, standing timber and feral animals is high." (pp 9-10)

44 In considering this issue, I have had the benefit of expert evidence from:

(a) Mr Cunningham, Mr Baldwin and Mr Deever (for Orange City Council) and

(b) Dr McKenzie and Mr Ivey (for the Action Group).

45 In relation to the effect of the carrying out of the development on the present use of the land for the purpose of agriculture, the evidence of the experts establishes that:

(a) There can be continued agricultural usage of the area in the south of the site which had originally been proposed for a soil storage area but which will not now be required for the purpose. However, the principal use would be restricted to grazing as it has some valuable stands of native grass, particularly red grass, which would be destroyed under a cropping regime (EIS Supplement, September 2007, p 4-60, s 4.11.6).

(b) Although the EIS Supplement (September 2007) proposed limited agricultural use of the landfill area during the operational phases as opportunities arise (p 4-60, s 4.11.6), the relevant agricultural experts subsequently agreed that there was little point in trying to carry out agricultural activities during the operational period of the waste disposal facility due to the range of operational constraints and possible health risks. Hence, the best management strategy was to rehabilitate the landfill area and other areas and keep the site as clean and tidy as possible with grass and weeds slashed to minimise fire hazards and weed growth (Joint report, 10 December 2007, p 3).

46 The main focus of the expert evidence, however, was on the effect of the carrying out of the development on the potential use of the land and, in particular, uses after the closure at the end of the estimated 40-year lifespan of the facility. By this time, the experts ultimately agreed, there would be a 0.15 m topsoil layer; an uncompacted subsoil layer of 0.85 m; 0.5 m of uncompacted clay and a compacted, impervious clay cap on top of the landfilled materials – this lowest layer is to be at least 0.7 m thick. The final proposed soil profile arises from agreement between the relevant experts, which has had the effect of adding, above the clay capping layer, 0.5 m usable soil depth compared to the soil depth originally proposed.

47 There is agreement between all the agricultural experts that there is sufficient depth of soil above the clay layer to the permit growing of a range of crops such as wheat, oats and canola. There is also agreement that it would not be possible to grow lucerne as there was insufficient soil depth for its roots.

48 The oral evidence of Mr Ivey and also of Mr Gosper, the neighbouring property owner, was that lucerne is regularly cropped on properties in the vicinity of the site. Mr Ivey's evidence was that he had observed lucerne being cropped on many of the properties in the vicinity of the site. Mr Gosper's evidence was that lucerne was cropped on Roseleigh and used for cutting, seed and grazing purposes; that lucerne was a valuable crop to him; and lucerne was his and surrounding property owners' main pasture species.

49 The evidence also shows that at least part of the portion of the site proposed to be used for the landfill and associated facilities is presently capable of being cropped, including for lucerne, whatever may have been the past land management regime for the site.

50 Mr Ivey also raised the possibility of the growth of grapevines as a future land use in this vicinity on class 3 land. It was his evidence that it would not be possible to grow grapevines on the landfill site after its closure as the root systems of grapevines would have inadequate soil depth, such vines requiring approximately 5 m of soil.

51 The first element in my consideration of this issue arises from the evidence given by Mr Ivey. He expressed the opinion that, if the class 3 land at the site was properly managed - there being agreement that the present management regime was certainly not an optimal agricultural management regime - it was almost good enough to be class 2 land.

52 He also expressed the opinion that the restriction on the range of crops and uses that would arise after the closure of the landfill operation would render that element of the site almost class 4 land.

53 There was no evidence that the ordinary crop and pasture rotation cycle of between ten to fifteen years would need to be lengthened as a result of the use of the landfilled portion of the site.

54 It is clear from the discussion of land classification in the Agfact that the various classes of land do not represent identified and rigid lines which would be drawn on a map with clinical precision. On the contrary, it is evident that the classification system represents a continuum of grades of agricultural land. Indeed, I accept the evidence given by Mr McKenzie and Mr Ivey that changes in farm technology and agronomy, over time, may enable some areas to be able to make a transition, in a practical sense, to the next higher class of land (any transitions would only be relevant, in the context of clauses such as that under consideration, if reflected on the map).

55 However, it is clear that, for the purposes of cl 10(1) of the LEP, five propositions emerged from the expert agricultural evidence and the site layout and proposed operational sequences:

(a) During the operational phases of the landfill, there will be necessary restrictions on use of the "live" landfill face area and the future landfill cell area, these areas being confined to maintenance as previously discussed. Moreover, throughout the life of the project, the area to be built upon for the ancillary structures as part of this proposal and (assuming stage 2 is approved and constructed) the area to be occupied for resource reprocessing facility activities will also be excluded from any agricultural uses;

(b) Although, after closure of the landfill, the area used for landfill will still be within class 3 of the classifications – so remaining "prime crop and pasture land" (its map status thus not needing to be reconsidered at that time), nevertheless the area will, for practical purposes, move down within that class (i.e. instead of being a high class 3 it would become a low class 3);

(c) The range of crops capable of being grown post-closure will be limited compared to the present potential range of crops capable of being grown on the site. Although most crops generally presently grown in the vicinity of the site will continue to be able to be grown on the site post landfill closure, lucerne will certainly not be able to be grown and, in the context of present agricultural practices in the vicinity, this is a significant restriction;

(d) Woodland areas of the land presently used for grazing will be revegetated for conservation and visual amenity purposes and will no longer be used for regular grazing; and

(e) The leachate ponds area of the site will be excluded from any agricultural use not merely during the operational use of the site but long after the expiry of the 40-year project life.

Not satisfied that development will not have a relevant adverse effect on sustained agricultural production

The meaning of the precondition

56 The second precondition requires the consent authority to be satisfied that:

(a) the development;

(b) will not have an adverse effect;

(c) on the long term use;

(d) for sustained agricultural production;

(e) of any prime crop and pasture land.

57 The development is that described in the development application (as amended) and in respect of which consent is sought. In this case, the development is the unusual, staged proposal described earlier.

