



FILE REF: RM140133

TO Independent Commissioners

FROM Jane Sinclair, Consultant Planner

SUBJECT Report on a publicly notified land use consent application to the Queenstown Lakes District Council to establish and operate a solar drying facility to process the secondary solids from the Wanaka Wastewater Treatment Plant. Consent is sought for a period of 35 years.

SUMMARY

Applicant: Fulton Hogan Limited

Location: Fulton Hogan Quarry site, Luggate-Tarras Road, State Highway 8A.

Proposal: To establish and operate a solar drying facility to process the secondary solids from the Wanaka Waste Water Treatment Plant. It is proposed to erect a building measuring 96m in length, 12.8 metres in width and 5.3 metres in height, with associated earthworks, access and landscaping.

The secondary solids will be transported by truck to the site where they will be processed inside the building and then transported off site by truck to the Park Burn quarry. No commercial or retail sales are proposed to occur from the site. The application does not seek consent for the bio-solids to be applied to land.

Legal Description: Lot 2, DP 341373, Certificate of Title 170215

Zoning: Rural General

Public Notification Date: 27 March 2014

Closing Date for Submissions: 29 April 2014

Submissions: 39 submissions received, including 2 late submissions.

The following submissions have been received in opposition to the application:

- | | |
|---------------------------------|---|
| 1. Dave Hawkins | 14 Church Road, Luggate |
| 2. K & B Pankhurst and K Hawkes | 48 Holyport Close, Dunedin |
| 3. Desmond & Patricia Olver | 113 Naturalist Byvd, Lluka, Western Australia |
| 4. Brandon & Kylie Kelly | 16 Alice Burn Drive, Luggate |
| 5. Michelle O'Brien* | 9 Alice Burn Drive, Luggate |
| 6. Penelope Spicer* | 14 Church Road, Luggate |
| 7. K Kripper | 34 Alice Burn Drive, RD3, Cromwell |
| 8. Percy & Joan Decker | 50 Alice Burn Drive, Luggate |
| 9. Margaret Bolwell | 145 Main Road, Luggate |

10. Graeme Perkins	49 Alice Burn Drive , Luggate
11. Sydney & Dawn Diamond	32 Bethel Crescent, Bishopdale, Christchurch
12. Leone Ward	20 Church Road, Luggate
13. Yvonne Perkins	48 Alice Burn Road, Luggate
14. A & B Kane*	Paerau, RD3, Cromwell
15. Andrea Petic and Grant Hastie*	43G River Riadge Road, RD3, Tarras
16. Sam Kane*	359 Luggate Tarras Road
17. Cynthia Robinson	359 Luggate Tarras Road
18. Phillip Gilchrist*	PO Box 839, Wanaka
19. J H & T K Bird Holdings Ltd*	47 Kane Road, RD2, Wanaka
20. Rosalee Gilchrist*	PO Box 839, Wanaka
21. R Picard and N Bloxham	PO Box 417, Wanaka
22. W Fisher and M Wilkinson*	3477 Luggate- Cromwell Road, Luggate
23. Luggate Community Association, Project Groundswell Subcommittee	
24. Wakatipu Holdings Ltd*	C/- PO Box 553, Queenstown
25. Dr Deborah Wilson*	1 Moss Street, Dunedin
26. Graham McArthur*	1 Moss Street, Dunedin
27. C Coombe*	17 Kingan Road, Luggate
28. Sue Orbell	48 Kingan Road, Luggate
29. Tim Orbell	48 Kingan Road, Luggate
30. G Halliday, Luggate Community Association*	110 Shortcut Road,Wanaka
31. Judy Thompson*	1153 Wanaka- Luggate Highway, Wanaka
32. A Olley*	17 Pisa Road, Luggate
33. Lorna Schmidt*	42 Kingan Road, Luggate
34. Joshua Olley*	17 Pisa Road, Luggate
35. G D Taylor* submission)	114 Shortcut Road, Wanaka (Late
36. B A Todd*	27 Main Road, Luggate (Late submission)

The following submissions were received in support of the application:

- 37. Rachel Brown* 109 Loess Lane, Wanaka
- 38. Public Health South* address n/a
- 39. Jan Piggot 3467 Luggate Cromwell Road, Cromwell

*indicates that the submitter wishes to speak at the hearing.

Implications For:

- i) Policy No
- ii) Annual Plan No
- iii) Strategic Plan No

RECOMMENDATION

- (i) Pursuant to Section 37 it is recommended that the late submissions be received.
- (ii) That subject to new or additional evidence being presented at the Hearing, the application be GRANTED pursuant to Section 104 of the Resource Management Act 1991 for the following reasons:

It is considered that the adverse effects of the activity will minor.

The proposal is not contrary with the relevant objectives and policies of the District Plan.

The proposal does promote the overall purpose of the Act.

REPORT

1.0 INTRODUCTION

My name is Jane Sinclair, I am a consultant planner contracted to undertake resource management services for the Queenstown Lakes District Council. I have 18 years experience in resource management having worked for various city, regional and district councils as well as in the private sector. I have extensive experience in resource consent processing and decision making. For the last 15 years I have been involved with resource consenting for the Queenstown Lakes District Council.

I have acted as an Independent Commissioner for the Queenstown Lakes District Council for over 10 years. Prior to acting as an Independent Commissioner, I was the Principal: Resource Management for CivicCorp, a private consultancy contracted to the Queenstown Lakes District Council to carry out Council's regulatory functions. I have extensive local planning knowledge, a sound understanding of the District Plan and the statutory requirements of the Resource Management Act.

I hold the qualification of Bachelor of Resource and Environmental Planning from Massey University graduating in 1996.

This report has been prepared to assist the Commission. It contains a recommendation that is in no way binding. It should not be assumed that the Commission will reach the same conclusion.

2.0 SITE AND ENVIRONMENT DESCRIPTION

The site is located at the Fulton Hogan Quarry, a 46 hectare site adjacent to State Highway 8A, between Luggate and Tarras. This location can be generally seen in Figure 4 of the application (page 9).

The proposed facility will occupy the north-western corner of the quarry site. The site is an elevated river terrace on the northern bank of the Clutha River, approximately 20 metres above the river. The majority of land is flat and thinly vegetated in pasture grasses with a triangular portion falling to a lower terrace in the western corner of the site adjacent to the river. There is a mature shelter belt running almost alongside the roadside boundary with State Highway 8A, and a further shelter belt running along the terrace edge between the site and the triangular lower terrace.

I refer the Commissioners to *Section 2. Existing Environment* in the applicant's AEE in particular to *Section 2.1 The Site* and *2.2 Surrounding Environment*, which provides a further description of the site and the surrounding environment.

Relevant Consenting Background

Resource consent RM060120 was granted in October 2006 to establish and operate a quarry. The quarry activity was granted for a period of 40 years. A number of conditions were imposed on this resource consent and of interest to this current proposal are the conditions relating to mitigation of the visual effects by landscaping. This resource consent is detailed in the application, specifically in the report titled *Landscape and Visual Effects* prepared by Boffa Miskell dated 28 January 2014.

Also existing on the site (but not acknowledged in the application) is a green waste facility located to the immediate north-east of the proposed solar drying facility, running west to east parallel to the State Highway. I understand from a discussion with the applicant that this is a community run green waste facility. A search of Council records has found no known planning approvals. It is not clear how long this facility has been in operation, but it was in operation when I first visited the site in February 2014.

3.0 PROPOSAL AS APPLIED FOR AND INFORMATION RECEIVED POST NOTIFICATION

A copy of the application and accompanying assessment of effects and supporting reports can be found in the "Application" section of the Agenda.

Proposal As Applied For

Consent is sought to establish and operate a solar drying facility which will process secondary solids from the Wanaka Wastewater Treatment Plant.

The facility will comprise a large glass building, built over an asphalt base measuring 108 metres x 13 metres, occupying an area of 1404m², the building itself will measure 96 metres in length x 12.8 metres in width, with a maximum height of 4.8 metres above existing ground level. The facility will be positioned 0.5 metre below ground level having an overall height of 5.3 metres.

A maximum of 4 covered trucks per day, with an average of 1.12 loads, Monday- Friday (based on the same frequency of current cartage) will transport the secondary solids from the Wanaka Waste Water Treatment Plant to the facility (unless emergency works are required). The trucks will deliver the secondary sludge directly into the building. The building will hold the solids for an approximate 14 months maturation period where the solids will be mechanically turned. Once the process is completed, the solids will be transported off site by a maximum of two truck loads per week and taken to the Park Burn quarry located outside of the Queenstown Lakes District on State Highway 6, Luggate- Cromwell Road. There are no commercial or retail sales sought from the subject site.

Access to the site will be via the existing quarry access. A maximum of 950m³ of earthworks are required to enable the facility to be positioned 0.5m below the existing ground level. Additional landscaping and mounding is proposed including a 1.5 metre bund located along the State Highway 8A, Luggate - Tarras Road.

The facility will be staffed for approximately 2 hours per day, by one on site operator at any time between the hours of 7am – 6pm, Monday – Friday.

Water is currently pumped directly from the Clutha River and held in storage tanks for irrigation purposes. No water or waste water connections are required for the processing. No bathroom facilities will be provided on site. It is proposed that Delta will connect power to the site prior to the commissioning of the facility. Stormwater will be diverted from the roof to ground soak pits.

No consent is sought for the bio-solids to be applied to land.

Consent is sought for a period of 35 years.

Clarifications/ Further Information Received Post Notification

Truck Loads

In an email received 1 April 2014, the applicant confirmed that the type of trucks used will be single axis, 4 x 2 trucks, with each truck capable of carrying approximately 4 tonnes.

Earthworks

The applicant has confirmed that the area of the earthworks is 950m² (letter dated 1 April 2014), and the volume of the earthworks 950m³ (page 42 of the AEE).

End Product

In an email received 1 April 2014, the applicant stated that the end product will be disposed of at the Victoria Flat Landfill, and that the intended future use of the end product would be that it is made commercially available from the Park Burn Quarry.

However, this statement was rescinded on 17th April 2014, and the application was as applied for ‘to dry sludge in a building, with no end use applied for’. It is stated in the application “that once tested and if the standard is met, then the end product will be used on farmland and forestry, and if the standard is not met then it will be transported to landfill.” Dispersal to land has not been applied for as part of the application and nor has any retail or commercial activity from the site.

Commercial Activity and Truck Movements

In a letter received 22 April 2014, the applicant confirmed that no commercial activity would be undertaken from the site, but rather it would occur from the Park Burn Quarry site owned by Fulton Hogan. Park Burn Quarry is located at State Highway 6, Cromwell – Wanaka Road.

A maximum of two truck loads will leave the site each week, with a stated maximum of 10 – 15 truckloads leaving the site per year.

On the 8th July 2014, the following additional further information was submitted:

- An assessment of Possible Alternative Locations, addressing the potential locations of the Wanaka Waste Water Treatment Plant and the Park Burn quarry.
- A draft Environmental Management Plan incorporating an integrated Pest Management Plan.
- An additional visual assessment undertaken from Rapid Number 618, Luggate - Tarras Road.
- Confirmation that no security lighting is proposed.
- Confirmation that safety equipment and work gear will be provided on site.
- An additional visual assessment was submitted on 18th July 2014, this assessment corrected an error in the location of the earlier submitted visual assessment (dated 8th July 2014). As a result of this visual assessment further mitigation was proposed involving an additional earth bund to be located 28 metres east of the facility, measuring 2 metres in height with a length of 120 metres. The bund is proposed to be landscaped.

4.0 SUBMISSIONS

4.1 SUBMISSIONS

A copy of the submissions received can be found in the “Submission” section of the Agenda and are summarised in Appendix 2 of this report.

Figures 1 and 2 show the location of the submitters’ properties in relation to the subject site.

36 submissions were received in opposition to the proposal. Common themes raised in the opposing submissions are:

- Uncertainty regarding use of the end product
- Concerns regarding the end product being dispersed to land
- Negative impact on Luggate
- Adverse effects from dust
- Adverse effects from odour
- Traffic generation and vehicle movements
- Noise concerns
- Decrease in property values
- Location of facility should be at a designated site
- Impact on the Clutha River
- Presence of heavy metals and bacteria and the impact on the food chain
- Inadequate hygiene facilities
- Pest control
- Fire risk
- Lack of adequate or qualified staffing on site
- Concerns regarding length of consenting period
- Impact on views
- Effects from glare and reflectivity from the east
- Cost benefit concerns, costs borne by community outside of where sludge is produced and where the benefits accrue.
- Effect on amenity values
- Impact of winter conditions on the efficiency of plant
- Impact of population and tourist growth
- Rural character concerns
- Lack of public consultation

- Cumulative effects
- Impact on recreation activities
- Spill and seepage management

Three submissions were received in support of the application. Common themes raised in the supporting submissions include:

- Support the establishment of a facility as a long term sustainable solution to disposal of sludge.
- Seek changes with respect to pest control, hygiene facilities on site, adequacy of proposed conditions, proposed landscape screening and the use of the name 'Luggate'.
- Support a more effective and efficient approach than trucking to land fill.
- This is a state of the art facility which will produce AA grade bio-solid that are rated safe to apply to land.

Submitter # & Address
1 D Hawkins – 14 Church Road
2 Pankhurst & Hawkes – 12 Alice Burn Drive
3 Olver – 17 Alice Burn Drive
4 B & K Kelly – 16 Alice Burn Drive
5 M O'Brien - 9 Alice Burn Drive
6 P Spicer – 14 Church Road
7 K Krippner – 34 Alice Burn Drive
8 P & J Dekker - 50 Alice Burn Drive
9 R Brown – 109 Loess Lane (<i>not within map</i>)
10 M Bolwell – 145 Main Road
11 G Perkins – 48 Alice Burn Drive
12 S & D Diamond – (<i>not indicated</i>)
13 L Ward – 20 Church Road
14 <i>Public Health South</i>
15 Y Perkins - 48 Alice Burn Drive
16 A & B Kane – 480 Luggate-Tarras Road
17 A Petic & G Hastie – 43G River Ridge Rd (<i>not within map</i>)
18 S Kane – 359 Luggate-Tarras Road
19 J Piggot – 3467 Luggate-Cromwell Road
20 Robson – 359 Luggate-Tarras Road
21 PR Gilchrist - 3475 Luggate-Cromwell Road
22 JH & TK Bird Holdings Ltd – 47 Kane Road
23 RB Gilchrist – 3475 Luggate-Cromwell Road
24 R Richard & N Bloxham – 33 Pisa Road
25 W Fisher & M Wilkinson – 3477 Luggate-Cromwell Road
26 <i>Luggate Community Association Project Groundswell Subcommittee</i>
27 Wakatipu Holdings Ltd – Church Road
28 D Wilson – Harris Place
29 G McArthur – Harris Place
30 C Combe – 16 Kingan Road
31 S Orbell – 48 Kingan Road
32 T Orbell – 48 Kingan Road
33 <i>G Halliday for Luggate Community Association Project Groundswell Subcommittee</i>
34 J Thompson – 1153 Wanaka-Luggate Highway
35 A Olley – 17 Pisa Road
36 L Schmidt – 42 Kingan Road
37 J Olley - 17 Pisa Road
38 GD Taylor – 114 Shortcut Road
39 BA Todd - 27 Main Road

Figure 1- Map of Submitters' Properties Outside Luggate Township

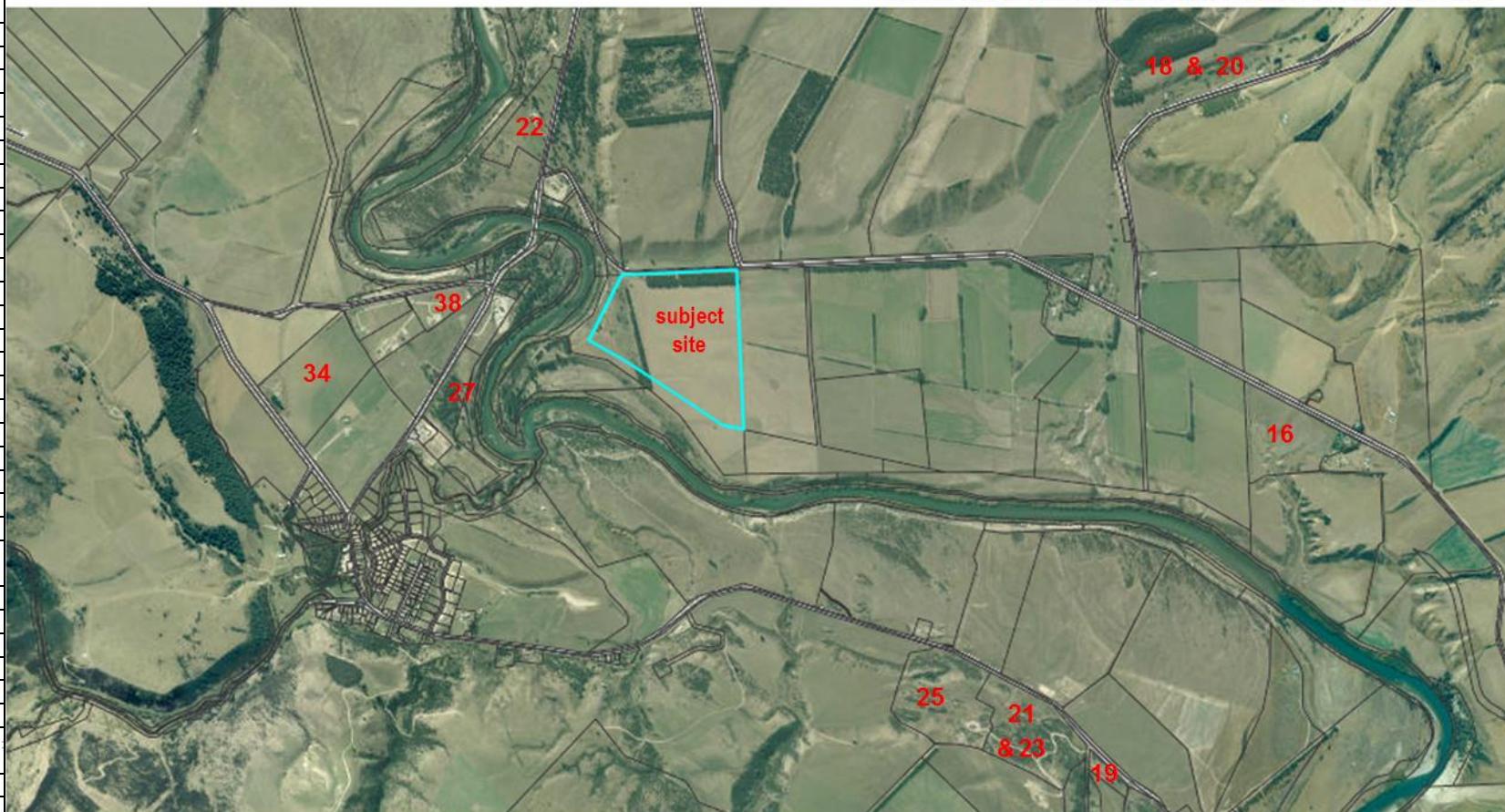
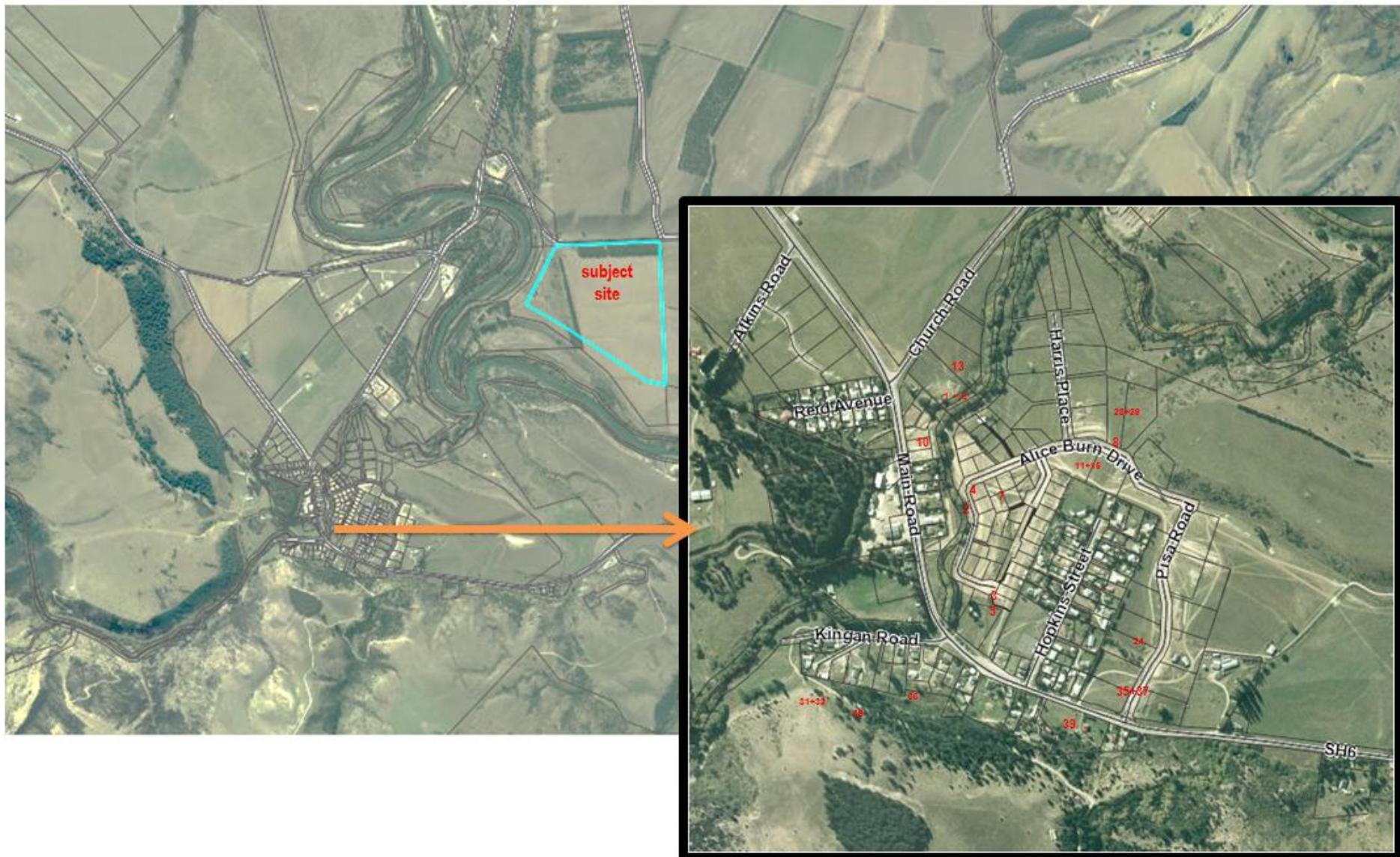


Figure 2 - Map of Submitters' Properties Within Luggate Township & Immediate Surrounds



4.2 LATE SUBMISSIONS

Under Section 37 of the Resource Management Act 1991 the Commission may waive the requirement to make a submission within the required time period provided Section 37A(1) is considered.