58 The relevant effect of the development needs to be "adverse" but no particular threshold of adverse effect is prescribed in cl 10 of the LEP, such as needing to be "significant". Furthermore, it is sufficient that the development have "an" adverse effect; more than one adverse effect is not required.

59 The object of the adverse effect is "long-term use, for sustained agricultural production, of any prime crop and pasture land". "Long term" is an ordinary English word meaning "extending over a period of time of considerable length": Macquarie Dictionary. "Long term use", therefore, refers to use extending over a period of time of considerable length.

60 In the context of considering whether development will or will not have an adverse effect on long term use, the period commences when the development would commence and extends over a period of time of considerable length. The enquiry is whether there will be an adverse effect of the relevant kind *in* this period, not *after* this period expires. Hence, in this case, the enquiry is whether, from the time the proposed waste facility is physically commenced, through to the cessation and rehabilitation of the waste facility in 40 years' time, and then extending thereafter for a period of time of considerable length, the waste facility will have an adverse effect of the relevant kind. The concept of "long term use" does not restrict the enquiry of whether the waste facility will have an adverse effect of the relevant kind to only the point in time when the waste facility ceases and is rehabilitated, in 40 years, and thereafter. It includes the 40-year period beforehand.

61 The relevant adverse effect is on the use for "sustained agricultural production". Agricultural production refers to the relevant land's capacity to yield agricultural products. Sustained agricultural production, therefore, refers to the land's capacity to keep yielding agricultural products without a relevant change in the nature of the products or their quantity or quality. When combined with the concept of long-term, it refers to the capacity to keep yielding agricultural products without relevant change over the long term period.

62 The relevant land is "any prime crop and pasture land". This is a defined term. Clause 5(1) of the LEP defines it to mean:

> "land within an area identified, on a map prepared by or on behalf of the Director-General of the Department of Agriculture and Fisheries and deposited in the office of the Council, as Class 1, Class 2 or Class 3 or as land of merit for special agricultural uses, but does not include land which the Director General has notified the Council in writing is not prime crop and pasture land for the purposes of this plan".

63 In this case, the whole of the land the subject of the development application, together with some adjoining land, including "Roseleigh", is identified on the map prepared by or on behalf of the Director-General of the Department of Agriculture and Fisheries and deposited in the office of the Council, as Class 3. The Director-General has not notified the Council in writing that such land is not prime crop and pasture land. Such lands are, therefore, prime crop and pasture land.

64 Although the use of the word "any" in the phrase "any prime crop and pasture land" in cl 10(1) would ordinarily suggest that the enquiry whether the development will or will not have an adverse effect of the relevant kind is not restricted to only land the subject of a development application meeting the definition of prime crop and pasture land but can also extend to other land meeting the definition, Clause 10(2) makes that fact clear. Clause 10(2) provides that:

> "In assessing the effect referred to subclause (1), the Council shall have regard not only to the land the subject of the application but also to land in the vicinity."

65 In this case, not only the subject land but also the adjoining land, including "Roseleigh", meets the definition of "prime crop and pasture land". Hence, the enquiry is whether the proposed waste facility will have an adverse effect on the long-term use, for sustained agricultural production, on both the subject land, as well as adjoining land, including "Roseleigh", classified as prime crop and pasture land.

Application to the facts of this development

66 Applying this construction of the precondition to the effect of carrying out the proposed waste disposal facility on the use of the land for the purpose of agriculture, I am not satisfied that the proposed waste facility will not have an adverse effect on the long-term use, for sustained agricultural production, of either the subject land or the adjoining land, including "Roseleigh", constituting prime crop and pasture land for the following reasons:

(a) About 55 ha of the 192 ha site will be physically used for the proposed waste disposal facility and ancillary works, buildings, roads and other facilities and services. This includes the landfill area (20.7 ha), landfill area perimeter bund (5.7 ha), leachate evaporation ponds (1.8 ha), resource reprocessing facility (2 ha), office and weighbridge, site access road, vegetation screens and visual amenity bunds (3.9 km long by 20 m wide) and areas around and in between these facilities. These areas will not be used for agricultural production (let alone "sustained" agricultural production) from the time of physical commencement of the development extending for a period of 40 years until cessation of use and rehabilitation of the land. Clearly, in this period of time, the

development will have an adverse effect on the long term use, for sustained agricultural production, of this prime crop and pasture land.

(b) An area of about 2.35 ha proposed to be reserved as a stock movement corridor parallel to Euchareena Road will also only be able to be used for grazing by stock in the corridor (EIS Supplement, September 2007, p 4-40, s 4.4.8). Use for grazing only involves a restriction on the range of agricultural uses, notably the land would not be capable of being used for cropping. A restriction on the range of agricultural uses constitutes an adverse effect on the use for sustained agricultural production of this prime crop and pasture land. A prohibition on cropping also removes one of the characteristics of Class 3 agricultural land, namely the ability of the land to be cultivated or cropped in rotation with sown pasture. In this sense also, there is an adverse effect on the use for sustained agricultural production of prime crop and pasture land.

(c) The balance of 83 ha of the land (51.1 ha in the north east and 31.9 ha in the west) will be set aside and rehabilitated in this 40 year period for conservation purposes, including the White Box - Yellow Box - Blakely's Redgum Woodland endangered ecological community (EIS Supplement, September 2007, p 4-59, s 4.11.5). This woodland also acts as a visual screen for the waste disposal facility, including the landfill area and buildings and infrastructure (EIS Supplement, September 2007, p 4-40, s 4.4.7.3). While such works involving the conservation of biological diversity and enhancement of visual amenity are commendable, they nevertheless restrict the use of that land for agricultural production to occasional grazing to reduce fuel hazards. No cropping would be permitted. These significant restrictions on agricultural use constitute an adverse effect for sustained agricultural production of this prime crop and pasture land.

(d) After 40 years, when the waste disposal facility ceases and is rehabilitated, there still will be a restriction on the range of agricultural uses of the land. The part of land physically used for the waste disposal facility (about 55 ha less the leachate evaporation ponds – see below), if rehabilitated as the experts ultimately agreed, could be able to be cultivated or cropped in rotation with sown pasture. However, the full suite of crops that could potentially be grown on that land currently, could not be grown on the rehabilitated land, notably deep rooted crops such as lucerne. This restriction in the range of crops that could be grown constitutes an adverse effect on the long term use, for sustained agricultural production, of prime crop and pasture land.

(e) The part of the land to be used for leachate evaporation ponds (EIS Supplement, September 2007, pp 4-34 - 4-36, s 4.4.6.5 and p 4-61, s 4-13) would continue, after the 40

year period of operation of the waste facility, to be used for leachate control purposes, with the exclusion of all agricultural use from this area. Such exclusion also constitutes an adverse effect on the long term use for sustained agricultural production of this portion (being 1.8 ha or approximately 1%) of this prime crop and pasture land.

(f) The part of the land reserved as stock movement corridor (about 2.35 ha), if maintained for that purpose after the waste disposal facility closes (the EIS Supplement September 2007 is not clear on this: see p 4-40, s 4.4.8 and pp 4-57 to 4-61, ss 4.11 to 4.13), would need to continue to be restricted to grazing by stock and not be integrated with the balance of the site which could be used for cropping.

(g) The part of the land set aside for conservation purposes (83 ha) would continue, after the 40 year period of operation of the waste disposal facility, to be used for that purpose, with only a significantly restricted agricultural use such as occasional grazing (EIS Supplement, September 2007, p 4-58, s 4.11.5). Such restriction also constitutes an adverse effect on the long term use for sustained agricultural production of this prime crop and pasture land.

(h) The only part of the land on which the development will not have an adverse effect of the relevant kind is the part of the land to the south of the area physically used for the waste facility (42.3 ha). This part of the land is to be restricted to grazing not cropping, but for reasons associated with conservation of the native grass, not the waste disposal facility (EIS Supplement, September 2007, p 4-60, s 4.11.6).

(i) Adjoining land meeting the definition of "prime crop and pasture land", including importantly the land immediately to the west of the land physically used for the waste disposal facility, called "Roseleigh", would also be adversely affected by the development. "Roseleigh" is used by the owner, Mr Gosper, for the keeping and breeding of bees. Such a use is a use for agricultural production. The LEP, cl 6, adopts the definition of "agriculture" in the Environmental Planning and Assessment Model Provisions 1980, which, by reference to the definition of agriculture in s 541A of the *Local Government Act* 1919, includes the use of land for any purpose of husbandry, including the keeping or breeding of bees.

As discussed in the section below on the issue concerning the impact on bees, the evidence is not sufficient to satisfy me, in the terms of cl 10(2) of the LEP, that the development will not have an adverse effect on the long term use, for sustained

agricultural production for the keeping and breeding of bees, of the prime crop and pasture land on "Roseleigh".

To the contrary, for the reasons given in the section below, the evidence satisfies me that, if the development were to proceed, there is a real likelihood the appropriate prudent, precautionary, apicultural response to the development would be the cessation of beekeeping activities on "Roseleigh". Such cessation would constitute an adverse effect on the long term use, for sustained agricultural production for the keeping and breeding of bees, of the prime crop and pasture land on "Roseleigh". In particular, there is evidence of an adverse effect of contamination of the agricultural product (honey) caused by bees bringing contaminants from the waste facility to the hives located on "Roseleigh". There is also a risk of infection of the bee colonies by American Foul Brood disease (AFB) caused by bees, whether domesticated or feral, bringing AFB spores from contaminated honey containers deposited at the waste facility. That risk might be low, but I am not satisfied that it is as insignificant as Dr Thomas, the biostatistician called by Orange City Council, states. His evidence was dependant on numerous assumptions, the reliability of many of which was shown to be attendant with doubt. The evidence of the Court appointed expert, Dr Somerville, was more reliable. Dr Somerville's expert opinion was that there remains a real or meaningful risk of infection by AFB spores sourced from the waste facility. Dr Somerville's expert opinion on the risk of contamination by other materials (the "food security risk") was not answered by any evidence for Orange City Council.

Conclusion on second precondition

67 For these reasons, I am not satisfied that the proposed development of waste disposal facility, in the terms of s 10(2) of the LEP, "will not have an adverse effect on the long term use, for sustained agricultural production, of any prime crop and pasture land". Absent such satisfaction, there is no power, by reason of cl 10(2) of the LEP, to grant consent to the application to carry out that development.

68 Moreover, apart from lacking power in these circumstances, I am of the view that to approve a development which is likely to have these adverse effects on the long term use, for sustained agricultural production, of prime crop and pasture land would not be consistent with the principles of ecologically sustainable development.

69 The principle of good governance is essential to sustainable development. It requires the enactment and enforcement of clear and effective laws that support sustainable development. The provisions of the LEP relating to the 1(a) zone, including cl 10(1), are part of a law supporting sustainable development, by protecting, enhancing and conserving the valuable resource of agricultural land and in particular prime crop and pasture land in a manner which ensures its use for sustained agricultural production. The upholding and enforcement of that law promotes good governance.

70 The principle of sustainable use of natural resources involves the exploitation of natural resources in a way which is sustainable in the long-term and which reduces environmental harm. It involves consideration

of the effects of use on all natural resources, certainly the effect of the use on the resources the intended subject of the activity but also the effect that the use of those resources might have on the sustainable use of other resources.

71 In this case, whilst adoption of a waste minimisation strategy and operation of a waste disposal facility with a resource recovery facility is beneficial in promoting sustainability, by such means as encouraging more efficient use of resources, reducing unnecessary resource consumption, improving resource recovery and reducing waste generation, by siting the waste disposal facility on prime crop and pasture land, the proposed development impedes achieving sustainability by adversely affecting the long-term use, for sustained agricultural production, of that land.