Section 37A(1) states:

A consent authority or local authority must not extend a time limit or waive compliance with a time limit, a method of service, or the service of a document in accordance with section 37 unless it has taken into account -

- (a) *The interest of any person who, in its opinion, may be directly affected by the extension or waive; and*
- (b) *The interests of the community in achieving adequate assessment of the effects of any proposal, policy statement or plan; and*
- (c) *Its duty under section 21 to avoid unreasonable delay.*

Two opposing submissions were received after the close of submissions. A submission from G D Taylor was received 30 April 2014, 1 day after the close of submissions, and a submission from Mr B A Todd was received 2 May 2014, 3 days after the close of submissions. The issues raised in the late submissions are generally covered in other opposing submissions and relate to concerns regarding the proposed location, monitoring regime, end product use and distribution, odour, pests, spill and seepage management, and on site security.

It is recommended that the submissions be received and accepted pursuant to the above section of the Act.

5.0 CONSULTATION AND WRITTEN APPROVALS

The application states that consultation has occurred, including two public meetings and a field day.

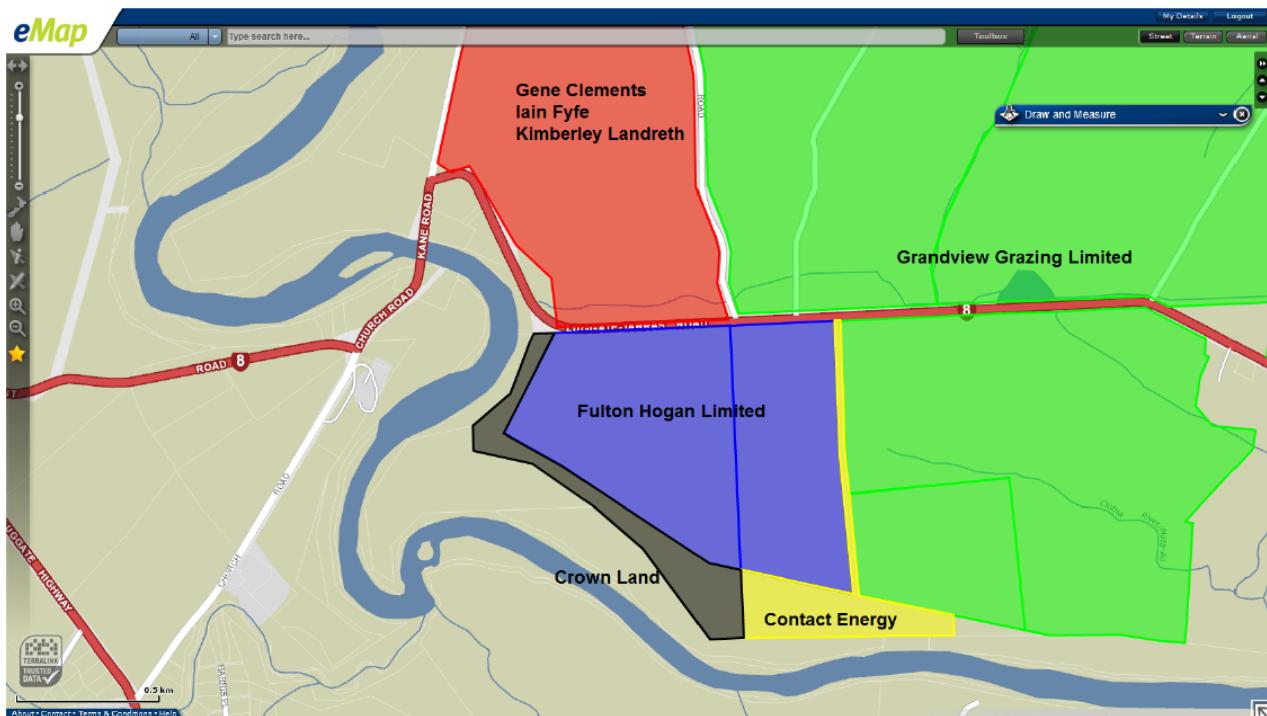
Furthermore, the application advises that other consultation has been undertaken with the Department of Conservation (DoC), Queenstown Lakes District Council, Kai Tahu Ki Otago, Ministry of Health, Fish and Game NZ, and adjacent property owners.

In the case of Kai Tahu Ki Otago, it is noted that the outcome of the consultation was that written approval was obtained which was subject to conditions. These conditions have been accepted by the applicant and now form part of the application.

The following additional written approvals have been provided as part of the application and as such adverse effects on these parties have been disregarded.

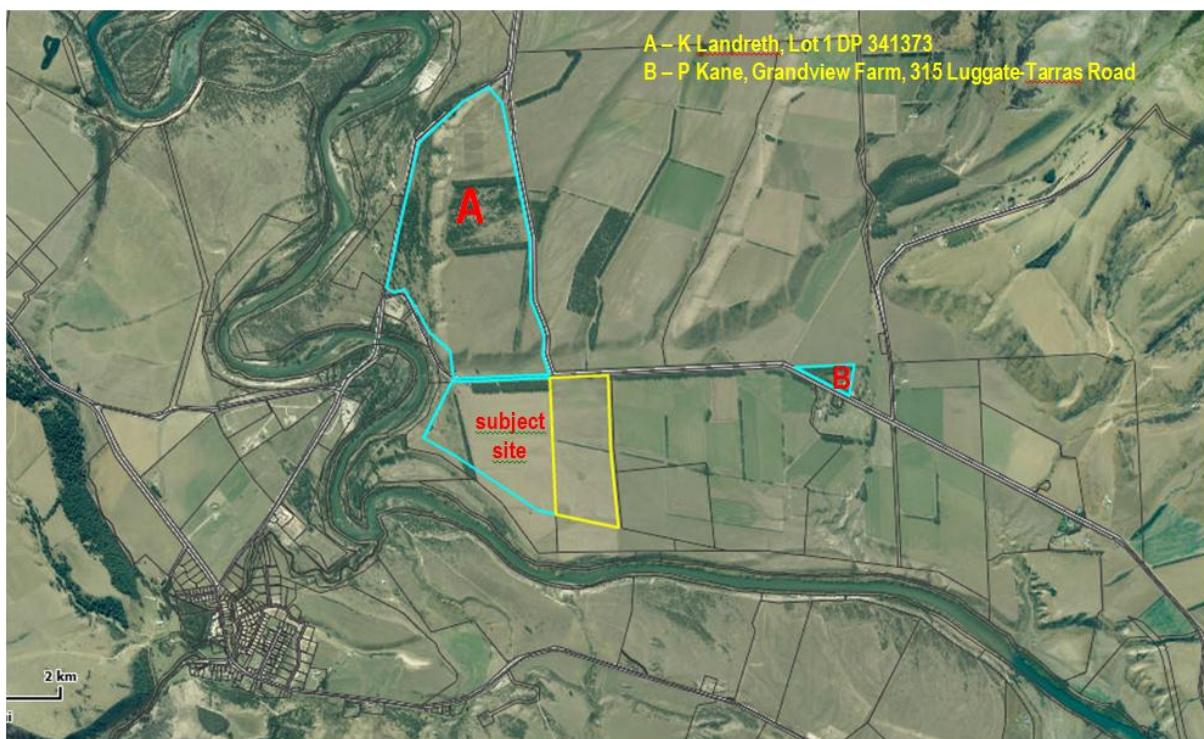
- Otago Fish and Game
- Kim Landreth, Lot 1 DP 341373
- Paul Kane, Grandview Farm, 315 Luggate Tarras Road

In section 2.2 on page 8 of the application, it is stated that Grandview Grazing Limited owns a large area to the east which is used for sheep and beef farming. Figure 4 on page 9 of the application reproduced below, shows a map of land ownership in the vicinity of the site. Fulton Hogan's eastern land parcel is stated as being currently leased by Kim Landreth the adjacent land owner.



The map above shows the parties that have given written approval in relation to the subject site (stated from the AEE).

It is noted that Paul Kane of Grandview Farm and Kim Landreth, Lot 1, DP 341373 have given written approval to the application. The applicant should clarify at the hearing the extent of land in ownership by those parties, as the Queenstown Lakes District Council rates database shows the properties as follows, which is not as extensive as that shown in the map above.



For clarification Contact Energy and the Crown have not provided written approval. The site highlighted yellow is also owned by Fulton Hogan, but not subject to this application.

6.0 THE PLANNING FRAMEWORK

6.1 PROCEDURAL MATTERS

Profile poles

Section 2.1.7 Building Outline of the District Plan states:

"that any application for a building in the Rural General zone shall erect poles or other similar devices to identify the bulk of the proposed building to be erected on the site. The poles are to be in place prior to site assessment and must remain in place until the Council has completed the application."

On 23th April 2014, during the submission period, a submitter, Mr Allan Kane, queried why no profile poles were erected on the site as part of the application. Confirmation was sought from the applicant on this issue, and evidence was provided that the profile poles were erected on Tuesday 25th March 2014, prior to public notification of the application. The profile poles were set at the ridgeline height with the overall height including the 0.5m of the building that is proposed to be located below the existing ground level.

When I visited the site in late August 2014, the building profile poles were still erected on the site.

6.2 THE ZONING AND TYPE OF CONSENTS REQUIRED

The site is zoned Rural General under the Queenstown Lakes District Plan.

The purpose of the Rural General Zone is found in section 5.3.1.1 of the District Plan and states:

*To manage activities so they can be carried out in a way that:
 -protects and enhances nature conservation and landscape values;
 -sustains the life supporting capacity of the soil and vegetation;
 -Maintains acceptable living and working conditions and amenity for residents and visitors to the zone; and
 -Ensures a wide range of outdoor recreational opportunities remain viable within the zone; and
 -Protects the on-going operations of Wanaka Airport.*

The relevant parts of the District Plan requiring consideration are:

- Part 4- District Wide Issues
- Part 5- Rural Areas

Consents Required and Status of the Activity

The proposal requires the following land use resource consent, which the applicant has correctly applied for:

1. A **discretionary activity** consent pursuant to rule 5.3.3.3 (i) relating to the construction of a building and (ii) any physical activity associated with any building such as roading, landscaping and earthworks.

The following additional resource consent is also required which was not specifically listed as a rule breach in the AEE, but was referred to in terms of the scale of the building in the body of the assessment of effects.

2. A **restricted discretionary activity** is required pursuant to 5.3.3.3 (xi), in respect of site standard 5.3.5.1 (iii) Scale and Nature of Activities in relation to (a) the maximum gross floor area of all buildings on the site , which may be used for the activities shall be 100m2; (b) No goods, materials or equipment shall be stored outside a building; and (c) all manufacturing,

altering, repairing, dismantling or processing of any goods or articles shall be carried out within a building.

The proposed building is in breach of (a) as the gross floor area of the building will exceed 100m², being 1228.8m². The proposal complies with (b) and (c) of the above rule.

Overall, the proposal is considered a **discretionary activity** under the Queenstown Lakes District Plan.

It is noted that this application is being jointly heard with consents also required from the Otago Regional Council.

6.3 STATUTORY CONSIDERATIONS

This application must be considered in terms of Section 104 of the Resource Management Act 1991.

Subject to Part 2 of the Act, Section 104 sets out those matters to be considered by the consent authority when considering a resource consent application. Considerations of relevance to this application are:

- (a) *any actual and potential effects on the environment of allowing the activity; and*
- (b) *any relevant provisions of:*
 - (i) *A national environmental standards;*
 - (ii) *Other regulations;*
 - (iii) *a national policy statement*
 - (iv) *a New Zealand coastal policy statement*
 - (v) *a regional policy statement or proposed regional policy statement*
 - (vi) *a plan or proposed plan; and*
- (c) *any other matters the consent authority considers relevant and reasonably necessary to determine the application.*

Following assessment under Section 104, the application must be considered under Section 104B of the Act. Section 104B states:

- After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority –*
- a) *may grant or refuse the application; and*
 - b) *if it grants the application, may impose conditions under section 108.*

Consideration is also required of Section 6 of the Act, Matters of National Importance, of relevance are the following matters over which the consent authority must recognise and provide for:

- (a) *the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate use and development;*
- (b) *The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development.*
- (d) *The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers.*
- (e) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tahu, and other taonga;*

Section 7 of the Act further identifies other matters to which particular regard is to be had, those relevant being:

- b) the efficient use and development of natural and physical resources:*
- (a) the maintenance and enhancement of amenity values:*
- (f) the maintenance and enhancement of the quality of the environment:*
- (j) the benefits to be derived from the use and development of renewable energy.*

All of the above are considered in seeking to give effect to the purpose of the Act, which is identified as being to promote the sustainable management of the natural and physical resources. The definition of sustainable management is:

managing the use, development and protection of natural and physical resources in a way or at a rate which enables people and communities to provide for their social, economic and cultural well being and for their health and safety while:

- (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations: and*
- (a) Safeguarding the life-supporting capacity of air, water, soil and ecosystems: and*
- (b) Avoiding, remedying, or mitigating any adverse effect of activities on the environment.*

Section 108 empowers the Commission to impose conditions on a resource consent, if granted.

6.4 NATIONAL ENVIRONMENTAL STANDARD FOR ASSESSING AND MANAGING CONTAMINANTS IN SOIL TO PROTECT HUMAN HEALTH (NES)

There are five activities that trigger the requirement to apply the NES legislation, these are;

- Subdivision
- Change of use
- Removal or replacement of a fuel storage tank
- Earthworks (over 25m³ per 500m²)
- Sampling soil

The NES regulations are considered to apply to the proposal as a 'Change of Use' of the land will occur, and also where the proposed activity involves earthworks that are more than 25m³ per 500m².

The applicant has supplied further information identifying the NES and concluded that as a result of their assessment that the site is not a HAIL site. The NES only applies to land that is potentially or actually affected by contaminants because of its historical and/or current use.

The HAIL list from Ministry for the Environment identifies the types of activities defined as 'HAIL' activities and that trigger the NES regulations. The two HAIL activities of note are:

- E-Mineral Extraction, Refining and Processing, Storage and Use, and
- G-Cemeteries and Waste Recycling, Treatment and Disposal.

The activity E Mineral Extraction, Refining and Processing, Storage and Use is not considered to apply, as gravel extraction is excluded from Mining industries.

In terms of G – Cemeteries and Waste Recycling, Treatment and Disposal, the site currently has a green waste disposal located in near vicinity of the proposed location. The green waste is stored on site and then chipped and taken away by members of the community. The green waste is not stored at the actual site of the bio-solids facility and is not disposed of on-site. The applicant contends that the best fit is G 5 - Waste Disposal to Land, and that the green waste is not waste as intended by the categories G5 and G6, as the material is held in temporary storage, shredded and returned to the soil away from the site as a soil conditioner in the form of mulch.

It is the applicant's position that the NES is not intended to capture small scale and temporary green waste storage and that the NES regulations do not apply to land within this property that has not been used for any purpose described on the HAIL list; that is, the regulations only apply to the actual area that is HAIL land, and that in this case, the green waste area is removed from the site of the proposed bio-solids facility. Therefore no consent is required under the NES regulations.

7.0 INTERNAL REPORTS

Landscape Assessment

Council's consultant Landscape Architect, Dr Marion Read, has reviewed the applicant's Landscape Architect's assessment and provided a report outlining where she agrees or disagrees with that assessment. Dr Read's report is attached as Appendix 3 to this report. The recommendations provided by Dr Read are considered reasonable and the final recommendations in this report are dependent on recommended conditions of consent being imposed to ensure Dr Read's recommendations are followed. The landscape assessment is adopted for the purposes of this report.

Engineering Assessment

Ms Lynn Overton, a QLDC engineer, has assessed the proposed development and her report is attached at Appendix 4 of this report. Her report addresses transport, natural hazards, earthworks, and the provision of services.

Ms Overton considers, with the imposition of conditions of consent as recommended in her report, the proposed development will not have adverse effects on the environment that have not been appropriately mitigated or avoided. The recommendations provided by Ms Overton are considered reasonable and the final recommendations in this report are dependent on the recommended conditions of consent being imposed to ensure Ms Overton's recommendations are followed. The engineering assessment is adopted for the purposes of this report.

Environmental Health Assessment

Ms Jodi Yelland, a QLDC Environmental Health officer, has assessed the proposed development in terms of noise, dust and odour, her report is attached at Appendix 5 to this report.

To summarise, Ms Yelland considers with the imposition of conditions of consent as recommended in her report, the proposed development is unlikely to have a more than minimal impact. The recommendations provided by Ms Yelland are considered reasonable and the final recommendations in this report are dependent on recommended conditions of consent being imposed to ensure Ms Yelland's recommendations are followed. The environmental health assessment is adopted for the purposes of this report.

The assessments and recommendations of the reports are relied on and are addressed where appropriate in the assessment to follow.

8.0 ASSESSMENT

The proposal requires assessment in terms of the following:

- (i) Actual and Potential Effects on the Environment
- (ii) District Plan Assessment
- (iii) Other Matters
- (iv) Part 2 of the Act

8.1 ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT

8.1.1 The Permitted Baseline and Existing Environment

Permitted Baseline

Pursuant to Section 104(2) of the Act, when considering the actual and potential effects of an application for resource consent, a consent authority may disregard an adverse effect of an activity on the environment if the plan permits an activity with that effect.

While the baseline has been outlined below to provide further information, it is noted that Section 104(2) of the Act provides the consent authority with discretion as to whether it considers the permitted baseline or not.

All buildings or alteration to buildings (as defined under the Plan) require resource consent in the Rural General zone. Hence, the Plan does not provide for any building as permitted and activities permitted are restricted to those such as:

- A post and wire or post and rail fence within 50m of a road boundary or anywhere on the site.
- Earthworks which comply with the relevant site standards in relation to volume, area and height of cut and fill.
- Agricultural activities including the operation of machinery.

The applicant has addressed the permitted baseline in section 4 of the application (pages 19-22), and I agree that there is no comparative permitted baseline for the building, nor for the scale of the activity proposed. In this instance the permitted baseline is almost entirely restricted to farming related activity such as, grazing, earthworks, the operation of machinery and structures such as fencing.

The applicant has stated that farming and cultivation activities carried out on the land as a permitted activity could produce dust, noise and odour as part of permitted farming operations. This is accepted as forming part of the permitted baseline. These effects are also recognised in the District Plan in Part 5 Rural Areas in 5.1 Resource Management Issues (iii) Protecting the Rural Amenity Values.

Existing Environment

Fulton Hogan were granted consent under RM060120 to extract, process and stockpile gravel. The quarry activity is in operation and is located to the north east from the proposed facility. The quarry activity will move across the site over the duration of the consented period, with rehabilitation occurring in areas retired from the quarry activity. The quarry operation including the associated truck movements, and the conditions required as part of that consent form part of the existing environment.

8.2 ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT

Otago Regional Council Matters

A number of submissions to the Queenstown Lakes District Council have raised issues which are part of the Otago Regional Council considerations. The issues are identified as odour, air borne particles, heavy metals and bacteria, ground contamination and the effect of winter conditions on the effectiveness of the operation of the plant. These matters will be addressed by the Otago Regional Council as part of their assessment of this joint application.

Application as Applied For

Numerous submitters are concerned about the use of the end product and the dispersal of the end product to land. The application as applied for is that the end product will be trucked off the site by a maximum of two truck loads per week and taken to the Park Burn Quarry located on State Highway 6

Cromwell- Luggate Road, a location outside of the Queenstown Lakes District. Consent is not sought for the dispersal to land, and as a result this has not been assessed as part of this application.

As a result of the above clarifications, I consider the proposal raises the following actual and potential effects on the environment:

- Earthworks
- Provisions of services
- Traffic generation and vehicle movements
- Natural hazards
- Noise
- Dust
- Safety
- Visual effects
- Rural amenity
- Scale of activity and hours of operation
- Rural character
- Cumulative effects
- Cultural and heritage effects
- Consent duration
- Positive effects

These will now be discussed as follows:

Earthworks

Earthworks are required to prepare the building area for construction, to provide a 200 metre long vehicle access to the facility within the site, and for the proposed mounding. The base of the building will measure 108 metres x 13 metres, it is proposed to excavate 0.5 metre down below the ground level, across the entire building platform so that the building will be as low as possible to mitigate against visual effects. The excavated material will be used to form the landscape bunds offered as part of the on site mitigation.

The site is essentially flat and the proposed earthworks are setback from the site boundaries. The maximum height of cut is approximately 1 metre, and Council's Resource Management Engineer, Ms Overton is satisfied that this will be supported by the walls of the building.

Ms Overton has assessed the earthworks, and is satisfied that with the appropriate conditions of consent being imposed relating to exposed surfaces being either re-vegetated or stabilised upon completion of the earthworks then adverse effects will be minor. I concur with these findings.

Provision of Services

Water Supply

Ms Overton has assessed the proposal and has confirmed that there is no available Council reticulated services to the site with water currently pumped directly from the Clutha River and held in storage tanks for irrigation purposes.

There is an existing water supply on site which was installed as part of the conditions of RM060120 for the quarry operation. No water connections are proposed for the facility and therefore no conditions have been recommended by Ms Overton. Adverse effects are considered to be minor.

Fire Fighting

Ms Overton is satisfied that a fire fighting water supply is not required for this activity, and has therefore not recommended any conditions.

Effluent Disposal

Ms Overton considers that as the facility will not be permanently staffed, she does not consider it necessary to provide toilet facilities. Ms Overton has made a further comment that in the event that the applicants do decide to install a domestic wastewater disposal and treatment system for staff she is satisfied that on site waste water disposal will be feasible given the nature of the underlying soils, and the available area. Therefore no conditions have been recommended in relation to waste water disposal.

Storm water

It is proposed to divert storm water from the roof to ground soak pits. Based on the underlying gravels within the site, Ms Overton is satisfied that there are no issues on site that would preclude storm water disposal to ground and that storm water disposal can be adequately addressed by the building consent process and therefore no conditions have been recommended.

Power and Communications

It is proposed that Delta will connect power to the site prior to the commissioning of the facility. Conditions have been recommended by Ms Overton to ensure that electricity or telecommunications connections to the proposed building are placed underground.

Lighting

There will be no adverse effects from lighting as the proposed facility is only to be staffed during daylight hours. In addition the applicant has stated that there will be no proposed security lighting, nor any fixed exterior lights.

Traffic Generation and Vehicle Movements

Vehicle Crossing

The facility will utilise the existing access from the State Highway. This access point was formed as a requirement of RM060120, and conditions of that consent required the vehicle crossing to be upgraded to New Zealand Transport Agency Diagram D (including road widening on both sides of the road) standard with a 15m radius and sealed 50m back from the State Highway road reserve boundary, including the provision of signage warning motorists of the site entry points and parking area for vehicles within the site. Ms Overton is satisfied that the vehicle crossing and signage has been formed in accordance with the conditions imposed on RM060120 and that the existing formation of the site entrance is appropriate for this proposal. No further conditions are required in relation to the vehicle crossing.

Internal Access to the Site

The applicants are intending to upgrade the existing access road within the site to the proposed facility by sealing the access within two years of the facility operating. A condition is recommended to ensure that the access road to the drying facility is formed to Council standards in the timeframe required.

Effects on the Surrounding Road Network

The secondary solids will be carted by covered truck from the Wanaka Waste Water Treatment Plant to the subject site, a distance of approximately 8 km.

The current practice stated in the application is that:

"In 2011, 954.54 tonnes equating to 291 truck loads was transported approximately 70km from the Wanaka Waste Water Treatment Plant to the Victoria Flat Landfill, State Highway 6, Gibbstion Valley."

The application goes on to state:

"this will occur at the same frequency as the current cartage to landfill, which is an average of 1.12 loads per day, 5 days a week. All trucks will carry the required Dangerous Goods Licence and the drivers will be trained in spill response. A maximum of four loads per day will be delivered and will occur during week days only. It is estimated that the removal off site of the end product to the Park Burn quarry will require approximately two truck loads per week at a maximum."

A number of submissions have raised the issue of the effect of additional traffic generation and vehicle movements of roading capacity and infrastructure and in particular the 'Red Bridge'. The 'Red Bridge' is a single lane iron bridge and concern has been expressed about the ability of the bridge to cope with increased numbers of heavy truck movements and the effect of the use of the bridge by trucks in terms of traffic flows.

The operation will generate a maximum of four truck deliveries per day to transport waste to the facility and two truck movements per week to remove the dried waste to another facility out of the District. This equates to 44 truck movements per week, or 8.8 truck movements per day on the State Highway roading network.

The Red Bridge forms part of the State Highway being part of the portion of road that links State Highway 6 and State Highway 8A. As such the Red Bridge falls within the New Zealand Transport Authority (NZTA) ownership and control. The NZTA were served notice of the application as part of the public notification, but did not lodge a submission. Council's engineer, Ms Overton sought comment from the roading authority on the impact that this facility would have on the local roading network. In an email dated 25 July 2014 (attached to the Council engineering report) the NZTA stated:

"We have looked at this proposal in-house and do not consider there will be any adverse effects on the State Highway. The proposal is not expected to generate a large number of vehicle movements, and those that it will generate will join the highway through a fully-formed intersection." and;

"We can't guarantee any effects or otherwise on the bridge. The bridge is not subject to use restrictions, and heavy vehicles can use it at present. All I can really say is that the evidence we have received to date does not raise any concerns, hence our decision to not submit on the proposal."

Ms Overton has accepted these comments from the NZTA and formed the view that any adverse effects are considered to be minor. No conditions have been recommended by Ms Overton.

As such, I consider that the NZTA is satisfied that the increased vehicle movements generated by the proposal will not adversely affect the integrity of Red Bridge. I therefore consider that the proposed activity and its associated traffic generation will not adversely affect roading infrastructure to a degree that is more than minor.

A number of submitters have raised issue with the number of truck movements that the proposal will generate, with most submitters agreeing that the truck movements could be avoided if the proposed facility could be co-located at the Wanaka Waste Water Treatment Plant. While I agree in principle that co-locating would avoid the transportation issues, the application being considered, is to site the facility at the subject site. As such, it is the effects of this application that need to be assessed accordingly.

As part of the processing of the application, the applicant provided an alternative site assessment, where they stated the following:

"The proposed location of the facility was chosen as the land is owned by Fulton Hogan. The disposal of Wanaka's sewage solids was put to tender and Fulton Hogan priced and submitted to that tender based on building the facility at the Fulton Hogan land on Luggate-Tarras Road. The only other land owned by Fulton Hogan suitable for the proposed facility is Park Burn Quarry and was dismissed due to the increased cartage costs and the quarry being located outside of the Queenstown Lakes District."

Fulton Hogan does not own land at or in close proximity to "Project Pure", in order to build the proposed facility next door to the Wanaka Waste Water Treatment Plant Fulton Hogan would have to lease land from the Queenstown Lakes District Council and significantly alter the design of the building or look for an entirely new concept. Fulton Hogan understands that the future plans for the Wanaka Airport include an additional runway which would bring height and site slope restrictions to land suitable for the proposed facility. Due to the design of the facility the surface area must be enhanced to dry the material and air flow is needed near the floor. The height restrictions within the airport zone would mean the facility would not be appropriate for drying the material as it would need to be dug into the ground and glass would not effectively allow the sunlight to reach the secondary solids.

The following points were raised by Ralph Fegan, Operations Manager at the Wanaka Airport, when asked about appropriateness of QLDC land next to the Wanaka airport facility.

- would be too high
- Glare of glass for approaching and departing aircraft would be an issue
- 90% of wind comes from a north westerly direction towards Luggate
- it would hinder the future of another runway
- Project Pure was actually constructed in such a way that it is virtually below the level of the airport land; I could not see this as being economically viable for your situation
- the allocated site would be too small for your plant and would be at the expense of the future Airport development."

A maximum of 4 truckloads per day, with an average of 1.12 movements per day, will leave the treatment plant and travel on State Highways 6 and 8A to get to the subject site. The trip is approximately 8km in length. This route is well used by people and companies travelling from Wanaka to Christchurch. In comparison the existing practice is to transport the sludge from the treatment plant over to the Victoria Flat Landfill, at Gibbston Valley, a journey of approximately 70km. The reduced journey is considered an improvement on the current practice of transporting the sludge the required distance to the landfill.

Neither Council's engineer, nor the NZTA have raised any issues with the proposed transportation and impact on Council and the NZTA roading networks.

Overall, adverse effects on the roading network are considered to be minor.

The proposed facility and associated increases in traffic generation and vehicle movements has the potential to result in adverse effects in terms of amenity through the generation of additional noise and dust. These effects will be discussed in the following sections titled Dust and Noise.

Natural Hazards

There are no hazards identified in the location of the proposed building in the Queenstown Lakes District Council's hazards maps.

Noise

The proposal has been reviewed by Council's Environmental Health officer, Ms Jodi Yelland, who has assessed the matters of noise, and dust. Ms Yelland also provided an assessment of odour, but in order to avoid duplication in the assessments between the Otago Regional Council and the District Council, this matter will be assessed as part of the Regional Council's considerations.

Potential noise sources will result from:

- trucks delivering the secondary solids,
- trucks removing the secondary solids,

- the Wendewolf agitator operating inside the building,
- ventilation fans,
- the motor driven roof flaps, and
- loaders digging out the solids and transferring the solids to trucks.

Operation Noise

The closest residential property is located at 85 Church Road, across the Clutha River; the notional boundary is approximately 850 metres west from the proposed activity. Located in the area is an existing industrial activity area which includes that Luggate Sawmill and Central Trusses and Frames, both located within 600 metres of the closest residential property. The township of Luggate is approximately 2 km to the southwest. The activity will occur on a consented quarry site which operates occurring during daylight hours.

The plant will operate during daylight hours and the Wendewolf machinery has been cited in the application as being essentially silent. There will be some noise associated with the fans and the motor driven roof flaps, but due to the distance to residential activity on the opposite side of the river, Ms Yelland's opinion is that noise will be very unlikely to be audible at the closest residential dwelling, 850m away and as a result the proposal will comply with District Plan noise standards.

Vehicle Noise

Traffic movements are likely to be an average of 1.12 truck loads per day, with a maximum of 4 loads per day, Monday to Friday. When the secondary solids have dried up to two trucks loads per week will be removed off site to be transported to the Park Burn Quarry site. A front end loader will be used to load the trucks with the dried solids. It is noted that Ms Yelland's report refers to two truck loads per day being required to remove the solids off site. For clarification the proposal is for two truck loads per week to be transported to the Park Burn quarry.

Ms Yelland has found that due to the nature of the site, truck movements being intermittent and the distance to the nearest residential neighbour, vehicle movements associated with the proposed operation are unlikely to breach District Plan noise limits at a distance of 850 metres.

Overall adverse effects from noise will be minor.

Dust

950m³ of material will be excavated during construction of the facility. During this construction water will be used to wet down open areas in order to mitigate any adverse effects. It is proposed that as soon as the material is excavated the surface will be compacted to avoid the generation of dust from wind.

The access road into the site is sealed, and all trucks entering the site will use this access. The road from the edge of the quarry site to the site of the proposed facility is unsealed. The unsealed road is approximately 200 metres in length and this is proposed to be sealed within two years of the facility being put into operation. A 30 km /hour speed limited has been proposed which is designed to reduce the generation of dust, and water will be available on site to wet down where necessary to minimise dust emissions.

Ms Yelland concludes that as the proposal is located on an active and consented quarry site, the likely hood of excessive dust being generated from the proposed activities is minor in comparison to the activity already occurring and that adverse effects will be minor. I concur with these findings.

Safety

The gates on site will remain locked when the facility is closed or unstaffed.

It is acknowledged that careful storage and handling of this hazardous material is required to ensure that spills are avoided, and that staff are protected safely. Unloading, loading and transportation have been identified as potential issues in the application.

In terms of the hygiene facilities located on site a draft Environmental Management Plan has been prepared which addresses the management of the substances and environmental hazards and includes, but not limited to:

- unloading from a covered truck directly into the building;
- all staff will wear appropriate safety clothing including gloves, boots and overalls;
- all trucks carting the product shall carry the correct hazardous labelling and signage, and
- in the event of a crash during transportation the sludge shall be contained immediately and prevented from entering the waterways;
- spill kits will be located at the facility and on the trucks used for transportation.

The applicant has provided additional information that safety equipment and work wear will be provided to staff including safety gloves, hand sanitation, overalls and boots to ensure that they do not come in contact with the product. The applicant has stated that due to the technology, the facility staff do not have to handle the product, as it is unloaded directly into the building and then mechanically turned.

The draft plan has been assessed by Council's Environmental Health officer who has not raised any issues.

Visual Effects

The proposed building is 96 metres in length, 12.8 metres in width and has a height of 4.8 metres above the existing ground level, with an overall height of 5.3 metres. The building has been described as a large scale industrial glass house by Council's consultant landscape architect Dr Read. It is considered that the framing will have limited surface area compared with the amount of glass, but nevertheless it is proposed that it be in natural tones to assist with possible reflectance.

It is noted that the applicant's landscape architect has assessed a 110m long building, 13 metres wide and 4 metres high.

It is stated that the design of the building is dictated by the machinery housed inside the building and by the operational requirements.

Dr Read has assessed the application and accompanying visual assessments and found in paragraphs 18-22 that:

"The subject site is effectively enclosed by topography and vegetation, being elevated above the public areas adjacent to the river, except with regard to the walking track to the north of the river and separated from both the walking track and the main road by the pine shelter belt. It is separated from the Clutha River ONF to the south and west by a further terrace. To the east mitigation planting and mounding associated with the quarry activity has been undertaken which has had limited effectiveness in enclosing the site."

The landscape architects are in agreement on the extent of visibility, in that:

- There will be intermittent views from State Highway 8A of the northern 12.8 metre façade for a distance of approximately 100 metres.
- There will be intermittent views of the northern façade from the public access track located on the site.
- Other short distance views into the site from State Highway 8A will be blocked by the existing shelter belt and bunding from the east.
- To the west of the site is a mature pine shelter belt which will screen the building from views from the west and from the access track to the west.
- Public view points on the southern side of the river are confined to the terrace where State Highway 6 Luggate – Cromwell road is located. The building will be visible driving west, 3 km east of Luggate at a distance of approximately 1.5-2.5 km.

They agree that the site is not able to be viewed from:

- Luggate township, including the subdivision along Hopkins Street, and from;
- The lower lying cycleway.

The applicant proposes the following mitigation as part of the application:

- A 70 metre long bund, 1.5 metres in height, located along the northern boundary between the building and the river access track, this will be planted with native grasses designed to screen the building from the road and track user. The bund will be constructed with the material from the excavation and will be seeded in grass.
- The existing shelter belt to the west will be retained.
- Additional landscaping located in the northern portion of the site, to screen the building from State Highway 8A.
- It is proposed that the Landscape Management Plan prepared as a condition of the consented quarry activity be altered in order to include the additional bund. Further mitigation planting is also proposed as part of the proposal in the north west corner to further screen the building from the public who access the river track.

As part of the processing of the application there has been some debate over the long distance views from the east into subject site.

These views were assessed by Council's consultant landscape architect who found that:

"the proposed development would be visible from SH8A at Sandy Point which is a view which is valued by the local community and which currently is open and pastoral. The building will be prominent in this view but vary, depending on the time of day and the time of year. At its worst it would be highly prominent, and at best readily visible. If no mitigation was proposed it would detract from public views from Sandy Point and private views from the Kane residence at 618 Luggate Tarras Road to a significant degree."

In response to a further information request, the applicant submitted an additional visual assessment in relation to the visual effects from the east, particularly from the Sandy Point location in the roadside vicinity of Rapid Number 618 Luggate Tarras Road. This assessment addressed the visual effects, and the effects from the morning sun in terms of glare and reflectivity.

As a result of this new assessment, additional mitigation has been proposed in the form of an additional landscape bund to be positioned 28 metres east of the proposed facility. The memo dated 18 July 2014, proposes bunding of 2 metres in height and screening of 4 metres. It is not clear whether this means a total of 4 metres in height or 6 metres. The plan submitted as part of the memo shows a bund of 1.5 metres and it is unclear as to the nature and type of planting.

Dr Read has agreed in principle that effects can be mitigated, but considers that the current level of detail is inappropriate. The applicant will need to provide clarification of this at the hearing. Dr Read considers that to be effective the height of planting and bunding together should be in the vicinity of 6m to mitigate the effects from the distant and elevated views and that the planting should blend in visually with the conifer shelterbelt to the west of the site to avoid introducing new lines of visibility different vegetation.

The AEE has identified that the building will cause some minor glare, which will be visible from higher lying private properties and Sandy Point. Road users on the lower portion of the Highway will not be affected due to elevation and existing screening.

Council's consultant landscape architect, Dr Read has assessed this issue and concluded that

"Significant views into the subject site are restricted to reasonably distant views from public and private locations to the north east, east and south. The views from the east from SH8A and from the Kane residence at 618 Luggate Tarras Road are considered to be the most adversely affected by the potential glare"

from the building. In addition, while the airport buildings are visible in this view they are the only intrusion, currently, into a highly scenic, pastoral view.

Mitigation bunding and planting has been proposed to run parallel to the building some 28 metres to its east. This bunding and planting should be that it rapidly reaches 6 metres in total height and so that it is visually blends into the pine shelter belt to the west of the proposed building. As no method of making the building appear recessive is possible it is considered that it should be totally obscured in these views.

I agree with these findings and accept that with the recommended conditions that any adverse visual and glare effects can be mitigated.

Rural Amenity

The rural area can have particular amenity and environmental values which are important to maintain. These include privacy, rural outlook, spaciousness, ease of access, clean air and at times quietness. However, in accordance with the permitted baseline, it is acknowledged that there are a range of activities that can occur in a rural area where there are levels of noise, dust, traffic generation and smell that are an integral part of rural amenity values, provided that these effects do not constitute a genuine nuisance or a health risk, they must be accepted as anticipated components of rural amenity.

From the assessment above it has been found that the proposal will have very small effect on the visual access to open space currently available to users of the track to the river, due to the proposed planting, mounding and existing shelter belts.

The proposed development will not compromise the ability to undertake agricultural activities on surrounding land.

The application states that the building is setback 70 metres from the external site boundaries and hundreds of metres from the southern boundary.

Many of the submissions received in opposition to the proposed quarry have raised the issue of the effect of noise on the amenity and tranquillity of the Clutha River and in particular 'The Nook'. 'The Nook' is a popular recreation area for residents of Luggate and the wider area as well as visitors to the area. The Clutha River is also used by a number of adventure tourism operators.

The zone standard relating to noise only relates to noise at the notional boundary of a residential dwelling. As such the zone standard protects only residential amenity and provided the limits at the notional boundaries of residential dwellings are maintained noise can be generated as of right by permitted activities such as agriculture. As such it is considered that noise within the Rural General zone, provided it complies with the noise limits at the notional boundary of any residential dwelling, forms part of the permitted baseline. Given the consented quarry activity and the pastoral character of the upper terrace it is considered that the generation of noise on the site through the operations of farming machinery is not a fanciful notion and as such it is considered that the amenity of the Clutha River and its margins could be adversely affected through the operation of permitted activities.

However, as this facility will be "essential silent", the standards for noise in the Rural General zone will not be breached. It is considered that, given the levels of noise that can be anticipated through the operation of permitted activities in the Rural General zone, and the consented quarry activity that the effects of the proposed activity on the amenity of the Clutha River and its margins will be no more than minor.

Scale of Activity and Hours of Operation

A maximum of four trucks will deliver secondary sludge to the site Monday- Friday. The secondary sludge will be off loaded directly into the building, there will be no storage required outside of the building. The facility will operate between the hours of 7am – 6pm, weekdays with one on-site operator present for a two hour period between these hours. The sludge will be stored inside the building where it will be mechanically turned for a period of approximately 14 months. A maximum of two trucks will leave the site per week taking the finished product to the Park Burn quarry site.

It is considered that this scale of the activity and the hours of operation will not result in adverse effects on the environment that are more than minor.

Rural Character

The rural character of the site will not be compromised as the facility will be accessed via an established access point formed to a NZTA standard. Views into the site from the west, south and north are restricted by existing shelter belts, mounding and elevation above the river. The activity will be conducted on a site which has a consented quarry activity and an established green waste facility. There will be no trees or vegetation required to be removed as part of the site preparation. There will be a low level of truck movements to and from the site and no commercial or retail activity is proposed from the site. It is my opinion that the rural character will not be adversely affected.

Cumulative Effects

Truck movements to the site will use the existing access formed to NZTA standards, and truck movements will be limited to those applied for. There are no proposed vehicle movements associated with the general public visiting the facility as there is no retail or commercial activities proposed as part of this application.

The consented quarry has a maximum of 50 truck movements leaving the site per day, and as such the proposed quarry generates 100 truck movements per day. From the evidence presented as part of the RM060120 Fulton Hogan quarry application, the applicant stated that vehicle counts undertaken by the then Transit New Zealand in February of 2005 identified State Highway 8A as having an average of 881 vehicle movements per day. The additional maximum of 4 truck movements per day to the site, and the additional two truck movements per week off the site (total 44 truck movements per week, or 8.8 movements a day) is not considered to be a significant increase in vehicle movements, and as such, cumulative effects of these additional vehicle movements will in my opinion, be minor.

There are no permanent buildings located on the site associated with the quarry and green waste activities. The existing shelter belts to the north and west screen the access to the site from surrounding properties. The internal access to the facility is located adjacent to the northern shelter belt and has been positioned this way in order to reduce visibility from trucks moving within the site. The building has been described by the landscape architect to have a semi industrial horticultural appearance which is considered to not be unexpected in the rural area. The low height and proposed mitigation of the building will ensure that the appearance will be appropriate in this location reducing any cumulative visual effect.

The remainder of the site will remain in pasture.

The proposed development will introduce another industrial activity into the Rural General zone on an already consented quarry site. There are some existing industrial developments in the vicinity of the site and as such there is an element of industrial activity occurring in the area. The existing developments within the area are of a relatively small scale and I consider that the proposed activity, when considered along side the existing activities in the locality will not over industrialise the area provided the shelter planting is retained and the proposed mitigation is imposed as a condition of consent, as such I consider that the proposal will have minor cumulative effect.

Overall, any cumulative effects are considered to be minor.

Cultural and Heritage Values

The Ngai Tahu Claims Settlement Act 1998 identified the Mata-Au (Clutha River) as a statutory acknowledgement area. A statutory acknowledgement is an acknowledgement by the Crown of the special relationship of Ngai Tahu with identifiable areas, namely the particular cultural, spiritual, historical and traditional association of Ngai Tahu with those areas (known as statutory areas). Consequently Ngai Tahu and Kai Tahu Ki Otago Ltd were notified as part of the notification process. Kai Tahi Ki Otago have given written approval for the proposal and Ngai Tahu did not submit on the

application. As Ngai Tahu were notified and made no submission on the application it can be taken that they do not have any objection to the proposed activity or its effect on cultural values.

A number of the submitters have made reference to the historic value of the 'Red Bridge'. This bridge is not identified as a heritage features and it is considered that while it is in close proximity to the site, it will not be directly affected by the proposed activity. A number of submissions have raised the issue of traffic generation and the effect on the 'Red Bridge'. This issue was discussed earlier in the report under the heading titled Traffic Generation and Vehicle Movements.

Positive Effects

By reproducing the material into fertiliser, within a controlled environment, which is to be sold at a different location will have positive effects in terms of reducing the waste stream currently going to land fill. .

Consent Duration

The applicant seeks a 35 year consent period to avoid any substantial additional costs and the uncertainty of having to renew the necessary resource consents. They state, that as the facility will not result in adverse effects that are more than minor and will provide benefits to the community, it is considered that a 35 year consent term is reasonable.

Summary

It is not considered that any adverse effects that are more than minor will result in terms of this proposal and that any adverse effects can be mitigated by conditions of consent. These conditions of consent are attached as appendix 1 to this report.

I am therefore of the opinion, that the actual and potential effects on the environment will be minor.

8.3 DISTRICT PLAN ASSESSMENT

The relevant assessment matters for consideration of the application are as follows:

- Section 5.4.2.2 (3) Visual Amenity Landscapes
 - (a) Effects on Natural and Pastoral Character
 - (b) Visibility of Development
 - (c) Form and Density
 - (d) Cumulative Effects of Development on the Landscape
 - (e) Rural Amenities
- Section 5.4.2.3(i) General Nature Conservation Values
- Section 5.4.2.3(iv) Discretionary Activities - Buildings
- Section 5.4.2.3(xxvii) Nature and Scale of Activities
- Section 5.4.2.3 (xxvii) Earthworks

These will now be discussed in turn:

8.3.1 Landscape Assessment

The two reporting landscape architects have reached different conclusions on the landscape category of the subject site, but not of the wider landscape. Therefore, I have considered all of the matters identified by the landscape architects in terms of general themes and will compare and discuss where appropriate.

I refer the Commissioners to Dr Marion Read's report (para 13-14) where Dr Read states:

"Ms Pfluger considers that the site is within a Visual Amenity Landscape and I concur with this opinion. She continues to state, however that the 'application site itself is not considered to hold values that would lead to this identification due to the existing modification through gravel extraction' and that 'the application for

the proposed facility should be considered to fall within an 'Other Rural Landscape'. I consider this to be a misapplication of the Plan's rules as the site is not in and of itself a landscape, and it is the landscape in which the proposal is located which determines the approach to be taken to its assessment."

Consequently Dr Read considers that the proposal is located within a Visual Amenity Landscape and should be assessed in accordance with the relevant parts of section 5.4.2.2(3) of the District Plan. I concur with Dr Read's opinion, and this report is based on the site being classified as a Visual Amenity Landscape.