72 The principle of inter-generational equity involves the right of the present generation to use and enjoy the resources of the earth but without compromising the ability of future generations to do likewise. The present generation needs to ensure that the health, diversity and productivity of the environment are maintained and enhanced for the benefit of future generations. This obligation of inter-generational equity would be breached by the carrying out of development which has an adverse effect on the long-term use, for sustainable agricultural production, of prime crop and pasture land. Such development compromises future generations' ability to use and enjoy to the same degree as the present generation the prime crop and agricultural land.

ADVERSE EFFECT ON BEEKEEPING ON ADJOINING LAND

73 The Action Group particularised its contention, concerning the impacts on beekeeping and honey production in the near vicinity of the site, in the following terms:

> "(h) The site adjoins a honey producing farm with approximately 1,800 hives.
>
> (i) Locating a landfill close to honey bees creates a risk of contamination."

74 As earlier noted, Mr Ian Gosper and others associated with him own and operate a very significant honey producing business. It has a supply quota agreement with Capilano Honey to supply up to 176,115 kg of honey each year (although actual production varies from year to year). The business generally has about 1600 hives in operation at any given time. "Roseleigh", the rural property immediately to the west of the site, is a significant part of Mr Gosper's beekeeping activities and is where Mr Gosper does his queen bee breeding and, from time to time, keeps hives for honey harvesting purposes. Mr Gosper's other property in the vicinity ("The Shades", opposite the site on Euchareena Road) is the home base of his enterprise and he has a number of other hive locations in the vicinity of the site, including on properties owned by others who permit his hives to be so located.

75 I have had the advantage of expert evidence given by Dr Somerville, the court-appointed expert on honey bees. Orange City Council has also provided expert evidence in response to part of the apiarian concerns. This expert evidence has been provided by Dr Thomas, a biostatistician.

76 There are two separate aspects to the matters of concern raised by Mr Gosper relating the possible impacts of Orange City Council's proposal on his beekeeping activities. These are described by Dr Somerville as being a bio-security risk and a food safety risk.

77 The bio-security risk arises from the existence of a disease which can infest and destroy bee hive populations. This disease is known as American Foul Brood disease (AFB). AFB is transmitted by spores located in contaminated honey upon which bees from uninfested hives forage and then transport back to their own un-infested hive.

78 The food safety risk arises from bees' normal foraging of material, such as resins and the like from trees and other plants. These materials are known as propolis. Propolis is used by bees for sealing cracks in hive structures and the like. It was Dr Somerville's evidence that bees will also collect a variety of other substances such as paint, tar or other contaminants which they use as substitutes for propolis. Use of contaminated propolis substitutes can result in contaminated honey. Dr Somerville expressed concern that bees would be likely to forage for propolis on the landfill. He said, in his original statement of evidence:

> "Bees at times collect a substance referred to as propolis. This material is normally composed of plant resins and is used by the bees to protect the colony. Bees have been observed to collect fresh paint and other man-made substances occasionally as a substitute to propolis." (Statement of Evidence, 29 June 2007, p 5)

79 This food security issue requires consideration separate from the AFB issue.

80 Evidence given by Dr Thomas was aimed at addressing the bio-security risk which would be attendant on bees from Mr Gosper's hives foraging on discarded honey containers which would form part of the waste stream disposed of to landfill. His evidence was based on a series of calculations derived from an examination of what were considered the likely number of honey containers from the domestic waste stream which would be sent to landfill at the site and, after assessing the nine variables he considered relevant, the probability of an AFB infestation of any of Mr Gosper's hives as a result. These variables were set out by Dr Thomas in his report appended to the EIS Supplement, September 2007 (Appendix 4). These variables are:

> "1. The distribution of the number of contaminated honey jars reaching the landfill site in each load.
>
> 2. The proportion of containers which are uncapped or broken.
>
> 3. The proportion of containers which are near the surface of the landfill and available for foraging.
>
> 4. The distribution of the length of exposure for each contaminated honey container.
>
> 5. The probability that foraging bees will be active during the exposure period for a contaminated honey container (this is driven by temperature).
>
> 6. The probability that an active foraging bee will locate any exposed honey container.
>
> 7. The probability that such an exposed honey container will be contaminated with AFB spores.
>
> 8. The probability of infection of the hive arising from contact with a single bee.
>
> 9. The probability that a foraging bee will successfully recruit other bees to the contaminated exposed honey container." (pp A4-6 to A4-7)

81 Dr Thomas's calculations are based on a management regime proposed by Orange City Council for site receipt of and compaction and covering with soil of wastes going to landfill. This management regime is incorporated in the Minister's proposed conditions of consent.

82 A deal of the attention in Dr Thomas's oral evidence was addressed to consideration of the only piece of academic literature which he had been able to find concerning the number of AFB spores which could trigger the infection of a single bee. This report was an article published in (1942) 35 (6) *Journal of Economic Entomology* 892 written by A W Woodrow, an officer of the United States Department of Agriculture, Bureau of Entomology and Plant Quarantine. This related to the value which was to be attached to variable 8 above.

83 The basis of this attention was to seek to establish that, whatever the accuracy or otherwise of the earlier variables, the probability for variable 8 was so low as to render any resultant risk irrelevant. Whilst I accept this analysis shows that it is unlikely that the transmission of a single spore of AFB to one of Mr Gosper's hives would lead to contamination of that hive, I am not satisfied that this is the sole necessary matter for consideration on this analysis. Indeed, the assumptions which he has made concerning his variables 1 to 7 set the backdrop for the number of spores potentially available for exposure to a foraging bee.

84 In considering this issue, I accept that Dr Thomas has given his evidence frankly and conscientiously within the framework of the instructions which he was given. This framework, however, has some limitations.

85 Dr Thomas's analysis is based on assumptions concerning the number of domestic honey containers which might reach the landfill. Even accepting the accuracy of these assumptions, for the moment, they have no regard to the number or nature of any honey containers which might be discarded as part of the commercial and industrial waste stream and sent to the landfill. Honey containers are likely to be discarded into the waste stream by commercial operators of restaurants, fast food outlets and accommodation facilities. The absence of any information concerning the risk of contamination from these sources casts doubt on the risk assumption in relation to variable 1 for Dr Thomas's calculations.

86 Dr Somerville and Mr Gosper gave oral evidence of their experiences which challenged the values applied by Dr Thomas to his variable 5. Both Dr Somerville and Mr Gosper have particular expertise in relation to bees and their behaviour, whilst Dr Thomas, although an experienced biostatistician, has limited experience in relation to bees and their behaviour. Dr Somerville and Mr Gosper's evidence was that the bees would be active for longer periods and over a wider temperature range than was assumed by Dr Thomas. I prefer their evidence to that of Dr Thomas.

87 In addition, although the Minister's suggested conditions of consent will impose load receival and waste covering obligations on the operator, the frequency of load arrival means that I cannot entirely discard the possibility that a bee which discovers a honey container (whether contaminated or not) in one load may not return to the hive and recruit bees which return to forage on a contaminated market honey container in a later load.

88 Dr Somerville and Dr Thomas, in their joint statement, express the agreed view that the low estimated risk to managed bees (from Mr Gosper's hives) from discarded retail honey containers is "critically dependent on hygiene practices at the site". If these practices are not managed "rigorously", there will be a "substantial increase in the risk of AFB infection" (Joint Statement, 12 December 2007, p 1).

89 I note that in the first five years of operation (during Stage 1), Cabonne Shire Council will be the sole operator, although under the management of Orange City Council. Cabonne Shire Council has taken no part in the proceedings. No evidence has been given by anyone from Cabonne Shire Council. What evidence there is about Cabonne Shire Council's current landfill facilities in its local government area reveals that they are operated in a manner that is environmentally unacceptable with poor hygiene and

management practices. Without any evidence from Cabonne Shire Council as to how they will improve their ability to operate landfills to the rigorous standard required to avoid the bio-security risk, I am not satisfied that the risk of AFB infection to managed bees from a landfill operated by Cabonne Shire Council will be low.

90 Furthermore, Mr Gosper's managed bees are not the only bees likely to be foraging over the site. Although a survey of the site was undertaken to establish whether or not there were likely to be feral bee colonies on the site, leading to the discovery of only one such colony, it was Dr Somerville's evidence that he expected to find three or more colonies within the property and larger numbers of feral bee colonies within a 5 km radius of the proposed Hub site (Statement of Evidence, 29 June 2007, p 5).

91 In their joint statement, Dr Somerville and Dr Thomas said, concerning feral bees:

> "The risk to feral bee populations which are foraging over the site throughout the year is greater. Robbing of contaminated feral bee colonies by managed hives is a risk, whilst foraging of discarded honey containers is likely to be largely an event involving a small number of bees (subject to appropriate management of the landfill), robbing of diseased feral bee colonies is likely to be a many thousand bee event. This is a much more significant risk to commercial bees than discarded honey containers." (Joint Statement, 12 December 2007, p 2)

92 They recommended, in response, as follows:

> "We recommend that, should this proposal be approved, the council should be required to develop, implement and monitor a feral bee control strategy, as a condition of approval. Furthermore this programme should be planned, and monitored to the satisfaction of the DPI." (Joint Statement, 12 December 2007, p 2)

93 However, Dr Somerville did not accept that feral bee control was effective and recorded this in the joint statement in the following terms:

> "Dr Somerville does not believe that currently available control methods are fit for purpose. Friponil, produced by BASF would be an appropriate and effective compound for the control of feral bees, but BASF are reluctant to allow its use against bees. This may change with the movement of Friponil out of patent protection. But at present, effective control of feral bee populations may prove impossible. Friponil also has a long residue period, and may pose a risk to managed bees.
>
> Thomas argues that AFB may be endemic in feral bees, and that the proposed development does not materially influence the risk. Dr Somerville argues that there is n [sic] material evidence that feral bees are currently a source of AFB." (Joint Statement, 12 December 2007, p 2)

94 On the issue of eradication of feral bees, Orange City Council tendered an article from the *Australian Journal of Entomology* (1998) Volume 37 pp 97 – 100 by B P Olroyd. Although the article discussed several possible methods of eradication of feral bees, it concludes by stating that "densities of feral bees in Australia are such that effective control over a broad area is unlikely to be economically feasible". Localised control may be feasible, but would be an expensive process (p 99). Any localised control would have to be repeated.

95 I am not satisfied by that article that feral bee colonies on the site could be eradicated and that recolonisation in future could be prevented with certainty. In addition, Dr Somerville's evidence that he expected to find larger numbers [than the three colonies he expected on the site] of feral bee colonies within

a 5 km radius of the site means that there is also an indeterminate risk (not capable of control by Orange City Council as such colonies would not be on its land) of infection of such off-site feral bee colonies leading, via the "robber bee" phenomenon, to infection of Mr Gosper's hives.

96 As a consequence, the risk of AFB infection of a feral bee colony leading to contamination of a managed hive on "Roseleigh" cannot be discounted.