It is noted that the AEE has assessed the site as an Other Rural Landscape in section 4.3

Both landscape architects are in general agreement with the extent of visibility of the proposed development with reference to assessment matters concerned with visibility. It is accepted by Dr Read that the visual baseline assessment is through in regard to the view points discussed, but the applicant's visual assessment does neglect the more long distance views across the site gained from State Highway 8A from Sandy Point and the private views from the residence of B and A Kane owners of Lot 1 DP405266, 618 Luggate Tarras Road. This visibility was later addressed in a memo dated 18th July 2014. Council's consultant landscape architect holds the view that when assessing the extent of visual effects that the sensitivity of the receptor needs to be identified, in this case the importance of the view. Dr Read finds that:

"It is striking for its expansiveness, and while it is clearly a view over a modified agricultural landscape, it is notable for the lack of readily visible buildings. The roof of the Kane residence is visible as is the buildings at the Wanaka Airport. None of these are prominent in this view, however, and consequently the view is highly scenic and contains most of the aspects – water, topographical relief, trees and indigenous vegetation – which Swaffield and Fairweather (Fairweather, J.R., & Swaffield, S.R. (2001)) have shown to comprise the most preferred views in this country. Consequently I considered that this view is sensitive to change, and it is a locally important view."

The following five assessment criteria relate to Visual Amenity Landscapes and have been applied by Dr Marion Read, her findings have been incorporated into the assessment below.

Effects on Natural and Pastoral Character 5.4.2.2 (3)(a)

The site is adjacent to the outstanding natural feature (ONF) of the Clutha River and its margins. The proposed building would not be visible in conjunction with this ONF and consequently Dr Read considers that the building would not compromise the character of that feature.

The proposed building is semi-industrial in nature and of a similar appearance to a horticultural glasshouse. Dr Read considers that as located in the quarry site she does not consider that its nature would compromise the character of the wider VAL. It is a large scale building with a footprint of 1228.8m², and in Dr Read's opinion the buildings long low appearance mitigates its size to a degree and therefore does not consider that the scale would compromise the character of the wider landscape to more than small degree.

The proposal is aligned with this assessment matter.

Visibility of Development 5.4.2.2 (3)(b)

Visibility has been assessed as part of the effects assessment above where it was found that the proposed building was able to be effectively screened from the north, west and from the Clutha River by both the location, the existing mature pine trees, the elevation above the river and the proposed mounding and additional planting.

Visibility from the east was identified as an issue as the building was found to be located in a prominent view and without suitable mitigation it would detract from the public views from Sandy Point and the private views from the residence at 618 Luggate Tarras Road. Mitigation mounding and

planting is proposed and Dr Read has stated that in order for it to be effective it needs to have an overall height of 6 metres. On this basis the proposal is considered to be aligned with 5.4.2.2.3 (b) Visibility of Development assessment criteria in particular (ii), (iii), (iv) and (vi).

Form and Density of Development 5.4.2.2 (3)(c)

The site has been found to not be highly visible from the river corridor due to topography and from the west due to existing planting. Views are gained into the site from the east and from the immediately adjacent land. The facility will utilise a common access and is to be located in the north west corner, close to the existing boundary planting. Dr Read has found that this location has the highest ability to absorb built form. The proposal is considered to satisfy the criteria 5.4.2.2.3 (c) Form and Density of Development in particular (i), (ii) and (iii).

Cumulative Effects of Development on the Landscape 5.4.2.2 (3)(d)

Located in the vicinity of the development is a green waste operation, a quarry, portions of farms, Central Trusses and Frames factory and a number of dwellings. Dr Read has found that:

"The proposed development would not in my opinion breach any threshold of the vicinity's ability to absorb change",

Dr Read goes on to state:

"The proposed development would exacerbate the existing potential adverse effects of the quarry in views from the east incorporating a large building into the area which is to be subject to on-going modification. It would also exacerbate the visual effects of the airport buildings in the same view. I consider the extent of this adverse effect of this inclusion to be relatively small. It would also exacerbate the existing and potential adverse effects on the rural landscape character by the inclusion of further industrial development into an otherwise agricultural landscape. I consider the extent of this effect is moderate."

The proposed development is to be located with the landscape unit formed by the river terrace on the true left of the Clutha River. This is an expansive landscape unit, and so its inclusion within it provides little, if any, mitigation.

No urban style infrastructure is required as part of the development.

Mitigation planting is proposed as part of the application and with the amendments recommended by Dr Read this would assist in integrating the building into the landscape. Whilst this would not reduce the cumulative effect on landscape character, it would reduce the cumulative visual effect.

No covenants, consent notices or other legal instruments have been volunteered by the applicant.

The proposal is considered to satisfy the criteria with respect to cumulative visual effects. In addition, general cumulative effects have been assessed as part of the effects assessment above and found to be minor.

Rural Amenities 5.4.2.2(3)(e)

Dr Read has found that due to proposed planting and mounding located between the proposed building and the track there will be a very small effect on the visual access to open space currently available to users of the track to the river which passes along the northern edge of the site.

The development will not compromise the ability to undertake agricultural activities on surrounding land.

The landscaping proposed is consistent with that already required as part of the quarry operation, but is not consistent with rural shelter belt planting which is a strong feature of the Upper Clutha Basin landscape. Dr Read recommends that non-wilding conifer species should be used in the planting mix for the screen planting so that they blend into the existing eastern shelter belt.

The building is well setback from the site boundaries.

The proposal is considered to satisfy the criteria 5.4.2.2 (3) (i)-(v).

5.4.2.3 i General - Nature Conservation Values

- (b) Any adverse effects of the activity on indigenous ecosystems from animal pests and domestic animals.

The draft Environmental Management Plan in 6.5 addresses pest management and states that there is an existing pest management system in place for the quarry which concentrates on limiting the number of rabbits on site. This management system will continue. The management plan states that rat bait will be placed along the four sides of the facility and will be checked monthly by the site operator and replaced if necessary. As there is no outside storage, and all solids are loaded directly into the facility, rodents are not expected to be an issue. It is not expected that the proposal will have adverse effects that can not be mitigated by on site management practices.

iv Controlled and Discretionary Activity - All Buildings (except in Ski Area Sub-Zones)

- (a) The extent to which the location of buildings and associated earthworks, access and landscaping breaks the line and form of the landscape with special regard to skylines, ridges, hills and prominent slopes.
- (b) Whether the external appearance of buildings is appropriate within the rural context.

The building, associated earthworks, access and landscaping will not break the line and form of the landscape, nor will it be built on a skyline, ridge, hill or prominent slope. The building comprises a frame and glass building; it has been likened to a semi industrial horticultural building not unexpected in the rural zone. Its low height, positioning in the north west corner adjacent to existing shelter belt and proposed mounding and planting to the east will ensure that the appearance of the building will be appropriate in this rural location. The proposal is considered to satisfy 5.4.2.3(iv).

xxiii Nature and Scale of Activities

- (a) The extent to which:
 - (i) the scale of the activity and the proposed use of buildings are compatible with the scale of other buildings and activities in the surrounding area.
 - (ii) the character of the site will remain dominant.
 - (iii) materials and equipment associated with the activity need to be stored outside of a building.
 - (iv) all manufacturing, altering, repairing, dismantling or processing of any goods or articles associated with the activity need to be carried outside of a building.
 - (v) noise and visual impact.
 - (vi) adverse effects of likely traffic generation and the ability to mitigate such effects.

The facility will occupy the north west corner, an aside from the quarry, the rest of the site will remain in its current state.

There will be no materials or equipment associated with the activity stored outside of the building.

Deliveries to the site will unload directly into the building, with the processing of the product occurring inside the confines of the building. The finished end product will load into trucks from inside the building to be transported off site to the Park Burn quarry.

Noise effects have been assessed as minor.

Visual impact has been assessed as minor from the west and north and the River margins. Visual effects from the east will be mitigated by additional mounding and planting.

The NZTA and council engineers have not raised any issue with the likely traffic generation.

The proposal is considered to satisfy this criteria.

xxvii Earthworks

Ms Overton, Council's engineer has assessed the proposed earthworks and is satisfied that the earthworks can be carried out in such a way that adverse effects will be minor. The earthworks will occur on a flat site, and not in the vicinity of any site boundaries. Water will be used to minimise dust emissions, exposed surfaces will either be re-vegetated or stabilised once the earthworks are completed. There will not be any stability effects to neighbouring sites. The excavated material will be reused on site in the formation of the two proposed earth mounds and no excavated material will leave the site.

Overall, the proposal is aligned with the assessment matters of the District Plan.

8.3.2 OBJECTIVES AND POLICIES ASSESSMENT

The relevant Objectives and Policies of the District Plan which require assessment are:

Part 4 District Wide Issues
Part 5 Rural Areas

Part 4 – District Wide Issues

Objective 2: Air Quality

Maintenance and Improvement of air quality.

Policies:

2.1 *To ensure that land uses in both rural and urban areas are undertaken in a way which does not cause noxious, dangerous, offensive or objectionable emissions to air.*

The protection of air through controls on air emissions is primarily a role for the Otago Regional Council. However, the District Council has the opportunity to control land uses in a way which ensures they do not cause noxious, dangerous, offensive or objectionable emissions to air by means of resource consent procedures and regulatory bylaws under the Local Government Act and the Health Act. As this is a joint application with the Otago Regional Council, in order to avoid duplication of assessments dealing with the air quality, this issue will be addressed by the Regional Council.

However, in light of the above objective in the District Plan, Ms Yelland has stated:

"the secondary solids will be stored in a glass house approximately 108m x 13m x 4m in height. The glass house will have a computer controlled active and passive ventilation system to assist with the drying, in addition to the mechanical agitation. Deliveries of secondary solids will be driven into the glasshouse and deposited on the processing floor. Mature fertiliser will be removed from the other end of the glasshouse loading straight onto trucks for spreading. No stockpiling of the final material is proposed.

The site itself is reasonably isolated on the Luggate Tarras Road and screened by trees. There is a large separation distance between sensitive sites on neighbouring properties. The closest dwelling is 850m to the west, there is a lifestyle dwelling 1000m to the north west on Kane Road and Luggate is 2km to the south west. The location of the site and the prevailing winds (from the west/north west)

are blowing away from the nearest residential location and indicating that odour will unlikely be detected at these locations.

A rural location has been chosen to reduce the impact of perceived odour. Trucks entering and leaving the location will be covered. Trucks unload directly into the enclosed facility to minimise the odour and likelihood of a spill causing odour outside of the normal operation. The constant airflow into the facility mitigates the build up of odour. Some odour maybe experienced during unloading, however this would be brief, if noticed at all, as the prevailing winds will carry this away from residential dwellings both in close proximity and Luggate."

Based on the proposed operation of the plant and its situation within a large rural block, it is anticipated that no adverse effects will arise from the discharge of odour.

Landscape and Visual Amenity

4.2.5 Objective:

Subdivision, use and development being undertaken in the District in a manner which avoids, remedies or mitigates adverse effects on landscape and visual amenity values.

With reference to the effects discussion above, it is considered that the proposal will not have significant adverse effects on landscape and visual amenity values.

Associated policies of relevance are:

1 Future Development

- (a) *To avoid, remedy or mitigate the adverse effects of development and/or subdivision in those areas of the District where the landscape and visual amenity values are vulnerable to degradation.*
- (b) *To encourage development and/or subdivision to occur in those areas of the District with greater potential to absorb change without detraction from landscape and visual amenity values.*
- (c) *To ensure subdivision and/or development harmonises with local topography and ecological systems and other nature conservation values as far as possible.*

The proposed location has been found by Council's consultant landscape architect Dr Read, to have the greater potential to absorb change without detracting from landscape and visual amenity values, with adverse visual effects from the east being mitigated by proposed mounding and additional planting.

4. Visual Amenity Landscapes

- (a) *To avoid, remedy or mitigate the adverse effects of subdivision and development on the visual amenity landscapes which are:*
 - *highly visible from public places and other places which are frequented by members of the public generally (except any trail as defined in this Plan); and*
 - *visible from public roads.*
- (b) *To mitigate loss of or enhance natural character by appropriate planting and landscaping.*
- (c) *To discourage linear tree planting along roads as a method of achieving (a) or (b) above.*

These objectives and policies are designed to ensure that adverse effects of development are avoided, remedied or mitigated when highly visible from public places and other places frequented by the public. It is considered that the view most affected is that from Sandy Point. To mitigate this effect an additional mound is proposed on the eastern side of the building. To be effective this mound with its associated planting needs to have a combined height of at least 6 metres to obscure the building from this important and well loved view corridor.

8. Avoiding Cumulative Degradation

In applying the policies above the Council's policy is:

- (a) *to ensure that the density of subdivision and development does not increase to a point where the benefits of further planting and building are outweighed by the adverse effect on landscape values of over domestication of the landscape.*
- (b) *to encourage comprehensive and sympathetic development of rural areas.*

Located on site is a green waste composting operation and a gravel quarry, there are no permanent buildings associated with these operations. At my first site visit in February 2014, the green waste was covered in a white plastic covering and the mound extended approximately 70 metres in an east west direction. In late August this mound had been removed from the site, and piles of new green waste had been formed. The remainder of the site is free from built form. The proposed location in the north west corner, to the west of the quarry is considered to be able to absorb the development. The proposal is considered aligned with the above policies.

9. Structures

To preserve the visual coherence of:

- (a) *outstanding natural landscapes and features and visual amenity landscapes by:*
 - *encouraging structures which are in harmony with the line and form of the landscape;*
 - *avoiding, remedying or mitigating any adverse effects of structures on the skyline, ridges and prominent slopes and hilltops;*
 - *encouraging the colour of buildings and structures to complement the dominant colours in the landscape;*
 - *encouraging placement of structures in locations where they are in harmony with the landscape;*
 - *promoting the use of local, natural materials in construction.*

The proposal is not considered to be entirely consistent with these policies given the nature of the glass house design which will result in a building which is not necessary "in harmony" with the form of the landscape, and whereby the colours will not be complimentary with the dominant colours of the landscape. However, it is noted that the building will not be located on a skyline, ridge, prominent slope or hilltop. With the proposed mitigation the proposal is not considered to significantly disrupt the visual coherence of the location.. Therefore the proposal is not considered contrary to this objective and associated policies.

- (b) *visual amenity landscapes*
 - *by screening structures from roads and other public places by vegetation whenever possible to maintain and enhance the naturalness of the environment; and*

The proposed building will be screened from the State Highway to a significant extent by way of

existing vegetation, proposed mounding and the proposed additional landscaping.

(c) *All rural landscapes by*

- *limiting the size of signs, corporate images and logos*
- *providing for greater development setbacks from public roads to maintain and enhance amenity values associated with the views from public roads.*

There is no signage, corporate images or logos proposed as part of this development. The building is setback sufficiently from the State Highway and it is considered that with the proposed mitigation the building will not significantly detract from amenity values associated with these views.

12 Transport Infrastructure

To preserve the open nature of the rural landscape by:

- *encouraging the location of roads, car parks and tracks along the edges of existing landforms and vegetation patterns.*

The proposed access way utilises an existing access and vehicle crossing from the State Highway. The internal access track will be upgraded within 2 years of the facility being operational and in this location, I consider that it will be screened by the existing shelterbelt and by the proposed mounding and additional landscaping.

- *by encouraging imaginative roading designs including a range of carriageway widths, different surface materials, grass berms and protection of existing mature trees where these can enhance the quality of design and the visual experience.*

I consider that the above policy relates more to the development of residential subdivisions. However I consider that the proposed internal access way is positioned in such a way that it protects the existing mature trees along the northern boundary of the site.

- *discourage roads and tracks on highly visible slopes.*

The proposed internal access will not be on a highly visible slope, it will not be highly visible from outside the site.

- *requiring that all construction be with minimum cut and fill batters and that all batters be shaped in sympathy with, existing landforms.*

The proposed access way will not require any cut or fill. I consider that the access will have no more than a minor effect on the resulting landform.

- *requiring that all disturbed areas be revegetated at the end of construction.*

The applicant proposes that any exposed surfaces will be re-vegetated at the completion of the earthworks. As such I consider that the proposed activity complies with the above policy.

17. Land Use

To encourage land use in a manner which minimises adverse effects on the open character and visual coherence of the landscape.

It is considered that the proposed land use will not have significant adverse effect on the visual coherence of the landscape, as discussed above it is not considered that in the context of the site that the proposal will appear visually unsuitable, or out of place. The location and proposed mitigation have been designed to minimise adverse effects in this location.

Objective(s) 9 - Protection of Water Resources

- 1 *The collection, treatment, storage and disposal of wastes in a way that minimises the adverse effects on the natural resources of the District.*
- 2 *Minimising the quantities of waste requiring disposal within the District.*

Policies:

- 9.2 *To ensure all waste is treated to a high standard.*

The collection, treatment and disposal of waste is a primary role of the District Council, from the assessment contained in this report it has been found that adverse effects will be minor. The facility will seek to reduce the amount of waste quantities requiring disposal to landfill. The technology used will ensure that the waste is treated to a high standard. The proposal is consistent with this objective and its related policy.

4.7.3 Objective 1

The collection, treatment, storage and disposal of solid and hazardous wastes in a manner which meets the needs of current and future generations of residents and visitors to the District, and avoids, remedies or mitigates adverse effects on the environment.

Policies:

- 1.1 *To ensure that the effects on the environment and other adverse effects on soil, groundwater and water contamination and other adverse effects on the health, safety and amenity values of residents, visitors and environment from the disposal wastes are avoided, remedied or mitigated.*
- 1.2 *To minimise the quantities of waste requiring collection, treatment, storage or disposal within the District and to maximise opportunities for reuse, recycling and recovery of materials from the waste stream.*
- 1.3 *To ensure the safe and efficient collection, treatment, storage and disposal of all solid and hazardous wastes within the District.*

The production of solid waste is an unavoidable by product of human activities and therefore provision needs to be made for the collection, storage, treatment and disposal of this waste in this District in a way which minimises the potential for adverse effects. This facility will seek to reduce the amount of waste quantities requiring disposal to landfill. Waste as it breaks gives rise to discharges to land, water, and air which can adversely affect the environment and cause nuisance to people. The location, design and nature of the proposal will ensure that adverse effects are avoided, remedied or mitigated.

The proposed facility is consistent with this section of the plan and reflects the stated goal that waste minimisation is a key strategy in the management of Otago's wastes. By removing this waste stream from disposal to landfill, and reprocessing the material to produce fertiliser within a controlled environment to be sold at a different location will achieve the environmental results anticipated by the District Plan.

4.11.3 Earthworks

Objectives

To avoid, remedy or mitigate the adverse effects from earthworks on:

- (a) *Water bodies*

- (b) The nature and form of existing landscapes and landforms, particularly in areas of Outstanding Natural Landscapes and Outstanding Natural Features.
- (c) Land stability and flood potential of the site and neighbouring properties
- (d) The amenity values of neighbourhoods
- (e) Cultural heritage sites, including waahi tapu and waahi taoka and archaeological sites
- (f) The water quality of the aquifers.

With the recommended conditions of consent it is considered that the above objective with respect to earthworks, such that effects resulting are appropriately avoided or mitigated.

Part 5 - Rural Areas

The purpose of the Rural General Zone is found in section 5.3.1.1 of the District Plan and states:

To manage activities so they can be carried out in a way that:
-protects and enhances nature conservation and landscape values;
-sustains the life supporting capacity of the soil and vegetation;
-Maintains acceptable living and working conditions and amenity for residents and visitors to the zone; and
-Ensures a wide range of outdoor recreational opportunities remain viable within the zone; and
-protects the on-going operations of Wanaka Airport.

Relevant Objectives and Policies for this zone are:

Objective 1 - Character and Landscape Value

To protect the character and landscape value of the rural area by promoting sustainable management of natural and physical resources and the control of adverse effects caused through inappropriate activities.

Policies:

- 1.1 Consider fully the district wide landscape objectives and policies when considering subdivision, use and development in the Rural General Zone.
- 1.3 Ensure land with potential value for rural productive activities is not compromised by the inappropriate location of other developments and buildings.
- 1.4 Ensure activities not based on the rural resources of the area occur only where the character of the rural area will not be adversely impacted.
- 1.6 Avoid, remedy or mitigate adverse effects of development on the landscape values of the District.
- 1.7 Preserve the visual coherence of the landscape by ensuring all structures are to be located in areas with the potential to absorb change.
- 1.8 Avoid remedy or mitigate the adverse effects of the location of structures and water tanks on skylines, ridges, hills and prominent slopes.

As above, the landscape and character values have been fully considered, and it is considered that given the Rural General zoned land in question, that the proposal will not result in land with potential for rural productive activities to be compromised by the development. Similarly it is considered that

rural character will not be adversely impacted given the characteristics of the site. I consider that this location has the ability to absorb the change that will be imposed by the development. The proposal is not inappropriate in this location. It is noted that one of the purposes of the Rural General zone is to protect the on-going operations of the Wanaka Airport, from the evidence presented the airport's future growth in terms of another runway could be compromised if the facility was to be located at the Wanaka Waste Water Treatment Plant.

Objective 2 – Life Supporting Capacity of Soils

Retention of the life supporting capacity of soils and/or vegetation in the rural area so that they are safeguarded to meet the reasonably foreseeable needs of future generations.

Policies

- 2.1 *Avoid, remedy, or mitigate adverse effects of subdivision and development on the life supporting capacity of soils.*
- 2.4 *Encourage land management practices and activities, which avoid, remedy, or mitigate adverse effects on soil and vegetation cover.*

The subject site in the area of development is vegetated in pasture grasses. Over the course of the quarry activity the vast majority of the site will be excavated and then reinstatement works will occur as part of the mitigation. The proposed development will not adversely affect the life supporting capacity of the soils within the site as the proposal does not seek consent for the bio-solids to be dispersed to land. Any adverse effects on the soil and vegetation cover in the area where the building will be constructed or where the internal vehicle access way is located will be mitigated by the re-vegetation of any exposed surfaces. As such, I consider the proposal to be consistent with this policy.

Objective 3 - Rural Amenity

Avoiding, remedying or mitigating adverse effects of activities on rural amenity.

Policies:

- 3.1 *Recognise permitted activities in rural areas may result in effects such as noise, dust and traffic generation, which will be noticeable to residents in the rural areas.*
- 3.2 *Ensure a wide range of rural land uses and land management practices can be undertaken in the rural areas without increased potential for the loss of rural amenity values.*
- 3.3 *To avoid, remedy or mitigate adverse effects of activities located in rural areas.*

As a result of the proposed planting and mounding located between the proposed building and the track there will be a very small effect on the visual access to open space currently available to users of the track which passes along the northern edge of the site. I rely on the findings of Dr Read Council's consultant landscape architect who has concluded that the extent of this effect is very small.

The development will not compromise the ability to undertake agricultural activities on surrounding land.

The landscaping proposed is consistent with that already required as part of the quarry operation, but is not consistent with rural shelter belt planting which is a strong feature of the Upper Clutha Basin landscape. It is recommended that non-wilding conifer species be used in the planting mix for the screen planting so as to blend into the existing eastern shelter belt.

The building is well setback from the site boundaries.