97 As to the "food security risk", the joint report records Dr Somerville's evidence as:

> "Somerville points out that the bee industry has identified a food safety risk associated with landfill sites. He believes the food safety risk to be significant, and argues that even if the risk is modest this will impact on the marketability of local producers produce." (Joint Statement, 12 December 2007, p 3)

98 Dr Somerville earlier had noted, when responding to the EIS Supplement, September 2007:

> "The EIS fails to address the issue of food safety which is unrelated to the AFB issue.
>
> The Australia Honey Bee Industry food safety program, B-Qual, of which a copy of the manual is located on the Australian Honey Bee Industry website www.honeybee.org.au/ states in the Approved Supplier Program Standards that "Placing apiaries near rubbish tips is avoided".
>
> The adoption of food safety programs by primary producers, is strongly encouraged by the NSW Department of Primary Industries. The adoption of the Australian Honey Bee Industry food safety program is strongly encouraged and desirable. The construction of the waste facility next to an existing apiary operation precludes this operation from complying with the industry recognised standard.
>
> Honey bees will collect a number of substances including nectar, pollen, water and propolis. Bees at times will collect substitutes to these materials including water in the leachate ponds associated with the landfill operation. This issue has not been addressed in the revised EIS." (Comments on EIS Supplement – September 2007, 9 November 2007, p 2)

99 As discussed during the proceedings, design responses would likely address the last mentioned, leachate pond concerns. However, the Orange City Council offers no answer to the possible importation of contaminated propolis substitutes to the hives on "Roseleigh". The evidence from Dr Somerville and Mr Gosper satisfies me that the food security issue is significant.

100 It is no answer to say that Mr Gosper's bees are not legally entitled to access the site. There is no evidence of objection being raised by any landowner of the site in the past to Mr Gosper's bees accessing the site. In any event, there is no way of Mr Gosper controlling his bees to avoid them accessing the site. The only viable way to achieve this would be for Mr Gosper to remove his hives to locations where their likely flight patterns would not include the site. The result of this is that the only appropriate prudent, precautionary apicultural response to the development would be the cessation of beekeeping activities on Roseleigh.

101 Such cessation of beekeeping activities would be an adverse effect on the long term use, for sustained agricultural production, of the prime crop and pasture land on Roseleigh.

FAILURE TO INCLUDE RESOURCE REPROCESSING FACILITY

102 As I have earlier observed, development consent is sought for Stages 1 and 3, but not Stage 2 of the project. Stage 2 involves the resource reprocessing facility. This facility is critical for the waste disposal facility to achieve sustainability. The great bulk of environmental benefits the Orange City Council claims will be achieved depend on the implementation of the resource reprocessing facility. Conversely, without the resource reprocessing facility, the proposed development is unsustainable and unacceptable. The criticalness of the resource reprocessing facility to the acceptability of the project is recognised by the Minister's proposed conditions of consent which make Stage 3 dependent on Stage 2 not only being approved, but also becoming operational.

103 The Minister's proposed conditions of consent provide, in condition 8 of Schedule 2 General and administrative conditions, that "the applicant shall not commence Stage 3 before Stage 2 of the development is operational". Condition 9, which follows, provides that "if the applicant is unable to obtain the necessary development consent or project approval for Stage 2 of the development, then it shall cease all landfill operations at the end of Stage 1, and rehabilitate the site to the satisfaction of the Director-General". Neither Orange City Council nor the Action Group proposes any amendment to these conditions.

104 The result is, effectively, that the only activities to which I would be giving an operational consent not contingent on the missing Stage 2 is the operation of Stage 1 of a conventional municipal landfill for the wastes of Cabonne Shire (other than wastes which will be diverted to the materials recovery facility at Ophir Road in Orange) (see Minister's proposed Condition 5(a) and 13 of Schedule 2). This conventional municipal landfill facility is to be operated by Cabonne Shire Council under the management of Orange City Council (Minister's proposed condition 2(a) of Schedule 2 and Appendix 1, para 4.1.3). It is to have a life of 5 years (Minister's proposed condition 5(a) of Schedule 2). A maximum of 35,000 tonnes of waste per annum can be disposed of at the landfill for each of the 5 years of Stage 1 (Minister's proposed condition 12(a) of Schedule 2).

105 Stage 1, by itself, is an environmentally unacceptable and unsustainable development which should not be approved. The critical aspect, which improves the environmental acceptability and sustainability of the proposed landfill, is the proposed resource reprocessing facility in Stage 2. Only then will the operation of the landfill, which is Stage 3, become environmentally acceptable and sustainable. Stage 3 extends from years 6 to 40 (assuming Stage 2 is approved). Stage 3 compromises 87.5% of the project.

106 However, there is no certainty that Stage 2 will be approved or constructed. Not being part of this development application, I certainly cannot approve Stage 2 or require its construction. As a result of this, I have no guarantee that Stages 2 and 3, and hence any of the long-term environmental benefits which are said to underpin the totality of the project, will come to pass.

107 I have had no satisfactory explanation, given the remaining life at the Ophir Road facility (a time period which could accommodate the wastes from Cabonne Shire during the period now proposed for the gaining of consent and construction of the Stage 2 element of the project) as to why it would not be possible to avoid Stage 1 entirely. If the Cabonne Shire wastes were to be taken to Ophir Road in lieu of Stage 1 of the project, Stage 2 would not commence (and thus no landfill operations at all would commence at the site) unless and until the resource reprocessing facility had been constructed at the site. The resource reprocessing facility could then operate from day one, in tandem with the limited residual landfill operation proposed for Stage 3.

108 I consider it undesirable to approve a project which is structured in this staged and contingent manner. The only certain stage of the development (Stage 1) is unacceptable. The balance of the project which might be acceptable is uncertain. If Stage 2 were not to be approved or constructed, Stage 3 will not occur. However, the land would already have been used for a development (Stage 1) that is unacceptable. The proposed rehabilitation, which would follow closure after the completion of Stage 1, would not be satisfactory because the land should never have been used for a landfill of the kind proposed in Stage 1 at all. If Stages 2 and 3 are the aspects of the project which make it acceptable to suffer a use of the land in

the otherwise unacceptable manner proposed in Stage 1, there needs to be certainty that Stages 2 and 3 will occur. The current development application does not and cannot provide that certainty.

DIFFICULTIES IN IMPOSING AND ENFORCING THE WASTE MINIMISATION STRATEGY

109 Orange City Council proposes that there should be a waste minimisation strategy prepared to enable Orange City Council and Cabonne Shire Council to implement the waste minimisation objectives which have been outlined in the proceedings and thus achieve the waste reduction and diversion level of 55% proposed to be required by the consent. This waste minimisation strategy is proposed to cover both councils.