Overall, based on my opinion as to the existing character, receiving environment and consented quarry activity, it is considered that the proposal is in accordance with provisions of the District Plan as directed by the above analysis of the assessment matters and the Objectives and Policies.

The proposal is considered to generally accord with the above provisions.

Overall the proposal is not contrary to the above objective and policies.

8.3.3 OTHER MATTERS

Waste Management and Minimisation Plan 2011-2017

The Queenstown Lakes District Council adopted the "Waste Management and Minimisation Plan 2011- 2017 on 16 December 2011 (WMMP). The document includes Goals and Guiding principals for waste management and minimisation, alongside a suite of objectives, policies and methods to realise these documents. Many of these matters traversed by the WMMP are incorporated into the QLDC Long Term Plan which sets the framework that shapes community development. In addition the WMMP incorporates matters that are consistent with the provisions of the District Plan and as such the District Plan makes reference to the WMMP in Part 4 District Wide Issues (4.7 Solid and Hazardous Waste Management). This integrated approach ensures that a consistent approach is taken to waste minimisation across the legislative requirements.

The applicant has correctly identified on pages 52-54 of the AEE the relevant Goals, Objectives, Policies and Methods considered to be relevant to the proposal.

The Plan identifies and supports initiatives that will result in the diversion of wastes from landfill and, alongside the general policies seeking to reduce and reuse the document refers specifically to recycling of the sewage waste stream.

Accordingly, the proposal has been found to be consistent with the Waste Management and Minimisation Plan 2011-2017.

8.4 PART 2 OF THE RESOURCE MANAGEMENT ACT 1991

Under Part 2 of the Act, Section 7 specifies other matters that the consent authority shall have particular regard to in achieving the purpose of the Act.

Of relevance to the subject proposal are the following matters:

- (b) *the efficient use and development of natural and physical resources;*
- (c) *the maintenance and enhancement of amenity values;*
- (f) *the maintenance and enhancement of the quality of the environment;*
- (j) *the benefits to be derived from the use and development of renewable energy.*

The proposal will achieve waste minimisation in the District and will extend the life of the Victoria Flat landfill by diverting this waste stream. Amenity values will not be adversely affected as the adverse effects of the proposal can be successfully mitigated. From the assessment of the actual and potential effects on the environment, I have formed the opinion that amenity values will not be adversely affected and any adverse effects appropriately mitigated. In addition the proposal is based on the use and development of technology that uses a renewable energy source. It is considered that the relevant matters contained in Section 7 of the RMA 1991 have been applied and considered as part of this assessment.

In achieving the purpose of the Act, the consent authority is also required to recognise and provide for matters of national importance under section 6 of the Act. The relevant sections of section 6 are:

- (a) *the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate use and development;*

- (b) *The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development.*
- (d) *The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers.*
- (c) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tahu, and other taonga:*

While natural character of the River is recognised as a matter of national importance, in the context of this application there is not considered to be any significant risk of loss of natural character of the Clutha River. The site is adjacent to the Outstanding Natural Feature (ONF) of the Clutha River and its margins but it will not be visible in conjunction with this ONF and Council's landscape architect does not consider the development would compromise the character of this feature. The proposal has found to be sufficiently removed from the Clutha River and its margins being elevated above the public areas adjacent to the river, except with regard to the walking track to the north located on Fulton Hogan land where mitigation mounding and planting are proposed. The facility is separated from the Clutha River ONF to the south and west by the river terrace. Public access to the river will be maintained. Runaga groups were consulted as part of the notification process and no submissions were received. Kai Tahu Ki Otago provided their written approval to the application.

The purpose of the Act is "to promote the sustainable management of the natural and physical resources." The Act defines the term sustainable management as:

managing the use, development and protection of natural and physical resources in a way or at a rate which enables people and communities to provide for their social, economic and cultural well being and for their health and safety while:

- (a) *Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations: and*
- (b) *Safeguarding the life-supporting capacity of air, water, soil and ecosystems: and*
- (c) *Avoiding, remedying, or mitigating any adverse effect of activities on the environment.*

With respect to the matters discussed above, the proposal is considered in keeping with the purpose of the Act, especially with respect to the matter of focus on listed in sections 6 and 7.

The facility will operate in a corner of an existing quarry. The remainder of the land beyond the quarry will remain in rural production. The facility will be screened by existing shelter belt and planting and by proposed mounding and additional planting. The proposal is located a sufficient distance from residential dwellings. The proposal will not compromise the ONF or landscape identified as having outstanding qualities. Overall, it is considered that the design, location and mitigation measures proposed for the operation will ensure that the activity will meet the purpose of the Act.

The proposal is considered an efficient use of the site and an appropriate facility in this location, resulting in an alternative use for a product currently transported to landfill. Any associated adverse effects in terms of site management, visual, transportation and amenity can, in my opinion, be appropriately mitigated, the above means that the proposal is considered to meet the purpose and principles of the Resource Management Act 1991.

9.0 RECOMMENDATION

I have considered the provisions of section 104(1) of the RMA 1991 as to the actual and potential effects on the environment of allowing the proposed activity in light of the relevant District Plan provisions, and subject to the provisions of Part 2 of the Act. It is therefore my recommendation that this proposal is a sustainable management of a natural and physical resource, and as such, consent can be granted.

Prepared by: Jane Sinclair
Consultant Planner



Reviewed by: Paula Costello
Senior Planner



Attachments:

- | | |
|------------|-----------------------------------|
| Appendix 1 | Recommended Conditions of Consent |
| Appendix 2 | Summary of Submissions |
| Appendix 3 | Landscape Architect's Report |
| Appendix 4 | Engineering Report |
| Appendix 5 | Environmental Health Report |

Report Dated: 3 September 2014

APPENDIX 1

Recommended Conditions of Consent

GENERAL CONDITIONS

1. That the development must be undertaken/carried out in accordance with the plans:
 - 'General Layout – Proposed Solar Drying Building. BTW South issued for consent 11 February 2014.
 - 'Solar Drying Facility, Boffa Miskell, Figure 1 Landscape Management Plan dated 17 July 2014.
 - Site Plan including the "Facility Access Track" (no date recorded)
 - Preliminary Plan, General Layout dated 6 March 2014.

stamped as approved on INSERT DATE

and the application as submitted, with the exception of the amendments required by the following conditions of consent.

- 2a. This consent shall not be exercised and no work or activity associated with it may be commenced or continued until the following charges have been paid in full: all charges fixed in accordance with section 36(1) of the Resource Management Act 1991 and any finalised, additional charges under section 36(3) of the Act.
- 2b. The consent holder is liable for costs associated with the monitoring of this resource consent under Section 35 of the Resource Management Act 1991 and shall pay to Council an initial fee of \$240. This initial fee has been set under section 36(1) of the Act.
3. All engineering works shall be carried out in accordance with the Queenstown Lakes District Council's policies and standards, being New Zealand Standard 4404:2004 with the amendments to that standard adopted on 5 October 2005, except where specified otherwise.

To be completed prior to the commencement of any works on-site

4. The consent holder shall install measures to control and/or mitigate any dust, silt run-off and sedimentation that may occur, in accordance with NZS 4404:2004 and '*A Guide to Earthworks in the Queenstown Lakes District*' brochure, prepared by the Queenstown Lakes District Council. These measures shall be implemented **prior** to the commencement of any earthworks on site and shall remain in place for the duration of the project, until all exposed areas of earth are permanently stabilised.

To be completed when works finish and prior to the operation of facility

5. Prior to the operation of facility, the consent holder shall complete the following:
 - a) The provision of an access way to the facility that complies with the guidelines provided for in Council's development standard NZS 4404:2004 with amendments as adopted by the Council in October 2005. This access way shall be sealed within two years of the facility being operational.
 - b) Any power supply or telecommunications connections to the building shall be underground from existing reticulation and in accordance with any requirements and standards of the network provider.
 - c) All earthworked/exposed areas shall be top-soiled and grassed/revegetated or otherwise permanently stabilised.
 - d) The consent holder shall remedy any damage to all existing road surfaces and berms that result from work carried out for this consent.
6. The consent holder shall implement, to the satisfaction of Council's Engineers, suitable measures to prevent deposition of any material on surrounding roads by trucks moving the material to and from the site. In the event that any material is deposited on the roads, the

consent holder shall take immediate action at their expense, to clean the roads. The loading and unloading of material shall be confined to inside the building.

7. The consent holder shall install measures to control/and or mitigate any silt runoff and sedimentation that may occur. These measures shall be implemented prior to the commencement of any earthworks on site any shall remain in place for the duration of the project.
8. The consent holder shall specify procedures to be put in place to minimise the spread of dust during earthworks construction.
9. The consent holder shall ensure that the activities be so conducted that the following noise limits are not exceeded neither at, nor within, the notional boundary of any residential site in the Rural General zone, other than that of residential units on the same site (other than those that have provided affected party approval):
 - Daytime (08:00-20:000) 50 dB L_{Aeq(15 min)}
 - Night time (20:00 – 08:00) 40 dB L_{Aeq(15min)}
 - Night time (20:00 – 08:00) 70 dB L_{AFmax}
10. A comprehensive Environmental Management Plan shall be completed for the operation of the facility with six months of operation of the facility. This Plan shall be submitted to the Manager Resource Consents (QLDC) for certification.
11. Vehicle movements entering and on site are restricted to a speed limit of 30 km per hour.
12. Truck movements in association with this consent are restricted to the following:
 - A maximum of four truck deliveries to the site per day, Monday – Friday, unless emergency works are required.
 - A maximum of two truck loads of material leaving the site per week, Monday – Friday unless emergency works are required.
13. Within six months of the granting of consent or prior to construction, which ever is the soonest, the amended landscape management plan included with Boffa Miskell, (Ms Pfluger's) July 2014 Memo and referred to in condition 1, is to be amended and resubmitted to QLDC for certification. The plan is to identify planting and bunding which will rapidly achieve a height of 6 metres above the surrounding ground level and which will blend, visually, into the pine shelter belt to the west. The plan should include a species list, planting densities and details of the heights of plants at the time of planting. Once approved this plan is to be implemented within the first available planting season and all plants irrigated and maintained as necessary. Should any tree or shrub die or become diseased it is to be replaced in the first available planting season.
14. That all practical measures are undertaken to minimise any adverse effects on property, amenity values, wildlife, vegetation and ecological values. (condition volunteered by applicant)
15. There is to be no stock piling on site, all material is to remain in the building until it is taken off site.
16. Prior to commencement of operations the consent holder shall submit to the Queenstown Lakes District Council for approval a schedule for community liaison including details of the proposed community liaison group and frequency of meetings. Following approval by the Council the Community Liaison Group shall meet every 6 months for the first two years of the consent.
17. Within 10 working days of each anniversary of the date of this decision or upon the receipt of information identifying non-compliance with the conditions of this consent, the Queenstown Lakes District Council may, in accordance with Sections 128 & 129 of the Resource

Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this resource consent for any of the following purposes:

- (a) there is or is likely to be an adverse environmental effect as a result of the exercise of this consent, which was unforeseen when the consent was granted.
- (b) monitoring of the exercise of the consent has revealed that there is or is likely to be an adverse effect on the environment.
- (c) There has been a change in circumstances such that the conditions of the consent are no longer appropriate in terms of the purpose of the above Act.

Recommended Advice Notes

1. This consent triggers a requirement for Development Contributions, please see the attached information sheet for more details on when a development contribution is triggered and when it is payable. For further information please contact the DCN Officer at Council.

Accidental Discovery Protocol

2. If the consent holder:
 - a) discovers koiwi tangata (human skeletal remains), waahi taoka (resources of importance), waahi tapu (places or features of special significance) or other Maori artefact material, the consent holder shall without delay:
 - (i) notify Council, Tangata whenua and Heritage New Zealand Pouhere Taonga and in the case of skeletal remains, the New Zealand Police.
 - (ii) stop work within the immediate vicinity of the discovery to allow a site inspection by the Heritage New Zealand Pouhere Taonga and the appropriate runanga and their advisors, who shall determine whether the discovery is likely to be extensive, if a thorough site investigation is required, and whether an Archaeological Authority is required.

Any koiwi tangata discovered shall be handled and removed by tribal elders responsible for the tikanga (custom) appropriate to its removal or preservation. Site work shall recommence following consultation with Council, the New Zealand Pouhere Taonga, Tangata whenua, and in the case of skeletal remains, the New Zealand Police, provided that any relevant statutory permissions have been obtained.

- b) discovers any feature or archaeological material that predates 1900, or heritage material, or disturbs a previously unidentified archaeological or heritage site, the consent holder shall without delay:
 - (i) stop work within the immediate vicinity of the discovery or disturbance and;
 - (ii) advise Council, the Heritage New Zealand Pouhere Taonga and in the case of Maori features or materials, the Tangata whenua and if required, shall make an application for an Archaeological Authority pursuant to the New Zealand Pouhere Taonga Act 2014 and;
 - (iii) arrange for a suitably qualified archaeologist to undertake a survey of the site.

Site work may only recommence following consultation with Council.

APPENDIX 2

Summary of Submissions

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
No.1 David Hawkins	14 Church Road, Luggate	<p>Opposes the entire application.</p> <p>It is not clear what will happen to the end product; the application is incomplete.</p> <p>Concerned that the development of the treatment plant will likely lead to the dispersal to land adjacent to our township.</p> <p>Our area is very dry and subject to high winds, concerned that the product will become airborne and get into homes impacting on our health.</p> <p>The community poll stated 93% of our community did not want these products distributed to lands around our township. A smaller majority did not want the treatment plant.</p> <p>It will have a negative impact on Luggate as a good and healthy place to live. It will affect property values and re sale.</p>	Refuse
No. 2 K & B Pankhurst N & K Hawkes	12 Alice Burn Drive, Luggate	<p>It is not clear what will happen to the end product..</p> <p>Development of treatment plant will lead to dispersal to lands near where we live, would like confirmation that this will not happen.</p> <p>Have they done any research into our area as I do not want my children or myself to be affected by airborne products, dust or smells.</p> <p>This development will have negative impact on Luggate, it is just starting to get good traction with new development, this plant could hinder the growth and reputation of the township.</p>	Oppose
Submission 3 D & P Olver	113 Naturalist Bvd Lluka, Western Australia	<p>Application not clear on the disposal of the sludge.</p> <p>There are potential health risks from windblown residue towards residential homes.</p> <p>Traffic in the area will be increase with trucks. Some of the roads are narrow.</p> <p>Noise will increase.</p> <p>Values of our property will decrease.</p>	Refuse
No. 4 B & K Kelly	16 Alice Burn Drive, Luggate	Oppose to the disposal of waste product to land adjacent to the Luggate Community.	Oppose

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>Concerns with health implications due to airborne contaminants from the material placed on rural land in the Luggate area.</p> <p>Potential for land values to decrease.</p>	<p>Preventing the dried material being spread in areas that could be dispersed by wind to any residential areas.</p> <p>A significant buffer zone should be applied and proof of there being no possible airborne contaminants spread into the Luggate village.</p>
No. 5 Michelle O'Brien Wish to be heard	9 Alice Burn Drive, Luggate	<p>Object to plant being located close to Luggate.</p> <p>There is danger of long term health effects with disposal to close to Luggate.</p> <p>Property values will drop.</p> <p>Clean Green image gone, Luggate's beauty and of course what gets into the Clutha River from airborne drift from river to lake, lake to sea. Unknown long term impact.</p> <p>Let common sense prevail.</p>	Oppose
No. 6 Penelope Spicer	14 Church Road, Luggate	<p>Object to the entire proposal.</p> <p>There is no guarantee that there will not be any health issues or smell.</p> <p>There is no guarantee that any heavy metals or bacteria will be removed from the end product. They have not mentioned what will happen to the end product.</p> <p>Disposing of the end product on to neighbouring land will create a health issues with heavy metals and bacteria getting into the food chain.</p> <p>There are frequent high winds in Luggate and the end product will blow into our homes causing health issues.</p> <p>Property values will decrease, Luggate will become an undesirable place to live if this plant gets built.</p>	Reject the entire application
No. 7 Kylie Krippner	34 Alice Burn Drive, Luggate	<p>It is not clear what will happen to the end product.</p> <p>The risk of airborne particles from the treatment plant will have a negative impact on our</p>	Oppose

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>communities' health and will decrease the value of properties.</p> <p>It will have a negative impact on the "stigma" Luggate holds as a healthy semi rural place to live.</p> <p>93% of the community do not want this facility.</p>	
No. 8 P and J Dekker	50 Alice Burn Drive, Luggate	<p>We object to the spreading out of the dried effluent in the region of Luggate township.</p> <p>There is a potential health risk to the surrounding community. This area is classified as a very high wind zone, the airborne dust will have an effect on our health and properties.</p> <p>There will be a negative effect on the quality of life currently enjoyed by the community and a decrease in property values.</p> <p>The bulk of the effluent is generated from Wanaka Sewage facility; we do not understand why the drying plant is proposed to be built at Luggate. It should be located adjacent to the Wanaka Sewage Ponds thus negating unnecessary trucking.</p> <p>This material should only be applied safely to farms in remote locations away from communities and towns.</p> <p>There is lack of economic benefits to our community.</p>	<p>Oppose</p> <p>Locate drying facility at Wanaka.</p> <p>There is more farming around Wanaka than around Luggate.</p>
No. 9 Rachel Brown Wishes to be heard	109 Loess Lane RD2 Wanaka	<p>Applaud the intent to deal more effectively and efficiently with sludge, moving towards making use of this valuable organic resource.</p> <p>Modern society has become too use to "flushing away their waste" and letting someone else deal with it.</p> <p>It is not sustainable to continue to truck our waste to landfill.</p> <p>The applicant's are proposing a state of the art facility that can produce AA grade bio solids that are rated safe to apply to land. The commercial risk is shouldered by Fulton Hogan.</p> <p>With proposed compliance measures ensuring no offensive smell or noise or visual effects how can we object.</p> <p>No one will know it is there unless you drive to the site.</p> <p>The complaints are due to deep seated social and cultural fears of human faeces. This is what</p>	Support

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>needs to be addressed.</p> <p>Fulton Hogan need to address the issue of the site. The site applied for is owned by Fulton Hogan and therefore commercially favourable. There is resistance from the community of Luggate but there is public support for the facility to be built at Project Pure. This site could be commercially viable as an option if there is too much resistance to the quarry site.</p>	
No. 10 Margaret Bolwell	145 Main Road, Luggate	<p>Object to the transportation of the sludge from one site to the quarry.</p> <p>Once dried where will it be spread?</p> <p>There will be effects on property values.</p> <p>Impact on air quality (i.e.windy days).</p>	<p>Oppose</p> <p>Need guarantee that this product is safe and not located in this area.</p>
No. 11 Graeme Perkins	49 Alice Burn Drive	<p>Concerned about:</p> <p>The disposal of the end product being spread on food producing land. I am not satisfied that adverse effects on our food chain will not occur.</p> <p>Concerned that the final disposal stage of the process is not covered by the application.</p> <p>The best outcome is to only consent to the end product being buried in the land fill or spread onto forestry blocks.</p> <p>Concerned about odour.</p>	<p>Oppose</p> <p>Application only be consented with condition that the end product be taken to landfill or spread on forestry blocks and never applied to pasture land.</p> <p>That the word "Luggate" to not appear in any naming or public description of the plant.</p>
No. 12 Sidney & Dawn Diamond	32 Bethel Crescent, Bishopdale, Christchurch.	Concerned with long term effects on the District and resale value.	Oppose
No. 13 Leone Ward	20 Church Road, Luggate	<p>Concerned with the use of the end product and the future care of the overall project.</p> <p>This treatment plant will led to the dispersal of the end product to land around our village as indicated in the public meetings. Fulton Hogan have now changed their statement and now say it will go to landfill. I believe that once consent is granted Fulton Hogan will eventually dispose onto nearby land.</p> <p>Our area is very dry and exposed to high summer winds, the dispersed product will become airborne and be present in our homes affecting our long term health.</p> <p>The majority of our residents are opposed to the disposal on land (93%). Council should respect</p>	<p>Reject in its entirety unless Council guarantee that the waste product will never be on farm or crop land linked to the food chain or in this area as it will become airborne. This would need to be a guarantee that could not be changed by future Council.</p>

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>these results.</p> <p>I have no objection to using waste product on land. This should never be allowed in the human food chain. The alternative is to place on barren land used for forestry or native regeneration but never for crops or stock.</p>	
No. 14 Public Health South Southern District Health Board Wishes to be heard	n/a	<p>Support the establishment of the proposed facility as a long term sustainable solution to the disposal of sludge from Project Pure.</p> <p>This submission focuses on;</p> <ul style="list-style-type: none"> -pest control, -hygiene facilities, and -adequacy of proposed conditions. <p>Sludge has the ability to attract pests such as rats, mice and flies. To reduce the health nuisance caused by such a facility an integrated pest management plan should be developed and implemented by the operator.</p> <p>With no water and waste connections on site as no bathroom facilities. Sludge has a high pathogen load and workers will inevitably come into contact with it. It is recommended that hygiene facilities or a means for hand washing be made available in the event that contamination occurs.</p>	Support
No. 15 Yvonne Perkins	48 Alice Burn Drive, Luggate	<p>Object to:</p> <ul style="list-style-type: none"> -application not addressing the management of the bio-solids at the end of the process. It does not include the full picture of what is planned. -transportation of the bio-solids from Project Pure to the site is unnecessary and environmentally unsound. -ventilation of the building so close to Luggate community, there will be some odour drift, which will have a huge impact. -two hours per day of staffing does not allow for on-going evaluation of the effects on the surrounding environment in a clear and transparent way. This new technology needs to be carefully monitored and evaluated. -there are no bathroom facilities to prevent the spread of any contamination. More consideration is required to possible waste contaminants on the surrounding environment. 	<p>Oppose</p> <p>1. Application should be made in two parts; one addressing the plant, the other addressing the management of the waste after the process.</p> <p>2. QLDC need to fully explore all the options available and evaluate the wisdom of transporting waste from Project Pure.</p> <p>3 On going careful monitoring of the plant in terms of odour and other environmental considerations need to occur. This needs to be reported to the Luggate Community</p>

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>-application implies that there will be retail sales, but not at this site. There is not enough transparency about the plans for managing the waste after the processing in the plant.</p> <p>-the 35 year consent period is too long it should only be consented for a short period of time so that careful environmental impact studies protect the community.</p>	<p>Association and QLDC on a monthly basis with assurances that any problems will be addressed ASAP.</p> <p>4. A plan needs to be put in place for management of people leaving the site.</p> <p>5. There needs to be a management plan for the bio-solids before, during and after the process.</p> <p>6. Consent only be given for two years initially during which time monthly monitoring reports are submitted to the Luggate Community Association and QLDC followed by a five year consent.</p>
No. 16 B & A Kane Wishes to be heard	Paerau, 3 RD, Cromwell (618 Luggate Tarras Road)	<p>The proposed building is located in one of the most important view shafts from a major arterial route in the District. This view point is where locals feel like they are "home" when returning from travels. It is where you first see the Clutha River and mountains in the background and a panoramic view of the district including the glacial terraces. Many tourists stop to take photos from this viewpoint. The proposed building will be situated right in the centre of their photos.</p> <p>No appropriate mitigation measures are proposed to reduce visual impact or glare and reflection from this viewpoint. Appropriate mitigation measures would be inexpensive, easy to construct and would have little if any effect on the operation of the facility.</p> <p>Our residence faces directly towards the long side of this building.</p> <p>As facing east this building will cause significant glare and reflection issues particularly in the morning with low sun angles.</p> <p>As part of the submission Mr Kane has prepared a three page attachment which audits the AEE, and raises the following issues.–</p> <p>-clarifications with dimensions and height of the proposed building (pages 13, 33, 35, 92 of AEE</p>	<p>Oppose</p> <p>Sufficient mitigation measures be put in place to ensure the building cannot be seen from the mailbox at Rapid 618, SH8a by lowering the platform by a metre and constructing a two metre high bund (or any combination of the two) on the south east side and planting trees along the bund to shield the building and prevent glare.</p> <p>A bond is required to ensure compliance with mitigation is achieved and annual inspection needs to occur.</p> <p>Please refer to the submission to see</p>

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>page 6 of Appendix 2). The application is inconsistent with height assessment and ranges from 4m-4.8m, actual height is 5.3m from the excavated level.</p> <p>-site stated as being surrounded by shelter planting (page 29). There is no shelter planting on the east, nor any proposed (page 6, Appendix 2 Landscape Assessment).</p> <p>- page 31 Other Rural Landscapes. The facility will be visible from SH8a Rapid Number 618.</p> <p>-Page 35 and 42 view shaft from Rapid Number 618 has not been considered and is far more significant than the view shaft from SH 6.</p> <p>-likely to cause minor glare page 43. No justification has been provided for this statement. There has been no attempt to qualify or illustrate the potential effects of the glare.</p> <p>-proposed bund, page 44. The proposed bund will be too far away to provide appropriate screening from the elevated position of the view shaft.</p> <p>.-page 7, Appendix 2 a row of young pine trees planted to screen the quarry activities. This will not screen the proposed activity.</p> <p>-page 8, Appendix 2 no recommendations made for the eastern side of the building in respect of bunding or planting.</p> <p>-visibility page 8, no assessment made for Rapid 618, SH8a despite being a major and important view shaft.</p> <p>-page 9, long distance view, "only other public views will be possible from the southern side" this is clearly incorrect.</p> <p>-page 9 and 10, assessment is deficient with estimation and assessment of glare and reflectivity. Any bunding or planting is too far away from the building to ever block the glare.</p> <p>Page11, "views from private dwellings on the north bank have provided written approval". This is incorrect, Our residence is on the north bank and we have not been consulted.</p>	attached diagrams which the submitter has prepared as suggestions.
No.17 Andrea Petic and Grant Hastie	43 River Ridge Road, RD3, Tarras	The Submitter has provided a detailed submission which I direct the Commissioners to refer to. The submission refers to a document titled "Frequently Asked Questions to Project Groundswell" from the QLDC website. The submission raises the following objections:	Oppose Locate facility at Project Pure.