110 This issue is dealt with in schedule 3 of the Minister's proposed conditions of consent in the following way:

"Waste Minimisation Strategy

1. The Applicant [Orange City Council] shall prepare and implement a Waste Minimisation Strategy for the Cabonne and Orange LGAs to the satisfaction of the Director-General. This strategy must:

   (a) be submitted to the Director-General for approval prior to the commencement of operations;

   (b) be prepared by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;

   (c) be prepared in consultation with DECC;

   (d) set the strategic framework for waste management in both LGAs over the next 20 years;

   (e) classify the different waste streams in each LGA, and establish baseline data for each waste stream;

   (f) establish short (3 years), medium (6 years) and long term (20 years) waste minimisation/diversion targets for each of these waste streams with the medium term target to be not less than 55% waste minimisation/diversion averaged across all waste streams;

   (g) determine the maximum amount of waste (tonnages) on an annual basis that would be disposed of to landfill in the short and medium term;

   (h) describe what measures would be implemented to meet these targets, and minimise the amount of waste being disposed to landfill; and

   (i) include a program to monitor the effectiveness of these measures, and whether the targets are being met.

Waste Minimisation/Diversion Targets

2. The Applicant shall comply with the waste minimisation/diversion targets in the Waste Minimisation Strategy, or any alternate targets or comparable requirements

imposed by DECC or the Director-General following a review of the results of each independent environmental audit (see conditions 7-9 of schedule 4)."

111 The Action Group proposes a number of modifications to these conditions of consent. However, they do not propose a radical alteration of the structure of these conditions. These modifications are to be seen in their proposed revised conditions in these terms:

"Waste Minimisation Strategy

1. The Applicant [Orange City Council] shall prepare a Waste Minimisation Strategy for the Cabonne and Orange LGAs to the satisfaction of the Director-General. This strategy must:

(a) be submitted to the Director-General for approval prior to the commencement of operations;

(b) be prepared by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;

(c) be prepared in consultation with DECC;

(d) set the strategic framework for waste management in both LGAs over the next 20 years;

(e) classify the different waste streams in each LGA, and establish baseline data for each waste stream;

(f) establish short (3 years), medium (6 years) and long term (20 years) waste minimisation/diversion targets for each of these waste streams with the medium and long term targets to be not less than 55% waste minimisation/diversion averaged across all waste streams;

(g) determine the maximum amount of waste (tonnages) on an annual basis that would be disposed of to landfill in the short, medium and long term;

(h) describe what measures would be implemented to meet these targets, and minimise the amount of waste being disposed to landfill; and

(i) include a program to monitor the effectiveness of these measures, and whether the targets are being met.

(j) be accompanied by an undertakinq from Cabonne Shire Council to implement the measures recommended in the Waste Minimisation Strategy for the Cabonne LGA.

Waste Minimisation/Diversion Targets

2. At all times when they are using the site for disposal of waste from their LGAs, the Applicant and Cabonne Shire Council shall implement the Waste Minimisation Strategy and comply with the waste minimisation/diversion targets in the Waste Minimisation Strategy, or any higher targets, imposed by DECC or the Director-General following a review of the results of each independent environmental audit (see conditions 7-9 of schedule 4)."

112 Orange City Council's response to the first of these conditions of consent, on the other hand, is to propose an alternative approach based on a detailed statement of commitments contained in appendix 11 to its proposed version of the conditions of consent. Orange City Council's version of these conditions is:

> "Waste Minimisation Strategy
>
> 1. The Applicant [Orange City Council] shall implement the Waste Minimisation Strategy set out in Table A the Statement of Commitments at Appendix 2 [sic, should be 11]. This strategy may be revised with the approval of the Director-General in consultation with DECC, and must be reviewed annually by the Applicant to determine whether its targets have been and are likely to be met. Any revision of the strategy is not to set a lower target than 55% diversion of waste from landfill. This revision is in addition to the review and revision of the strategy, which may be necessary as a result of the Independent Environmental Audit under schedule 4 below."

113 Orange City Council adopted the Minister's version of the second of these conditions.

114 In this context, I have been provided with copies of contracts which have been entered into between Orange City Council and its waste collection contractor. These contracts permit the extension of the service to a third bin for the kerbside collection of garden organics. It is upon these contracts and community education programmes presently undertaken (and to be expanded) by the Councils and the contractor that Orange City Council relies as the basis for enabling compliance with the waste minimisation strategy conditions.

115 It is appropriate that I note that Orange City Council's statement of commitments contains a wide ranging list of topics coupled with desired outcomes, proposed actions and the timing of such actions as set out in the various parts of this table. My concerns here do not relate to specific items but to the framework itself.

116 There are a number of fundamental problems with both the approach in the Minister's and Action Group's versions of the conditions and the alternative embodied in Orange City Council's versions of the conditions. These problems do not relate to the matters that might be contained in such a strategy or to the commitment of Orange City Council to the pursuit of environmental goals - I am satisfied that there is a genuine policy and operational commitment by Orange City Council to the pursuit of waste minimisation and diversion from landfill.

117 The first problem concerns the fundamental nature of a development consent. A development consent runs with the land. It is not personal to the original applicant to whom it is given but enures for the benefit of subsequent owners and occupiers: *Ryde Municipal Council v The Royal Ryde Homes* (1970) 19 LGRA 321 at 324; *Parramatta City Council v Shell Co of Australia Ltd* [1972] 2 NSWLR 632 at 637; *Winn v Director-General of National Parks and Wildlife* (2001) 130 LGERA 508 at 513. In *Eaton & Sons Pty Ltd v Warringah Shire Council* (1972) 129 CLR 270 at 293, Stephen J further observed that:

> "First, although a consent will no doubt result from an application by an individual it is essentially impersonal in the sense that it does not concern itself with and is not limited to the applicant but is a consent to the world at large in relation to the land which is its subject. Once granted it makes lawful, in a town planning context, what would otherwise be unlawful but does so by reference to the acts done and not to the identity of the actor…."