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
Wish to be heard		<p><u>Location</u> Only chosen because this is where Fulton Hogan has a site. The appropriate location would be at a designated site for wastewater purposes such as Project Pure. This would stop any potential risk transporting sludge by road, and visual effects from the building would be more appropriate given scale of existing development around the airport.</p> <p><u>Trucks</u> It is stated that covered skip trucks will be used to transport the sludge. In the Frequently Asked Questions document it is stated that there will be between 1-3 trucks a week moving approximately 5 tonnes per truck. Application as applied for is seeking four trucks per day. Currently 1.12 trucks leave Project Pure to go to the landfill. QLDC and the applicant have misinformed the public about the amount of truck movements potentially there will be 20 trucks a week. This is nearly a 600% increase.</p> <p><u>Odour</u> Based on the submitted AEE. Page 41- "some odour will occur during unloading, unloading takes an estimated 10 minutes". Based on this, four trucks per day, five days a week will result in 3.33 hours of odour being omitted, it will be an offensive odour.</p> <p>Page 41, when Rachel Scott visited the plant in Australia no offensive odour was detected. Is Rachel Scott qualified to assess this? The site visit is stated as having occurred on 18 November 2014, this date has not yet past.</p> <p>Page17, Fulton Hogan claim "product has fewer odours than most composts". On the Wendewolf website under "Frequently Asked Questions" it states "smell is similar to compost".</p> <p>From Appendix 9 AEE Contamination Discharge into Air – page 11, 4.5 Site Management. "Plant operator will inspect boundary of site each working day and record any detectable odour and the intensity". What qualifications as an odour intensity assessor does the plant operator have? As an employee of Fulton Hogan they will not be able to give an independent opinion. Someone who works inside a sludge drying facility daily will have a different opinion than a general member of the public.</p> <p><u>Transportation of the End Product</u> As not applied for, why is it constantly referred to in the application pages 4, 10, 11, 13, 17 and</p>	<p>Limit trucks to two per day.</p> <p>Claim that there are fewer smells than compost be disregarded.</p> <p>A suitably qualified person be used to assess the odour.</p> <p>The front end loader to be used solely for the purpose of loading the end product and not for quarry use.</p> <p>Loading needs to occur inside an additional shed attached to the facility to prevent contaminants entering the air and soil.</p>

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>18.</p> <p>Page 13 “load into trucks for transport to rural land for spreading”. It states in the application that only bio-solids that do not make the grade will be transported to Gibbstion landfill.</p> <p>Pete Reid of Fulton Hogan confirmed that a front end loader from the quarry will be used to load end product into trucks which will happen outside the glasshouse. If no consent for land application has been applied for how will dust or spillage during this operation be contained from contaminating the ground?</p> <p>As the front end loader will be from the quarry how will it be cleaned before loading gravel and aggregate without contaminating these products?</p>	
No.18 Sam Kane Wish to be heard	359 Luggate-Tarras Road	<p>The submitter has provided a detailed submission which raises the following issues:</p> <p><u>Inadequate and misleading cost benefit analysis.</u> Refer to statement on page 45 of the submitted AEE. “The positive impacts of this facility, far outweigh any potential adverse environmental effects; these are being assessed as being less than minor”. This is a grossly misleading and inaccurate statement. There is no clear definition of the costs and benefits of the proposal, there is no discussion on the equitability of the distribution of these costs and benefits. The benefits occur largely to Wanaka. No quantification of what these benefits may be reduced to if efficiency expectations are not met. No quantification of the cost of reduced amenity values, traffic congestion and odour. These costs will be borne by a community outside of where the sludge is produced and where the benefits accrue.</p> <p>Proposal is contrary to Policy 1.4 of the District Plan which seeks to ensure that activities not based on the rural resources occur only where the character of the rural area will not be adversely impacted. The facility will process sludge from Project Pure not sludge from the local community and rural properties. These rural properties and the community will be adversely affected by the odour and glare from this facility. This should not be located in Luggate.</p> <p><u>Visual amenity values and visibility.</u> Building is 4.8 metres above ground, with 1.5m of bunding proposed this will leave 3.3m of glasshouse building still visible. Glare will be an issue from one of the main road entrances, surrounding properties and hill top walking tracks. The landscaping proposed will be ineffective and the hastily planted pine trees on the eastern boundary will take 20-40 years to mature and even then will not screen the building from 485 and 618 Luggate-Tarras Road as the bund is too</p>	<p>Oppose</p> <p>Support the idea to find a more sustainable way to manage human waste, however consent should be declined.</p> <p>Suggested alternatives are:</p> <ul style="list-style-type: none"> -Locate at Project Pure -Locate in industrial zone -More analysis of the suitability of the technology in Upper Clutha's physical environment. -Maintain the status quo. -Trial at a small scale to make sure technology can work in our environment. -Wait until mitigation is effective before operation.

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>far east. The view from 618 Luggate- Tarras Road is spectacular and endless people stop to take photos. The building will be an eyesore. The bund on the eastern side of the building will not mitigate the glare.</p> <p><u>Traffic</u></p> <p>Four trucks a day will travel over the 100 year old single lane bridge which has a 30km/hour speed limit. This is a treacherous piece of road in winter. Little acknowledgement has been made to the inconveniences and costs associated with this substantial road usage. The data is inconsistent, four trucks per day are sought yet 2011 data it was an average of 1.12 truck movements and based on 5.6 trucks per week assuming you will reduce the mass by 4/5ths then won't the trucks be about 1.12. Why the discrepancy? Council should restrict the number and time of traffic movement.</p> <p><u>Inconsistencies and information asymmetries and lack of contingency planning.</u></p> <p>Page 9, AEE incorrect statement on amenity values.</p> <p>Applicant states that the advantages that the heavy metals bind with the dry matter and so reduce leaching from the landfill, and then they promote it as a great soil conditioner. – Page 29.</p> <p>Why do the photos in the AEE not include the pegs and poles?</p> <p>Their track record on screening is appalling.</p> <p><u>Reduction of volume from 80 to 15 % moisture.</u> . Trinidad and Tobago achieve 70% reduction even with their average air temperature being twice that of ours.</p> <p>There is no reference to expected reduction of plant efficiency in winter conditions.</p> <p>What is the break even conversion ratio?</p> <p>What happens if the plant is less economical than the status quo because it doesn't hit expected targets?</p> <p>More rigorous analysis is required on environmental factors (temperature, wind speeds, humidity, sunlight, input material, population etc). If it doesn't met targets then it will be expensive and smelly.</p> <p><u>Odour</u></p>	-Make it a 5 year consent with controls on visual and odour, no detectable odour at boundary and 80% buffering of the building from a visual perspective.

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		QLDC should consider the adverse effects of the smell. The AEE acknowledges that odour affects amenity but the AEE is inadequate on addressing this issue. This could have a big effect on tourism and related businesses. The location is inappropriate (SH8A is the main route from Mt Cook to the District) and it should be sited alongside the Project Pure plant.	
No. 19 Jan Pigot	3467 Luggate-Cromwell Road, R D 3, Cromwell	<p>Agree in principle with the following limitations:</p> <ul style="list-style-type: none"> 1. The site would be more appropriate in terms of the RMA if it were located adjacent to Project Pure, reducing huge environmental and human costs of transportation. 2. The name Luggate should not be used in any way associated with the facility. 3. That the facility be fully screened from the cycle trail which is becoming increasingly popular. 4. The 35 year time frame is inappropriate. The facility could become completely outdated by technology. Maximum of 20 years. 5. No population or tourist number projections have been submitted, it is of concern that large amounts of sludge may have to be stock piled or the facility expanded. <p>How will the facility continue to operate in winter temperature and when there is an inversion this needs to be explained in more detail.</p> <p>I agree that we need to use our waste products more effectively, however, I disagree with the spreading of the dried bio-solid to farm land or land where it could re-enter the food chain. This submission relates only to the building and the operating of the plant it does not relate to the application to land.</p> <p>I am disappointed with the process there was no consultation prior to accepting the Fulton Hogan tender and the investigation of the site adjacent to Project Pure seems to have been very limited.</p>	<p>Support in principal</p> <p>Reconsider placing the facility adjacent to Project Pure.</p> <p>The name Luggate is not to be associated with the facility.</p> <p>Screening of the facility from the cycle track.</p> <p>Time frame reduced to 20 years.</p> <p>Information needs to be supplied regarding population and tourist growth.</p>
No. 20 Cynthia Robinson Wish to be heard.	359 Luggate Tarras Road	<p>QLDC need to investigate further the claims Fulton Hogan are making are these achievable in the Luggate climate especially with fog and inversion conditions.</p> <p>Facility should be located next to Project Pure where existing odour issues occur and no transportation would be necessary.</p>	Oppose

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>Landscape mitigation needs to be established prior to building if facility is granted.</p> <p>The facility needs to be heated to be effective.</p> <p>Only be allowed to load sludge that is at a minimum of 20% solid, if not at this dryness than it can not be loaded.</p> <p>Claim to be able to reduce from 80% to 15% moisture saving each household \$23. Will this be achievable in our climate based on where other countries with much warmer climate do not achieve such a high moisture reduction.</p> <p>Included in the submission is examples from other locations. The Commissioners should refer to this submission.</p> <p>Fulton Hogan are working on Wendewolf predictions which is acknowledge by that company as having a +/-10% accuracy. Could as a result cost ratepayers more if moisture and volume reductions are not achieved as promised. Realistic figures are required in order to get an accurate cost benefit analysis. In respect of cost to local environment, odour, traffic and amenities.</p> <p>As neighbours we will be left with a smelly eyesore that does not achieve what is required.</p> <p><u>Visibility</u> After mitigation, 3.3m of glass house glare will be visible with a length of 95m to people approaching from the east on a main entrance road to Wanaka. The proposed mitigation will not be effective.</p> <p><u>Odour</u> On the Wendewolf website it refers to if paste becomes anaerobic, bad smells occur. This must occur frequently as they have developed special tools to assist with this issue.</p> <p>The AEE acknowledges that odour directly affects amenity values. Trial and error problems are unavoidable and can take a long time to correct, this will have a huge effect on the community. The Boneo Wendewolf plant referred to in the AEE is located at a wastewater treatment plant. It was here that Rachel Scott was not able to detect an odour this was probably due to the desensitisation at being located in the middle of a wastewater treatment plant. Relative to the plant the drying facility probably had no smell but put into the quarry site with no smell it will be</p>	

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>noticeable. The site visit occurred in November and not in winter when the sludge was not drying as well.</p> <p>Odour will escape through the vents there are no filters or gas capture technology proposed.</p> <p><u>Traffic</u></p> <p>4 trucks a day are proposed. These will travel over the 100 year old bridge with its 30km speed limit. The bridge is not suitable for the amount of heavy traffic that already use it, the risk of carrying human waste over the bridge and having an accident is high especially in winter when there are icy conditions. The spill kits will not be effective for cleaning up the Clutha River.</p> <p>Aerobic conditions can not be guaranteed by the use of the Wendewolf system.</p> <p>Based on the breaches to the District Plans this project should not proceed at this site, it should be sited at Project Pure.</p> <p>The activity is contrary to policy 1.4 of QLDC District Plan as the activity is not based on the rural resource and the character of the area will be adversely affected as a result.</p>	
No 21. Phillip Ross Gilchrist Wish to be heard	P O Box 839, Wanaka	<p>Opposed to:</p> <p>The location of the proposed development.</p> <p>The materials used.</p> <p>Visual impact of the structure.</p> <p>Dry end product to landfill v's wet (raw) product to landfill.</p> <p>Project Pure site is a more suitable location.</p> <p>Our property overlooks the proposed site.</p> <p>Concerns relate to visual impact, glare, airborne pathogens, and odour.</p> <p>All alternatives have not been adequately researched.</p>	Oppose Decline consent

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
No 22. JH and TK Bird Holdings Ltd Wish to be heard	47 Kane Road, RD2, Wanaka	If it can be independently determined that the proposal is capable of consistently producing Class A bio-solids then this facility be established immediately adjacent to Project Pure facility thereby eliminating the transportation of hazardous toxic waste and creating an additional hazardous offensive area.	Oppose Decline consent in its entirety. If granted, locate the facility on the eastern boundary of the property furthest away from access and cycle/walking tracks/ the historic Clutha red bridge and its public area, DoC land, the Clutha River and its recreational amenities and the furthest distance from residential dwellings. That a panel independent of the QLDC, ORC and the applicant be established so that any complaints about odour outside the applicant's boundary be addressed by that panel and if confirmed then all consents be withdrawn.
No 23. Rosalee Bella Gilchrist Wish to be heard	3475 Luggate -Cromwell Road	Opposed to: Location of the plant. Visual impact Odour, airborne pathogens. Breaches of ORC Waste Plan and QLDC District Plan. Fulton Hogan's expansion plans. The expertise of the applicant in this area. Unnecessary crossing of the Clutha River over an old one land bridge.	Oppose Decline consent If consent is granted to restrict the amount of sludge to only sludge from Project Pure. To monitor the pathogens and odour regularly by an independent suitable qualified expert.

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>Alternatives not explored properly.</p> <p>Existing Project Pure site should be explored more.</p> <p>Consultation inadequate with property owners.</p> <p>Hardship for a small rural community who contribute very little to the waste problem, being burdened with an increasing problem from the District and possibly beyond.</p>	
No 24. R Picard & N Bloxham	P O Box 417, Wanaka	<p>Not enough information regarding what will happen to the end product.</p> <p>We do not want to see the end product distributed to land around our township.</p> <p>We are residents of Luggate.</p>	Oppose Greater assurance needs to be provided to residents of Luggate that the existence of the plant will not impact on our township.
No. 25 Wendy Fisher and Michael Wilkinson Wish to be heard	3477 Luggate-Cromwell Road, Luggate	<p>Do not understand the need to establish a new drying facility this is a waste of money and resources the current site at Wanaka Airport could be expanded and utilised.</p> <p>We brought a house in Luggate last May as QLDC have a strict requirements for building in rural areas, surely the QLDC would not approve the proposed building as it does not fit the standard imposed on everyone else.</p> <p>Central Otago and Queenstown Lakes are world class and are one of the most beautiful areas in NZ. The Clutha River is very special, the government has just spent millions on cycle tracks so it can be enjoyed. What will it be like to have a glasshouse emitting nasty smells and seepage into the land and river.</p> <p>Road safety is also a major concern, the roads are already clogged up with tourist buses, campervan, trucks etc. The application states that there will be 4 trucks per day but given that in 2009 the plant was producing twice as much sludge as predicted I do not believe that they can say this, it is too vague.</p>	Oppose
No 26. Luggate Community Association Project Groundswell Subcommittie	n/a	<p>The Association is opposed to this proposal.</p> <p>-The Association has prepared a detail submission which should be referred to in conjunction with this summary.</p> <p>-prior to accepting the Fulton Hogan proposal by Council there was no public consultation on</p>	Oppose

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>acceptable methods and sites.</p> <p>-the location is based on commercial convenience. It does not consider sustainability, efficient use of non-renewable fossil fuels and greenhouse gas emissions.</p> <p>-locating plant on Council owned land at Project Pure will have lesser environmental effects and reduces the need for the transportation of sludge.</p> <p>-the application is contrary to the provisions of the RMA and should not be granted.</p> <p>-the whole issue of sludge disposal should be re-examined and appropriate consultation occur.</p> <p>-the sub-committee supports the philosophy of waste minimisation, reduction of harmful effects of waste and maximizing the efficiency of resource use. However it does not believe that this proposal is the best way to achieve these objectives due to the location.</p> <p>In 2.0 of the submission a detailed history of the resource consent proposal to date is outlined.</p> <p>In 3.0 the submission addresses the community consultation that has occurred prior to the resource consent application being lodged.</p> <p><u>Drying Plant</u></p> <p>Application is for the drying of the sludge from Project Pure. The method of site disposal that would follow is not stated; only that land disposal is not included in the application.</p> <p>It is proposed to apply for farmland disposal and commercial sales of the fertiliser in the future.</p> <p>Purpose is to prepare sludge for the proposed land disposal scheme but this is not guaranteed to receive future resource consent.</p> <p>-efficiency issues are raised about the process promoted especially in respect of the winter conditions of Luggate, considerable amounts of electricity may be required.</p> <p>-potential odours are an issue of concern, it will require close monitoring. Monitoring costs will increase by the separation of the facility from Project Pure where monitoring already occurs.</p>	

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>-trucking of the sludge from Project Pure is unnecessary, it could be dried on site at Project Pure. Locating the site 6km from the treatment facility is contrary to environmental and engineering logic. It appears to be a matter of commercial convenience as Fulton Hogan own land at Luggate.</p> <p>There is no alternative sites analysis.</p> <p>-based on sludge production of 1000 tonnes per year, at least 35, 000 tonnes of sludge would require transport over the 35 year period. Allowing for projected population and tourism growth it could be considerable more. The round trip to the proposed site is 12km, requiring at least 6000 truck trips during the application period, with no population effects considered. This is unnecessary and unsustainable burning of fossil fuels and generation of green house gases. Also there will be wear and tear on the State Highway and the old Luggate bridge.</p> <p>The costs of sludge transport will be built in into the Fulton Hogan cost structure and will ultimately be borne by QLDC ratepayer.</p> <p>-the requirement under the RMA for consideration of alternative sites for projects has not been met.</p> <p>-locating the facility on Council land at Project Pure would generate less environmental effects. Sludge could be transferred directly from the treatment works avoiding trucking and associated environmental issues. This would meet one of Council's goals for waste management of "maximizing the efficiency of resource use". This is the logical engineering solution that would eliminate the transport costs.</p> <p>-if building height is an issue at the Project Pure site it could be overcome by lowering the foundation level of the building.</p> <p>-any land tenure issues could be solved with appropriate long term leasing arrangement of the land to the drying plant operator.</p> <p>-the majority of the Luggate community opposes this application.</p> <p>-we consider the proposal is contrary to the RMA and should be declined.</p> <p>Attached to the submission is the following:</p> <p>1.Lugate Community Response to Project Ground swell Proposal. Questionnaire.</p>	

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
No. 27 Wakatipu Holdings Ltd Wish to be heard	Lot 1, DP300025 approximately 1km west of the site.	<p>2 Infrastructure Services Committee Report for the Agenda for a QLDC meeting and the associated minutes.</p> <p>Object in its entirety for the following reasons.</p> <p>1. From page 10 of the AEE it is clear that there are significant adverse effects if the process is not managed appropriately. Page 16 of the AEE refers to an Environmental Management Plan yet this is not included in the application. This needs to be submitted to demonstrate contingency plans for 1. Fire risk; electricity is provided to a building which expels a number of flammable gases. 2. Spill.</p> <p>2. Bio-solids benefits unknown. The proposed activity is reliant on the application of the bio-solid to pasture as fertiliser. The schedule on page 19 of the AEE lists bio-solids as having the lowest nitrogen levels (2%) and phosphorus levels (0.9%) marginally higher than cattle manure. These levels would mean that 99 sacks of bio-solid are required to do the job of 1 sack of phosphate and 50 sacks of bio-solid are needed to do the job of 1 sack of nitrogen. The cost of spreading 99 sacks of bio-solid as an alternative to one sack of phosphate is not desirable or efficient.</p> <p>If it is not desirable as a fertiliser and can not be stored on site then it will need to go to landfill at a rate of two truckloads per week.</p> <p>3. Cumulative effects: the applicant has indicated that they want to move their Wanaka depot to the site. The existing quarry operation coupled with this proposal is contrary to the objectives and policies of the Rural General zone.</p> <p>4. Offensive odour. The assessment contained in appendix 10 is based on experience from other sites taking into account site specific factors and proposed mitigation measures. The facility in Boneo Australia is recognised as being similar operation where there is little odour occurring. While similar there is no record of the climatic conditions experienced in Boneo throughout the year that enables this operation to remain in an aerobic state. There is no evidence that Boneo climate is comparative to Luggate and that the winter climate in Luggate would not result in anaerobic conditions within the facility. The AEE states that increased levels and intensity of odour would occur should anaerobic conditions develop within the facility.</p>	Oppose For the reasons stated in 1-4 request that QLDC refuse consent.
No. 28. Dr Deborah Wilson Wish to be heard	1 Moss Street, Portobello, Dunedin	<p>Sections object to:</p> <p>Section 3.2 p12, transportation of wet solids to Luggate. This is an unacceptable discharge of carbon to the atmosphere, which will exacerbate global climate change It should be processed where it is produced.</p>	Oppose

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>Section 3.2 p 13, asphalt pad to ensure no liquids discharged to the environment. The applicant does not explain why asphalt is a suitable material or whether it may be or later become permeable to liquids over time. Any discharge of contaminants from this site is likely to reach the Clutha River as the alluvial soil is stony and porous. This is unacceptable as it has the potential to effect the ecology of the river, the health of the people using the river, tourism and other economic activities in the region.</p> <p>Section 3.2 pp 18-19, description of fertiliser to be obtained and comparison with other fertilisers. This is not relevant as it is not applied for. Including this section suggests that approval for such a step is tacitly requested.</p> <p>Section 5.2.1 Odour. There is a possibility of odour reaching Luggate village and the Clutha River or its environs during certain wind directions, during unloading and in case of spills. Any odour reaching these places is unacceptable. This area is not only residential but is also important ecologically and recreationally.</p> <p>Section 5.2.2, Dust. This is a windy region and there is a possibility of contaminated dust reaching Luggate village and the Clutha River and environs. Any discharge of dust will be hazardous to people in the area.</p> <p>I am a property owner in the Luggate village. This issue is of great concern to me as it has the potential to affect the carbon economy, ecology, quality of life and property values.</p>	
No.29 Graham McArthur Wishes to be heard	1 Moss Street Portobello, Dunedin	<p>The processing of secondary solids from the Wanaka wastewater treatment plant should not be carried out at any other site than where they are collected.</p> <p>As a QLDC ratepayer and property owner this issue is of great concern to me.</p> <p>It is unsustainable to transport the waste to another location and then once processed transport to a third location for disposal.</p> <p>It is sound environmental practice that the community that creates the waste should treat and dispose of the waste within the community, thus providing the incentive to minimize the waste and treat to the highest standard.</p> <p>No odour should be produced from this activity and so when any odour does occur the best chance of its control is when the treatment is occurring within the community that is producing</p>	<p>Oppose The processing of secondary solids should occur at the place where the material is collected.</p> <p>This activity needs to be carried out by the QLDC as it is too important and sensitive to allow this processing to be contracted out.</p>

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>the waste.</p> <p>The Luggate area will in the future face its own problems of waste treatment and future solutions should not be jeopardised by already having to deal with another communities waste.</p>	
No.30 Cyril Coombe Wishes to be heard	16 Kingan Road, Luggate	<p>I object to the location of Luggate being used as this will result in the perception that it is not a desirable place to live and will reduce property values.</p> <p>This area is commonly known as Grandview.</p> <p>I object to the discharge of containment liquid onto land in the vicinity under section 15/16 of the RMA. This activity is non-compliant.</p> <p>I oppose this site being considered, not enough consideration has been given to citing the facility at Project Pure.</p> <p>The leachate of liquids mixed with bitumen in the base will cause issues, if it is to be expected that 90% of the sludge is liquid and will be removed by drying, there has to be a high percentage removed by drainage, and very little by heat evaporation.</p> <p>Several discharge sections of the RMA are breached section 15/16, 15/2, 2A.</p>	Oppose
No.31 Sue Orbell	48 Kingan Road, Luggate	<p>Support the idea of a drying facility, but do not support this location.</p> <p>I object that if granted no facilities on site for safety of workers e.g toilet and shower.</p> <p>No mention of addition heating which will be required for periods of inversion layer and "below zero' temperatures.</p> <p>Land located at Project Pure is the logical location, removing double handling, transport costs over 35 years. The plant can be dug down to comply with height restrictions.</p> <p>No consultation with Wanaka and no consultation prior to contract with Fulton Hogan.</p> <p>Health and safety of workers is important.</p> <p>Odour concerns.</p> <p>Temperature is variable at site, there will be extra costs in heating.</p>	Oppose Build the facility at Project Pure.

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
No. 32 Tim Orbell	48 Kingan Road, Luggate	<p>Support the proposition of building a drying facility but object strongly to the proposed site.</p> <p>The lack of wider communication with the community is sad as Wanaka and surrounding areas are very unaware of the whole process and resulting end product disposal.</p>	<p>Oppose</p> <p>In favour of the facility being located at Project Pure site where the product could be easily conveyed to the drying facility. I am not in favour of other towns bringing sludge to be processed on our site.</p>
No 33. Graeme Halliday On behalf of the Luggate Community Association Project Groundswell Sub Committee Wish to be heard	110 Shortcut Road, RD2, Wanaka	Refer to submission 26.	Oppose
No. 34 Judy Thompson Wish to be heard	1153 Wanaka – Luggate Highway	<p>-Supports the Luggate Community Association submission.</p> <p>-facility should be located close to Project Pure site for environmental and engineering perspective. If co-located there will be efficiencies with monitoring and management.</p> <p>There is no plan in place for the disposal of the dry end product, I support waste minimisation but the potential risks for disposal should be addressed in conjunction with this application.</p> <p>The 35 year consent period exceeds the potential functional life of the facility.</p> <p>The application refers to a “comprehensive Environmental Management Plan”, it does not provide sufficient detail to evaluate this (pages 40 and 45).</p> <p>The lack of toilet and shower facilities in a potentially hazardous environment is unsatisfactory from a heath and safety perspective.</p> <p>Security lighting must be low impact down lighting to avoid light pollution.</p> <p>The consideration of all options not necessarily the cheapest option by the community would have assisted acceptance.</p> <p>Consultation has been poor.</p>	<p>Oppose</p> <p>Decline application.</p> <p>To require QLDC and Fulton Hogan (or other providers) to carry out facilitated community consultation with all affected areas in the Upper Clutha.</p> <p>If granted a nominated community representative should be part of the monitoring process.</p> <p>The management plan should include an emergency plan for breakdown or failure of the plant to preform.</p> <p>A detail assessment of the Project Pure site as a potential location</p>

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
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No. 35 Amelia Olley	17 Pisa Road, Luggate	<p>Object to the proposed development.</p> <p>Transportation costs over the 35 year period.</p> <p>Concerns with the environmental risks.</p> <p>Location in an outstanding natural area, future recreational uses need to be provided for and development of the area needs to be held in the highest regard.</p> <p>The development will hinder the expansion of the town.</p> <p>Luggate has been tarnished by this proposal "the place where the sewerage goes", property prices will be decreased.</p> <p>It should be dried where it is produced.</p> <p>The uncertainty of the end product is a concern.</p> <p>If granted will other towns use this facility?</p> <p>Concerned over future expansion plans and increasing health risks, stigma, loss of value for the Luggate community.</p>	should be carried out. Oppose
No.36 Lorna Schmidt Wish to be heard	42 Kingan Road, Luggate	<p>Clarifications</p> <p>Page 1 asphalt floor, page 190 concrete slab. Inconsistent.</p> <p>Page 147 "increases and mass" do they mean 'decrease' and "volume".</p> <p>Object to:</p> <p>proposed facility being built on site.</p> <p>-QLDC and ORC dealing with sewerage in a piecemeal, undersized planning manner. It is generating odorous, expensive facilities of Project Pure.</p> <p>-The application is incomplete. Council is allowing the applicant a six month post start up before supplying the details of the "good practice measures' plan to restrain odour to within the site boundary.</p>	Oppose -Site facility at Project Pure. -Research and tender for a digester system and a recapture system for heavy metals. These applications or tenders should include an odour management plan. -Riparian strip planting for any project within 1km of the Clutha River.

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>The site being termed as "remotely rural", the expense of trucking sludge to the site and the decrease in values to our properties.</p> <p>-The discharge to land should have been made alongside this application.</p> <p>-Local sewerage should be dealt with at Project Pure. It arrives in pipes and should go straight to a digester process. This has no odour and produces usable gas to run the whole plant, excess could go into Wanaka's gas reticulation. The sludge can then be moved by pipe (no trucks) to a heavy metal recovery process, then again by pipe to a drying hall on the Project Pure site. Then sell the pellets of high grade fertilizer and valuable rare heavy metals. Put your chamber of commerce minds onto how to make money for the ratepayer not private contractors. The final product will be a smaller volume as past the composting fermenting stage so will meet Council waste reduction objectives.</p> <p>-without the discharge to land application it leaves matters wide open and is short sided decision making. It is not transparent.</p> <p>-there will be an odour problem especially in winter, unless a lot of electricity is used to heat the sludge.</p> <p>-Luggate has an inversion layer for about 3-4 months in winter. The gases are heavy and will permeate the whole area and will hang about in long windless conditions.</p>	
No. 37 Joshua Olley Wish to be heard	17 Pisa Road, Luggate	<p>The transporting of sludge for 35 years is illogical, risky, costly and un-environmental.</p> <p>It should be developed next door to Project Pure as this being used for the first part of the process.</p> <p>An environmental bias will be put on Luggate, as this is the waste of Wanaka, Hawea, Albert Town, Hawea Flat, Luggate and all dwellings around this region.</p> <p>As a small town we would have to tolerate the entire load 2km from our growing community centre.</p> <p>As a result we would have all the health risks, stigma, decreasing property values etc.</p> <p>The facility should not be associated with one town alone as an environmental bias will occur as a result.</p>	Oppose

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>The material is socially very sensitive.</p> <p>Site is close to the Clutha River and areas valued by the public for outdoor recreation activities. This type of development needs to be away from outstanding natural features i.e. Clutha Devil's Nook. To build a waste industry in this zone is old fashioned and short sighted and would limit future clean growth and the perception of this zone.</p> <p>This is the gateway to the Upper Clutha region, one is met by the river and red bridge and mountain views and this development will impact on this greatly.</p> <p>It is not appropriate for a commercial business to have ownership and responsibility for such a hazardous and socially sensitive waste. It should be kept in Council control.</p>	
Late Submission No. 38 G D Taylor Wish to be heard How many days late	114 Shortcut Road, RD 2, Wanaka	<p>Concerns relating to the location of the plant and monitoring of the air and dried effluent.</p>	Oppose Make the drying plant contiguous with the existing sewerage plant at the Wanaka airfield. Ensure that a robust monitoring regime is established including local representation. It is essential to link the end product use/distribution and associated quality control to any proposed development.
Late Submission No. 39 Mr B A Todd How many days late	27 Main Road, Luggate	<p>I object to the entire proposal.</p> <p>The environment of Luggate should not be spoilt by taking Wanaka's sludge.</p> <p>Why go to all this expense when the dried sludge is going back to the Victoria Flat landfill where it currently goes.</p> <p>It will cause a smell and will attract flies. There are no provisions to wash out the interior of the trucks.</p> <p>What is proposed regarding the control of seepage that will occur?</p>	Oppose

Name & Number of Submission	Location of Submitters Property	Issues Raised	Relief Sought
		<p>Concerned about the reflection issues from the glass.</p> <p>There will be a high risk of fire from the concentrated glass reflections.</p> <p>Concerned about security on site.</p> <p>Devaluation of property values.</p>	

APPENDIX 3

Landscape Architect's Report

To: Jane Sinclair, Consultant Planner to Queenstown Lakes District Council

From: Marion Read, Consultant Landscape Architect

Subject: RM140133, Fulton Hogan Ltd: Landscape and visual assessment of the proposed solar drying facility at Luggate

Date: 1st August 2014

Introduction

1. An application has been made to Queenstown Lakes District Council (QLDC) for resource consent to construct and operate a solar drying facility at a site adjacent to the Clutha River in the upper Clutha Basin. The site is located at the intersection of Kane Road and State Highway 8A, the Luggate Tarras Road. It is legally described as Lot 2 DP 341373 and is zoned Rural General in the terms of the Queenstown Lakes District Plan (the District Plan).
2. The subject site comprises an area of 46.47ha. Resource consent exists to operate a gravel quarry on the site. This consent was granted with a requirement for screen planting along eastern, western, south western and part of the northern boundaries of the site.
3. An assessment of landscape and visual effects prepared by Boffa Miskell was included in the application. In addition two further responses to further information requests were received from the reporting landscape architect, Ms Yvonne Pfluger. This report will undertake to review that report in terms of the guidelines provided by the 'Guidelines for Landscape and Visual Impact Assessment' (3rd Edition)1 (GLVIA) which are as follows (paraphrased):
 - scope, content and appropriateness of the landscape and visual baseline studies;
 - methods;
 - accuracy and completeness of the identification of the landscape and visual effects;
 - appropriateness of proposed mitigation;
 - approach to judging the significance of the effects identified, and;
 - that it meets the requirements of the QLDC District Plan.

Scope, content and appropriateness of the landscape baseline

4. The description of the subject site and its landscape context included in Section 2 of the Boffa Miskell report is comprehensive. I do consider that the description of the site in paragraph 2.3 of the main report as having been 'substantially modified' to be somewhat overstated. While modifications exist these are the gravel extraction operation restricted to the north eastern portion of the site (approximately 4.6ha of a 46.5ha site); mounding along a part of the eastern boundary; and the community composting facility in the north western corner of the site. The balance of the site is more neglected than modified, remaining ungrazed and without irrigation or pasture improvement. Consequently I would say that the subject site has some ability to absorb change, rather than a 'high ability' as reported.
5. It is the case that the existing consent for gravel extraction on the subject site, which has a 40 year term, stages the quarrying activity and requires the rehabilitation of each stage prior to the next being utilised.

Scope, content and appropriateness of the visual baseline

5. The description of the visual baseline in the main report is thorough in regard to the viewpoints discussed. It neglects, however, the more long distance views across the site gained from State Highway 8A from Sandy Point, and the private views from the residence of Allan and Barbara Kane owner of Lot 1 DP 405266 at 618 Luggate Tarras Road.



Fig 1: View from the Kane's outdoor living area showing the location and extent of the Solar Drying Facility Building. (Photo taken by author at 3.22pm on May 6th 2014).

6. Ms Pfluger addresses visibility from SH8A and from the Kane residence in a memo to Fulton Hogan dated 18th July 2014. She also states, incorrectly, that Luggate township is visible within this same view. While it is the case that there is consented, but as yet unbuilt, development on the northern margin of the township which will be visible in this view it will be limited in its extent and is required by its consent to be recessively coloured and mitigated by planting (RM060393).
7. It is important when assessing the extent of visual effects to identify the sensitivity of the receptor, part of which is the importance of the view. I do not consider that the report has adequately done this. I note that the view from Sandy Point along SH8A is the first view into the Upper Clutha Basin which is gained by travellers heading to Wanaka from Christchurch. This is a route which is used by bus companies as well as visitors and local residents. Fig 2 shows this view, on a day when the light was poor. In fine weather the view includes the distant mountains including Treble Cone, Black Peak and beyond. It is striking for its expansiveness, and while it is clearly a view over a modified agricultural landscape, it is notable for the lack of readily visible buildings. The roof of the Kane residence is visible, as are the buildings at the Wanaka Airport. None of these are prominent in this view, however, and consequently the view is highly scenic and contains most of the aspects – water, topographical relief, trees and indigenous vegetation – which Swaffield and Fairweather¹ have shown to comprise the most preferred views in this country. Consequently I consider that this view is sensitive to change, and is a locally important view.

¹ Fairweather, J. R., & Swaffield, S. R. (2001). Visitor experiences of Kaikoura, New Zealand: an interpretive study using photographs of landscapes and Q method. *Tourism Management*, 22, 219 - 228.



Fig 2: View from Sandy Point. (Merged panorama. Photos taken by author at 3.55pm on May 6th 2014).

Methods

8. The identification of visual effects is hampered by a somewhat simplistic interpretation of the causes and effects of glare off shiny surfaces. The methods used to identify the landscape effects are adequate.

Accuracy and completeness of the identification of landscape and visual effects

9. Ms Pfluger opines that the introduction of the large glasshouse (solar drier) into the site which is the location of gravel quarrying and composting activities would integrate with the existing rural landscape character. I agree with this position.
10. Ms Pfluger considers that the facility would have very minor visual effects as a result of the limited number of sites from which it would be visible; the distance from which it would be visible; and the limited effects of glare. She does concede in her July memo that further mitigation is appropriate, however. While I consider the analysis of the visual effects to be limited in scope, the further consideration given has resulted in proposed mitigation which is appropriate.

Appropriateness of the proposed mitigation

11. In the July memo bunding and planting parallel to and some 28m to the east of the drying facility is proposed. The details of this proposal are confusing, the memo proposing bunding of 2m and screening of 4m. It is unclear if this is meant to mean a total of 4m in height or 6m. Further, the plan attached to the memo shows a bund of 1.5m and is unclear as to the nature and type of planting, and the total screening height it is aimed to achieve. Thus, while I consider that proposed mitigation to be appropriate in principle, I do not consider the current level of detail to be adequate.

Approach to judging the significance of the effects identified

12. The approach to judging the significance of the effects appears to be based on two parameters. Principally the extent of visual effects is anticipated to be inversely proportional to the distance from which the proposed building is viewed. While distance certainly does have a relationship with the significance of visual effects I do not necessarily think that this is linear, nor do I consider that it can be assessed without reference to the type of building under consideration. The second major parameter is in regard to the potential for glare. In this regard I consider the approach to judging its effects are limited.

Requirements of the QLDC District Plan

13. The landscape and visual assessment report identifies the site as being an Other Rural Landscape, and does not apply the Plan's assessment matters to the proposal in any transparent manner.

14. The District Plan requires an assessment to determine whether the proposed site falls within an outstanding natural, visual amenity or other rural landscape. Ms Pfluger considers that the site is within a Visual Amenity Landscape and I concur with this opinion. She continues to state, however, that the 'application site itself is not considered to hold values that would lead to this identification due to the existing modification through gravel extraction' and that 'the application for the proposed facility should be considered to fall within an 'Other Rural Landscape'. I consider this to be a misapplication of the Plan's rules as the site is not in and of itself a landscape, and it is the landscape in which the proposal is located which determines the approach to be taken to its assessment. Consequently I consider that the proposal is located within a Visual Amenity Landscape and should be assessed in accordance with the relevant parts of S5.4.2.2(3) of the District Plan.

Effects on natural and pastoral character

15. The site is adjacent to the outstanding natural feature (ONF) of the Clutha River and its margins. The proposed building would not be visible in conjunction with this ONF and consequently I do not consider it would compromise the character of that feature.
16. The proposed building is semi-industrial in nature and of similar appearance to a horticultural glasshouse. Because of its location within the quarry site I do not consider that its nature would compromise the character of the wider VAL. In terms of scale, the building is to be 94m long and 12.8m wide which gives it a footprint of 1,203.2m². This is a large building. For comparison, the shearing shed and covered yards on the Grandview Grazing property to the east have an area of approximately 850m². I consider that its long and low appearance would mitigate its size to a degree and thus do not consider that its scale would compromise the character of the wider landscape to a more than small degree.
17. The proposed development would not degrade the pastoral character of the landscape.

Visibility of development

18. The proposed development would be visible from SH8A at Sandy Point which, as discussed above, is a view which is valued by the local community and which currently is open and pastoral.
19. The proposed building would be prominent in this key view but this would vary depending on the time of the day and the time of the year. At its worst it would be highly prominent, and at its best readily visible. I consider that without mitigation it would detract from public views from Sandy Point and private views from the Kane residence at 618 Luggate Tarras Road to a significant degree.
20. Mitigation planting is proposed, but it is unclear what is proposed. In my opinion the total height of planting and bunding together should be in the vicinity of 6m to ensure screening of the building in these distant and slightly elevated views. I also consider that the planting selected should be such that it blends in, visually, with the conifer shelterbelt to the west of the site so as to avoid introducing new lines of visibly different vegetation.
21. The subject site is effectively enclosed by topography and vegetation, being elevated above the public areas adjacent to the river, except with regard to the walking track to the north, and separated from both the walking track and the main road by the pine shelter belt. It is separated from the Clutha River ONF to the south and west by a further terrace. To the east, mitigation planting and mounding associated with the quarry activity has been undertaken. This has had limited effectiveness in enclosing the site however.
22. The proposed bunding and planting would create an arbitrary line on the landscape. For this reason I consider the planting should be of species which will blend in, visually, with the conifer shelter belt to its west.

Form and density of development

23. The topography of the site ensures that the site is not highly visible from the river corridor, but allows views into the site from the east and from immediately adjacent to the development site.
24. The proposed location of the drier in the north western corner of the site close to the existing boundary planting ensures that it is located within the portion of the site with the highest ability to absorb built development.

Cumulative effects of development on the landscape

25. The existing development within the vicinity (defined as an area 1.1km radius around the proposed location of the drier) includes the Luggate green waste operation and the Fulton Hogan gravel quarry on the subject site, and portions of a number of farms; the Central Trusses and Frames factory; and a number of dwellings. The factory and dwellings are all located on the true right of the Clutha. In the main it is a relatively open, rural landscape.
26. The proposed development would not, in my opinion, breach any threshold of the vicinity's ability to absorb change.
27. The proposed development would exacerbate the existing and potential adverse visual effects of the gravel quarry in views from the east, incorporating a large building into an area which is to be subject to ongoing modification. It would also exacerbate the visual effects of the airport buildings in this same view. I consider that the extent of the adverse effect of this inclusion would be relatively small. It would also exacerbate the existing and potential adverse effects on the rural landscape character by the inclusion of further industrial development into an otherwise agricultural landscape. I consider that the extent of this effect is moderate.
28. The proposed development is to be located within the landscape unit formed by the river terraces on the true left of the Clutha River. This is an expansive landscape unit and so its inclusion within it provides little, if any, mitigation.
29. The proposed development does not require any urban style infrastructure.
30. Mitigation planting is proposed and, with modification, would assist in integrating the building into the landscape. While this would not reduce the cumulative effect on landscape character, it would reduce the cumulative visual effect.

Rural amenities

31. The proposed development would have a very small effect on the visual access to open space currently available to users of the track to the River which passes along the northern edge of the subject site. This is because mounding and planting is proposed between the drier building and the track. I consider the extent of this adverse effect to be very small.
32. The proposed development would not compromise the ability to undertake agricultural activities on surrounding land.
33. The landscaping proposed (mounding and planting) is consistent with that already required as mitigation for the quarrying work, but it is not consistent with the traditional rural shelter belt planting which is a strong feature of the Upper Clutha Basin landscape. In my opinion non-wilding conifer species should be used in the planting mix for the screen planting so as to blend it, visually, into the eastern shelterbelt.
34. The proposed drier building is well set back from the site's boundaries.