118 Hence, conditions of consent should relate to the land and its development and be capable of implementation by whomever is the person carrying out the development on the land.

119 Each of the parties' versions of the proposed conditions of consent oblige "the Applicant" to implement the specified waste minimisation strategy in both Orange and Cabonne local government areas. The applicant is currently Orange City Council. However, if the person carrying out the development were to change, for instance because of a change in ownership or occupation, the obligation would be transferred to the person carrying on the development. A person other than each Council would be incapable of performing such an obligation in the respective local government areas.

120 No doubt in recognition of this fact, each party's proposed conditions of consent include a condition (condition 18 - Management) that "the development shall be managed at all times by the Applicant". The intent of this condition is that even if there is a change in ownership or occupation of the land, the Applicant (defined to be Orange City Council) must continue to manage the development. The period of this obligation certainly extends throughout the period of active operation of the landfill (40 years) but also continues afterwards during post-closure rehabilitation and on-going monitoring and maintenance, including the leachate which continues to be produced after closure of the landfill. There is no end point for this latter work.

121 This condition therefore imposes a non-transferable, non-delegable, personal obligation on Orange City Council that endures for a long period of time, perhaps indefinitely. Such an obligation is contrary to the fundamental nature of development consents which are not personal to the original applicant. I have serious doubts as to the power of a consent authority to grant development consent which imposes a non-transferable, non-delegable personal obligation on an original applicant requiring that person to continue managing the development for its life and perhaps indefinitely. But even if there is power, it is an undesirable condition.

122 Secondly, the parties' proposed conditions require Orange City Council to implement the specified waste minimisation strategy not only in its own local government area, but also in Cabonne local government area. Orange City Council has no power to do so directly in any local government area other than that of which it is the local government authority. Orange City Council, therefore, would seek to do so by entering into contractual arrangements with Cabonne Shire Council whereby Cabonne Shire Council would need to fetter the future exercise of its discretionary functions in relation to provision of waste services in its local government area. The legality of such contractual arrangements is in serious doubt: see, for example, *Ansett Transport Industries (Operations) Pty Ltd v The Commonwealth* (1977) 139 CLR 54 at 74-76 and *Attorney-General (NSW) v Quin* (1990) 170 CLR 1 at 17.

123 The proposed conditions of consent do not impose the obligation to implement the specified waste minimisation strategy on Cabonne Shire Council. In any event, there would not be power to do so given that Cabonne Shire Council is not an applicant and is not an owner of the land.

124 Independently of the issue of power, there has been no evidence from Cabonne Shire Council upon which I could be satisfied that Cabonne Shire Council has the dedicated commitment, institutional capacity and necessary resources to implement the specified waste minimisation strategy. I am unable to be satisfied, therefore, that Orange City Council, notwithstanding its best endeavours, will be able to discharge the obligation to ensure the implementation of the specified waste minimisation strategy in Cabonne local government area.

125 Thirdly, the proposed conditions of consent requiring the implementation of the specified waste minimisation strategy in the two local government areas may not have sufficient nexus with the development proposed so as to satisfy the second limb of the *Newbury* tests requiring conditions of consent to fairly and reasonably relate to the proposed development: *Newbury District Council v Secretary of State of the Environment* [1981] AC 578 at 599, 607-608, 619 and 627 and see also *Western Australian Planning Commission v Temwood Holdings Pty Ltd* (2004) 221 CLR 30 at 55 [57], 59 [72], 87 [155].

126 Devising and implementing a waste minimisation strategy may well be a desirable object but its desirability exists independently of any particular proposal for a waste disposal facility. There is nothing about this particular waste disposal facility proposed for this particular site, as opposed to any other one, which necessitates devising and implementing the specified waste minimisation strategy. As Callinan J observed in *Western Australian Planning Commission v Temwood Holdings Pty Ltd* (2004) 221 CLR 30 at 87 [155], the second limb of the *Newbury* tests requires that the condition "must be a condition, not simply justifiable as one which a reasonable planning authority could impose, but one which is fair and reasonable *in the circumstances of the particular case*" (emphasis in original).

127 For these reasons, I am not satisfied that the proposed conditions requiring the implementation of waste minimisation strategies in Orange and Cabonne local government areas can or should be imposed. Yet these conditions are critical to enable the proposed development to achieve sustainability. The proposed development would not yield all of the claimed environmental benefits without implementation of the waste minimisation strategy in both local government areas. Furthermore, I am not satisfied on the evidence that, even if the conditions were to be imposed, the waste minimisation strategy would be able to be implemented successfully in Cabonne local government area.

OTHER ISSUES

128 Having regard to the foregoing reasons for concluding that the development application should be refused, it is unnecessary to deal with the other issues raised by the Action Group (issues 2, 3, 4 and 5).

CONCLUSION

129 For the reasons I have given above, development consent should not be granted to this particular proposal for a waste disposal facility at this particular site. This conclusion does not mean that another proposal at another site would not be acceptable. It also should not be taken to imply any criticism of Orange City Council's policy and commitment to achieving sustainability and waste minimisation. It is simply a conclusion specific to this particular development on this particular site.

130 I acknowledge the considerable assistance of Commissioner Moore in this appeal.

ORDERS

131 The orders of the Court are:

1. The appeal is upheld.

2. Development Application DA 95-4-2005 for the construction and operation of the "Hub" Regional Resource Reprocessing Facility and associated infrastructure on Lot 10 DP 1034198 at the corner of Euchareena and Shades Creek Road, Molong is determined by refusal of development consent.

3. The exhibits are returned.

4. Costs are reserved.

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AMENDMENTS:

02/04/2008 - agriculture changed to agricultural - Paragraph(s) 69