SUBMISSIONS

35. Three submitters raised landscape related issues. These were Allan and Barbara Kane, Philip Gilchrist and Sam Kane.

Allan and Barbara Kane

36. Regarding the submission of Allan and Barbara Kane, I consider that their visual amenity was compromised by the original proposal, as were the public views from SH8A at Sandy Point about which they also expressed concern. I consider that the planting and bunding now proposed parallel to the proposed building would reduce the adverse effects experienced by them. I consider, as discussed above however, that the combined height of the bunding and planting needs to be at least 6m in order to ensure that the building is suitably screened from view, and that consequently fast growing species and ones that will blend visually with the conifer shelter belt to the west of the site should be used.
37. It is noted that generally speaking there is no requirement under the District Plan Rules to require buildings within the VAL to be totally obscured from either public or private views. In this instance I consider that it is appropriate to require that this building be fully screened however. With all other types of buildings within the rural landscape it is required that they have a recessive appearance. As this building is fully clad with glass it cannot be made to appear recessive. Further, glare from the glass surface is likely to make it extremely prominent at times throughout the day. I consider that Ms Pfluger understates the likely effect of reflectance and glare from the glass surfaces. While I agree that early morning is likely to be the worst time of the day I disagree that light striking the roof will simply reflect back up to the sky, particularly as the sun descends from its zenith in the western sky. It has been my observation that sunlight striking roofs often causes glare as illustrated in the photograph below (Fig 3). While the roof in this example was of corrugated iron, and thus light striking it would be dissipated more than from a glass surface, I nonetheless remain unconvinced that glare off the roof of the building would not be problematic. Simple geometry fails to take into account subtle variations in the angles of each pane of glass; variations in the surface of each pane; and the degree to which refracted light may also reflected from the inner surface of each pane. All of these variables complicate the estimation of glare effects. Consequently I consider that mounding and planting of fast growing species to reach a minimum height of six metres is necessary to avoid and mitigate any glare effects.

Philip Gilchrist

38. Mr Gilchrist expresses concern regarding the visual impact and glare effects of the proposed building. I have visited his property with him. The proposed building would not be visible from the consented building platform on the site. It would be visible from parts of the property towards its north western boundary. I consider that there would be an adverse effect on the Gilchrist property, but that the extent of the effect would be small. It is the case that the mounding and planting proposed would not provide any mitigating effect from this direction.

Sam Kane

39. Mr Kane expresses similar concerns to Mr and Mrs Kane with regard to the visibility and glare effects on SH8A. These have been discussed above. He also expresses concern that the 'building will be a major eyesore from about 400hectares [of] the Grandview range farmland, and will be a moderate eyesore from a further 200hectares of the Grandview range farmland.' I have not visited this property but agree that the proposed building would be visible from elevated locations to the north east. The degree to which it would be visible would depend on altitude and distance, closer views being obscured by the pine shelter belt on the subject site. The quarrying on the site and the industrial development on the true right of the river (Central Trusses and Frames, the timber mill and Luggate Game Packers) would also be visible in these views.



Fig 3: View from SH8 adjacent to the Lazy Dog Café showing glare from a building roof. (Photo taken by author at 10.45 am on the 24th July 2014).

Conclusion

40. An application has been made to QLDC to construct and operate a sludge drying facility on a site on SH8A north of Luggate. The sludge drying facility has the appearance of a glass house extending 94m long and 5.3m high.
41. The subject site, on which consent exists to operate a gravel quarry, and the surrounding landscape have the capacity to absorb the proposed development without significant adverse effect on the character of the landscape in the vicinity.
42. Significant views into the subject site are restricted to reasonably distant views from public and private locations to the north east, east and south. The views from the east from SH8A and from the Kane residence at 618 Luggate Tarras Road are considered to be the most adversely affected by potential glare from the building. In addition, while the airport buildings are visible in this view they are the only intrusion, currently, into a highly scenic, pastoral view.
43. Mitigation bunding and planting has been proposed to run parallel to the building some 28m to its east. This bunding and planting should be such that it rapidly reaches 6m in total height and so that it visually blends into the pine shelter belt to the west of the proposed building. As no method of making the building appear recessive is possible it is considered that it should be totally obscured in these views.

Recommended conditions:

1. Within six months of the granting of consent or prior to construction, whichever is the soonest, the amended landscape management plan included with Ms Pfluger's July memo is to be amended and resubmitted to QLDC for certification. The plan is to identify planting and bunding which will rapidly achieve a height of 6m above the surrounding ground level and which will blend, visually, into the pine shelter belt to the west. This plan should include a species list, planting densities and details of the heights of plants at the time of planting. Once approved this plan is to be implemented within the first available planting season and all

plants irrigated and maintained as necessary. Should any tree or shrub die or become diseased it is to be replaced in the first available planting season.

Read LandscapesA handwritten signature in blue ink that reads "Marion Read".

Marion Read
Principal

**Reviewed by Helen Mellsop Landscape
Architect**A handwritten signature in black ink that reads "Helen Mellsop".

Helen Mellsop

APPENDIX 4

Engineering Report



79

QUEENSTOWN
LAKES DISTRICT
COUNCIL

www.qldc.govt.nz

ENGINEERING REPORT

TO: Jane Sinclair

FROM: Lyn Overton

DATE: 24/07/2014

APPLICATION DETAILS	
REFERENCE	RM140133
APPLICANT	Fulton Hogan Ltd
APPLICATION TYPE & DESCRIPTION	Land Use consent is sought to establish a wastewater sludge drying facility at Kane Road, Luggate.
ADDRESS	Luggate – Tarras Highway (SH8A)
ZONING	Rural General. Applicant assesses this as being within an ORL.
LEGAL DESCRIPTION	Lot 2 DP 341373
SITE AREA	46.4655ha
ACTIVITY STATUS	Discretionary activity.

Application	Reference Documents	Consent application.
	Previous Relevant Consents	RM060120 – Land Use consent to undertake a quarry
	Date of site visit	19/03/2014

Location Diagram



Comments	
Existing Use	Gravel quarry.
Neighbours	No immediate neighbours.
Topography/Aspect	Gentle slope down to the south.
Water Bodies	The Clutha River is located approximately 200m to the west.

ENGINEERING		COMMENTS	Condition
TRANSPORT	Access	<p>Means of Access</p> <p>Vehicle crossings</p> <p>Access to the site is from Luggate – Tarras Highway (SH8A). The access point to the site was formed as a requirement of RM060120. Conditions of this consent required the vehicle crossing to be upgraded to New Zealand Transport Agency Diagram D (including road widening on both sides of the road) standard with a 15m radius and sealed 50m back from the State Highway road reserve boundary, including the provision of signage warning motorists of the site entry points and parking area for vehicles within the site. I am satisfied that the vehicle crossing and signage has been formed in accordance with the conditions imposed on RM060120 and that the existing formation of the site entrance is appropriate for this proposal, please refer to photographs and site layout below. No further conditions are proposed in relation to the vehicle crossing.</p>   	



ENGINEERING		COMMENTS	Condition
TRANSPORT	Access	<p>Access</p> <p>The applicants are intending to upgrade the existing access road within the site to the sludge drying facility. The applicants are intending to seal this access within two years of the facility operating. A condition is recommended to ensure that the access road to the drying facility is formed to Council standards.</p> <p>A number of submitters have raised concerns over the impact the traffic generated will have on the Historic Luggate Bridge. The operation will generate four truck deliveries per day to transport waste to the facility from Council's Project Pure. There will be two truck movements per week to remove the dried waste to another facility out of the district for sale. This equates to 44 truck movements per week or 8.8 truck movements per day on the local roads. NZTA made the following comments in relation to the traffic impact on the local roading net work (email received 25/07/2014); <i>"We have looked at this proposal in-house and do not consider there will be any adverse effects on the State highway. The proposal is not expected to generate a large number of vehicle movements, and those that it will generate will join the highway through a fully-formed intersection."</i> and; <i>"We can't guarantee any effects or otherwise on the bridge. The bridge is not subject to use restrictions, and heavy vehicles can use it at present. All I can really say is that the evidence we have received to date does not raise any concerns, hence our decision to not submit on the proposal."</i> I accept the NZTA comment and no further conditions are recommended in relation to access.</p>	
NATURAL HAZARDS	Hazards on or near the site	<p>There are no hazards identified in the location of the proposed building on Council's hazards maps. No conditions are proposed in relation to hazards.</p>	

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ENGINEERING		COMMENTS	Condition
EARTHWORKS	Extent	Description	Earthworks will be required to upgrade the existing access road to the location of the building and to prepare the construction area.
		Total Volume (m³)	950m ³ of material is to be excavated. As the site is a quarry excavated material will be stockpiled with quarry material.
		Area Exposed (m²)	Not determined.
		Max Height Cut/Fill (m)	The maximum height of cut will be approximately 1m in height, and I am satisfied that this will be supported by the walls of the building.
		Prox. to Boundary	I am satisfied that all earthworks will be set back 10+m from the site boundaries.
	Site Management	Report reference	A Guide to Earthworks in the Queenstown Lakes District brochure.
		Neighbours	Nil
		Traffic management	Not required
		Revegetation	An appropriate condition is recommended to ensure that all exposed surfaces are either revegetated or stabilised upon completion of earthworks.
	Existing Services		

SERVICES	Water	Potable	A water supply is available to the site and was installed as per conditions of RM060120 for the quarry operation. No conditions are proposed in relation to water supply.
		Fire-fighting	I am satisfied that a fire fighting water supply will not be required for this activity. No conditions are proposed in relation to fire fighting.
		Effluent Disposal	As there will be no permanent staff retained at this site I do not consider it necessary to provide toilet facilities. In the event that the applicants do decide to install a domestic wastewater disposal and treatment system for staff I am satisfied that on-site wastewater disposal will be feasible given the nature of the underlying soils, and available area and that any necessary assessment will be a requirement of Building Consent. No conditions are recommended in relation to wastewater disposal.
	Stormwater		Stormwater will be disposed of on site. Based on underlying gravels within the site I am satisfied that there are no issues on-site that would preclude SW disposal to ground. Therefore, I am satisfied that stormwater disposal can be adequately addressed by the Building Consent process and no conditions are required in relation to stormwater disposal for this consent.
	Power & Telecoms		Conditions are recommended to ensure that tall electricity or telecommunications connections to the proposed building are placed underground.
	Consent notice/Covenants		
	There is no consent notice or covenant registered on this title.		

TITLE	Consent notice/Covenants	There is no consent notice or covenant registered on this title.	
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RECOMMENDED CONDITIONS

It is recommended that the following conditions are included in the consent decision

General

1. All engineering works shall be carried out in accordance with the Queenstown Lakes District Council's policies and standards, being New Zealand Standard 4404:2004 with the amendments to that standard adopted on 5 October 2005, except where specified otherwise.

To be completed prior to the commencement of any works on-site

2. The consent holder shall install measures to control and/or mitigate any dust, silt run-off and sedimentation that may occur, in accordance with NZS 4404:2004 and '*A Guide to Earthworks in the Queenstown Lakes District*' brochure, prepared by the Queenstown Lakes District Council. These measures shall be implemented **prior** to the commencement of any earthworks on site and shall remain in place for the duration of the project, until all exposed areas of earth are permanently stabilised.

To be completed when works finish and prior to the operation of sludge drying facility

3. Prior to the operation of sludge drying facility, the consent holder shall complete the following:
 - a) The provision of an access way to the facility that complies with the guidelines provided for in Council's development standard NZS 4404:2004 with amendments as adopted by the Council in October 2005.
 - b) Any power supply or telecommunications connections to the building shall be underground from existing reticulation and in accordance with any requirements and standards of the network provider.
 - c) All earthworked/exposed areas shall be top-soiled and grassed/revegetated or otherwise permanently stabilised.
 - d) The consent holder shall remedy any damage to all existing road surfaces and berms that result from work carried out for this consent.

Recommended Advice Notes

1. This consent triggers a requirement for Development Contributions, please see the attached information sheet for more details on when a development contribution is triggered and when it is payable. For further information please contact the DCN Officer at Council.

Prepared by:

Lyn Overton
RESOURCE MANAGEMENT ENGINEER

Reviewed by:

Steve Hewland
CONSULTANT ENGINEER

Rachel Beer

Subject: FW: Sludge Drying Facility near Luggate - NZTA comment received 25/07/2014

From: Lynette Overton
Sent: Monday, 1 September 2014 2:30 PM
To: Jane Sinclair
Subject: FW: Sludge Drying Facility near Luggate - NZTA comment received 25/07/2014

FYI

From: James Coutts [<mailto:James.Coutts@nzta.govt.nz>]
Sent: Friday, 25 July 2014 2:10 PM
To: Lynette Overton
Subject: RE: Sludge Drying Facility near Luggate - NZTA comment received 25/07/2014

Hi again Lyn

We can't guarantee any effects or otherwise on the bridge. The bridge is not subject to use restrictions, and heavy vehicles can use it at present. All I can really say is that the evidence we have received to date does not raise any concerns, hence our decision to not submit on the proposal.

Regards,

James Coutts / Planner

Planning and Investment

DDI 64 3 955 2930

E james.coutts@nzta.govt.nz / W nzta.govt.nz

Dunedin Office / Level 2 AA Centre, 450 Moray Place, Dunedin

PO Box 5245, Moray Place, Dunedin 9058, New Zealand



Please consider the environment before printing this email

From: Lynette Overton [<mailto:Lynette.Overton@qldc.govt.nz>]
Sent: Friday, 25 July 2014 1:43 p.m.
To: James Coutts
Subject: RE: Sludge Drying Facility near Luggate

Thank you James,
A number of the submitters have concerns over the impact vehicles will have on the Historic Luggate Bridge. Do you consider this a reason for concern?
Regards
Lyn

From: James Coutts [<mailto:James.Coutts@nzta.govt.nz>]

Sent: Friday, 25 July 2014 1:40 PM

To: Lynette Overton

Subject: RE: Sludge Drying Facility near Luggate

Hi Lyn

We have looked at this proposal in-house and do not consider there will be any adverse effects on the State highway. The proposal is not expected to generate a large number of vehicle movements, and those that it will generate will join the highway through a fully-formed intersection.

Regards,

James Coutts / Planner

Planning and Investment

DDI 64 3 955 2930

E james.coutts@nzta.govt.nz / **W** nzta.govt.nz

Dunedin Office / Level 2 AA Centre, 450 Moray Place, Dunedin

PO Box 5245, Moray Place, Dunedin 9058, New Zealand



Please consider the environment before printing this email

From: Lynette Overton [<mailto:Lynette.Overton@qldc.govt.nz>]

Sent: Friday, 25 July 2014 12:48 p.m.

To: James Coutts

Subject: Sludge Drying Facility near Luggate

Hi James,

As discussed by phone recently. Could you please confirm that you have no concerns with the impact resulting in the increase of traffic numbers using the Luggate Red Bridge to access the proposed Fulton Hogan Sludge Drying Facility. An immediate response would be appreciated as I would like to get my response to the planner today, thank you.

Regards

Lyn

<p>Lyn Overton (BSurv, ANZIS) Resource Management Engineer Planning & Infrastructure Queenstown Lakes District Council DD: +64 3 450 0336 P: +64 3 441 0499 M: +64 21 226 9900 E: lynnette.overton@qldc.govt.nz</p>	<p>QUEENSTOWN LAKES DISTRICT COUNCIL www qldc govt nz</p>
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APPENDIX 5

Environmental Health Report



OFFICE MEMO

FILE REF: RM140133

TO: Jane Sinclair

FROM: Jodi Yelland

DATE: 17 April 2014

SUBJECT: Fulton Hogan Ltd.

1.0 INTRODUCTION

I have reviewed the application by Fulton Hogan Ltd. to establish a solar drying facility at the current Fulton Hogan quarry site on Luggate –Tarras Road, State Highway 8A, which is zoned Rural General. Consent is sought for 35 years.

Approximately 1000 tonnes of secondary solids from the Wanaka Wastewater Treatment Plant ('Project Pure') will be transported to the proposed site per annum. The solids will be deposited in a glasshouse containing a Wendewolf mechanical agitator (a turning and conveying wall mounted machine) which will constantly aerate the solids to assist with the drying effect. Drying relies on solar radiation to dry the surface of the solids in addition to active (by fans) and passive ventilation. The process of drying the material and reducing the water content from 80% to 15% takes 12-14 months to produce the end dried product.

The number of loads transported from Project Pure to the solar drying facility is predicted to be on average 1.12 loads per day, five days a week with a maximum of four loads in one day. Once the drying process is complete up to two loads per day will be removed. The operation will generally run Monday to Friday unless an incident requires operation at the weekend.

The application has been assessed in regards to noise, dust and odour.

2.0 DISCUSSION

Noise

The site is located in the Rural General Zone and pertinent noise rules are as follows:

- (a) Sound from non-residential activities measured in accordance with NZS 6801:2008 and assessed in accordance with NZS 6802:2008 shall not exceed the following noise limits at any point within the notional boundary of any residential unit, other than residential units on the same site as the activity:

Daytime (08:00 to 20:00) 50 dB L_{Aeq(15min)}

Night-time (20:00 to 08:00) 40 dB L_{Aeq(15min)}

Night-time (20:00 to 08:00) 70 dB L_{A,F,max}

Potential noise sources include trucks delivering and removing the secondary solids, the Wendewolf agitator, ventilation fans, the motor driven roof flaps and loaders digging out the solids (and aerating the solids should there be a breakdown in the Wendewolf agitator).

The closest residential property is 85 Church Road across the Clutha river. The notional boundary is approximately 850m west from the proposed activity. There is existing industrial activity in the area to include the Luggate Sawmill, and Central Trusses and Frames which are both within 600m of the closest residential property. The Luggate township is approximately 2 km southwest. The site itself is rural pasture and is screened from the road by trees.

The activity will occur on a consented quarry site and will be occurring during daylight hours. Generally the site will be manned for approximately 2 hours a day. The applicant has provided an Assessment of Environmental Effects report for the Solar Drying Facility.

Wendewolf solar drying facility

The Wendewolf solar drying facility will be operating 24 hours per day. This machinery is cited as being essentially silent. There may be some noise associated with the fans and the motor-driven roof flaps. Due to the distance to residential activity on the opposite side of the river it is very unlikely that noise will be audible at the closest residential dwelling 850m away. There is nothing to suggest that District Plan limits will be breached.

Vehicles

Traffic movements are likely to be an average of 1.12 truck loads per day, with a maximum of four loads per day, Monday to Friday. When the secondary solids have dried to approximately 1/5 of their original mass up to two truck loads per day will be removed for distribution on rural land. There is also likely to be a front end loader operating to load the trucks which remove the dried solids.

Due to the nature of the site, truck movements being very intermittent and the distance to the nearest residential neighbour vehicle movements associated with the proposed operation are unlikely to breach the District Plan noise limits at a distance of 850m.

Odour

Specialist Environmental Services Ltd produced a report concerning 'contaminant discharges into air' including odour on 26 January 2014.

The secondary solids will be stored in a glasshouse approximately 108m (long) x 13m (wide) x 4m (high). The glasshouse will have a computer controlled active and passive ventilation system to assist with the drying, in addition to the mechanical agitation. Deliveries of secondary solids will be driven into the glasshouse and deposited on the processing floor. Mature fertiliser will be removed from the other end of the glasshouse loading straight onto trucks for spreading. No stockpiling of the final material is proposed.

The site itself is reasonably isolated on the Luggate-Tarras Road and screened by trees. There is a large separation distance between sensitive sites on neighbouring properties. The closest dwelling is 850m to the west, there is a lifestyle dwelling 1000m to the northwest on Kane Road and Luggate is 2km southwest. The location of the site and the prevailing winds (from the west/northwest) are blowing away from the nearest residential location and Luggate indicating that odour will unlikely be detected at these locations.

A rural location has been chosen to reduce the impact of perceived odour. Trucks entering and leaving the location will be covered. Trucks unload directly into the enclosed facility to minimise the odour and likelihood of a spill causing odour outside of the normal operation. The constant airflow into the facility mitigates the build up of odour. Some odour maybe experienced during unloading, however, this would be brief, if noticed at all, as the prevailing winds will carry this away from residential dwellings both in close proximity and Luggate.

Dust

The Environmental Effects Assessment report states that a maximum of 950m³ of material needs to be excavated for the site to position the facility 0.5m below the current ground level. Water will be available to wet down areas should dust become an issue. Compaction will occur as soon as excavation is complete.

The access road onto the site has been sealed and there is a 200 m long road from the edge of the quarry site to the proposed facility which is proposed to be sealed within two years of operation. A 30km/h speed limit is to be enforced during this time to minimise dust emissions. Water will be onsite during summer to wet down where necessary. Truck movements usually associated with the activity are likely to be 1.12 loads per day with a maximum of five loads per day (Monday to Friday) to include one for removal.

The proposed activity is to be located on an active and consented quarry site. The likelihood of excessive dust generation from the proposed activities is minor in comparison to the activity already occurring.

Summary

The proposed site is close to Project Pure thus minimising the disruption caused by vehicle movements. The site itself is well screened and the secondary solids are housed within an enclosed glasshouse. The proposed site has no near neighbours with the closest approximately 850m west over the Clutha river.

Noise is unlikely to breach the District Plan limits due to the distance of the nearest receptors and the operation of the facility being quiet in its nature. Dust mitigation methods have been cited and appear to be sufficient to manage any potential dust issues additional to those associated with the sites quarry activities. Odour is managed through the nature of the facility being enclosed and constantly aerated to dry solids out and minimise bacterial growth. The prevailing winds blow away from the nearest neighbour and Luggate township.

The proposed activities are unlikely to have a more than minimal impact in terms of noise, odour or dust.

2.0 CONCLUSION

Should consent be granted I recommend the following conditions of consent be imposed:

1. The consent holder shall ensure that the activities be so conducted that the following noise limits are not exceeded neither at, nor within, the notional boundary of any residential site in the Rural General Zone, other than that of residential units on the same site (and other than those that have provided affected party approval):

daytime (08:00 – 20:00)	50 dB L _{Aeq(15 min)}
night-time (20:00 – 08:00)	40 dB L _{Aeq(15 min)}
night-time (20:00 – 08:00)	70 dB L _{AFmax}

2. Within 6 months of the date of this decision; and/or upon the receipt of information identifying non-compliance with the conditions of this consent, the Council may, in accordance with Sections 128 & 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this resource consent for any of the following purposes:

(i) There is or is likely to be an adverse environmental effect as a result of the exercise of this consent, which was unforeseen when the consent was granted.

(ii) Monitoring of the exercise of the consent has revealed that there is or is likely to be an adverse effect on the environment.

- (iii) There has been a change in circumstances such that the conditions of the consent are no longer appropriate in terms of the purpose of the above Act.
3. A comprehensive Environmental Management Plan shall be completed for the operation of the Solar Drying Facility within 6 months of operation. This plan shall be provided to Council for approval.
 4. Vehicle movements entering and onsite to 30kmp/h must be restricted to.
 5. The applicant must seal the 200m of access road within 2 years of operation to minimise dust.

Report prepared by
QUEENSTOWN LAKES DISTRICT COUNCIL



Jodi Yelland
ENVIRONMENTAL HEALTH OFFICER

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Zoe Hammett
SENIOR ENVIRONMENTAL HEALTH OFFICER