**FOR DISCUSSION PURPOSES ONLY – FURTHER REFINEMENTS MAY BE MADE BY THE APPLICANT PRIOR TO CLOSING.**

***OFFICER SET OF CONDITIONS – LAND USE CONSENT RC185627***

General Conditions

1. Except as required by subsequent conditions the development shall proceed in accordance with the information and plans submitted with the application submitted on 20 November 2018 and subsequent further information submitted on 12 March 2019 and 16 August 2019. The Approved Consent Documentation has been entered into Council records as RC185627. Where there is any conflict between the application and the conditions, the conditions of consent shall prevail.

**Location of Quarry**

1. The area to be excavated shall be in accordance with the area shown on the attached RC185627A plan dated December 2019. This is the quarry area within the quarry site.

**Lapse and Expiry**

1. The consent holder is to notify the Team Leader Resource Consents, Selwyn District Council, at least 5 working days prior to commencement of activities authorised by this consent.
2. Pursuant to section 125 of the Resource Management Act 1991 this consent shall lapse five years after the date of this consent unless either the consent is given effect to, or the council has granted an extension pursuant to section125(1)(b) of the Act.

Management Plans and Works to be Completed Prior to Commencement of Quarry Operations

**Preparation of Plans**

1. The site shall operate in accordance with the following management plans:
2. Landscape Management Plan
3. Transportation Management and Routing Plan
4. Roydon Quarry, SH1 / Dawsons Road Queue Management Plan
5. Noise Management Plan.
6. Rehabilitation Management Plan.

In the event of an inconsistency between the management plans and a condition of this consent, these conditions shall prevail.

**Certification**

1. The following shall apply in respect of any condition which requires the consent holder to provide the Council with a plan or similar document ‘for certification’
2. the consent holder shall provide the plan to the Council in accordance with the timeframe specified in the applicable condition;
3. the consent holder may commence the activities to which the plan relates in accordance with the submitted plan, unless the Council advises the consent holder in writing within 20 working days of receipt of the plan that it refuses to certify it, on the grounds that it fails to meet the requirements of the condition which requires such a plan to be provided, and the Council provides reasons why that view is held;
4. should the Council refuse to certify the plan, the consent holder shall submit a revised plan to the Council for certification. Clause (b) shall apply for any resubmitted plan;
5. once certified the plan may be varied by the consent holder. The certification process for any variation to the plan shall follow the process outlined in clauses (a) to (c) above. The activities subject to the variation shall not commence until the variation has been certified by the Council. Any amendment shall be consistent with the conditions of the resource consent and the original objectives or purpose stated within the Management Plan and any changes shall be reported at the following Community Liaison Group meeting.
6. This resource consent and a copy of the Council certified versions of all the management plans required by this consent shall be kept on site at all times, and the consent holder shall ensure all personnel are made aware of each plan's contents, where the plan relates to activities that those personnel are responsible for.

**Supervision and Notification**

1. The consent holder shall appoint a representative(s) prior to the exercise of this resource consent, who shall be the Council’s principal contact person(s) in regard to matters relating to this consent.
2. All quarrying works shall be overseen by a suitably qualified and experienced quarrying practitioner.

*Advice Note: Should any persons change during the term of this resource consent, the Consent holder shall inform the Team Leader – Compliance Environmental Services, Selwyn District Council (compliance@selwyn.govt.nz) and shall also give written notice to the Team Leader of the new person’s name and how they can be contacted as soon as practicable.*

**Site Preparation and Landscaping**

Landscape Management Plan

1. The consent holder shall prepare a Landscape Management Plan for certification by the Selwyn District Council in accordance with condition 6). The purpose of the Landscape Management Plan is to provide detail on how condition 12) will be achieved for the duration of this consent. Establishment of landscape works (including bunding and planting) shall not occur until Selwyn District Council has certified the Landscape Management Plan in accordance with condition 6). The Landscape Management Plan shall, as a minimum, include:
2. Details of all bunding and landscape planting to be established prior to quarrying operations commencing;
3. Details of any bunding and landscape planting to be established after quarrying operations commence;
4. The methodology for establishing landscape planting required by (a) and (b);
5. The maintenance requirements of all landscape features for the duration of the consent; and
6. The process for review of the Landscape Management Plan.
7. The consent holder shall ensure that all quarry activities are undertaken in a general accordance with the certified Landscape Management Plan.
8. Prior to quarrying operations commencing on the site, and for the duration of quarrying operations, site bunding, landscaping, a walking track and viewing platform shall be established and maintained in accordance with Visual Impact Assessment by DCM Urban, referenced as Appendix E of the Resource Consent Application report by Golder Associates dated November 2018 together with subsequent updates to this documentation from the 12 March 2019 and 16 August 2019 further information responses, and figures dated 5 December 2019 provided to the hearing panel. These shall include:

*Bunding*

1. Establishment of 3 m high earth bunds around the site perimeter, with the exception of site accessways, with a 1 m wide flat top shall be constructed around the site. The bunds shall have a profile with an outside slope of up to 1:3 (one vertical to three horizontal) and a 1 m wide top and shall have a minimum width of 15 m.
2. Overlapping bunding, or a planted island barrier, shall be established to the heavy vehicle accessway entrance adjacent to Jones Road, so as to obscure views into the quarry from Jones Road (as per the example shown on Page 25 of the LVIA prepared by DCM Urban, Project No. 2017\_31, dated 12 August 2019, or as otherwise may be approved by the Team Leader, Resource Consents).
3. As soon as practicable following construction of the bunds, the bunds are to be sown with grass or hydro-seeded to achieve swift grass cover and watered regularly to ensure grass cover is established and maintained.
4. To assist in achieving swift grass cover, construction of the bunds shall take place outside of summer months and in favourable weather, to avoid significant potential dust risk (e.g. during the months of February to November inclusive) and enable grassing of the bunds to occur in autumn or spring, in order to align with periods of good grass strike.
5. The grassed bunds shall be mown regularly or grazed to give a tidy appearance.
6. The grassed bunds shall be watered, when required to suppress potential dust, until a grass cover has been established. An 80% grass cover is to be maintained on earth bunds at all times during quarry operations.
7. To ensure the survival of the existing shelter belts (identified on the figure Mitigation Measures – Edge Treatments on Page 17 of the LVIA) bunds should not be constructed within 1 m of the base of trees. Where no shelterbelt currently exists, bunding shall be setback at least 4 m from the site boundary. This design is shown in the Edge Treatments included on pages 19-22 of the LVIA prepared by DCM Urban, Project No. 2017\_31, dated 12 August 2019.

*Planting*

1. The existing shelterbelts (identified on the figure Mitigation Measures Edge Treatments on Page 17 of the LVIA prepared by DCM Urban, Project No. 2017\_31, dated 12 August 2019) along the site’s road boundary with Curraghs Road, the common boundary with 319 Maddisons Road, and the road boundary adjacent to the dwelling at 107 Dawson’s Road shall be retained. Where there are gaps or where the vegetation is dying or in poor condition these gaps shall be filled with similar tree species to achieve closures of these gaps.
2. An additional row of plantings shall be established behind these existing shelter belts as shown on the Edge Treatments A and C (pages 19 and 21) of the LVIA prepared by DCM Urban, Project No. 2017\_31, dated 12 August 2019. This row of plantings shall be established within the first planting season following the commencement of consent.
3. Along the site boundaries where there is no planting, four rows of plantings shall be established in accordance with the Edge Treatments B and D (pages 20 and 22) of the LVIA prepared by DCM Urban, Project No. 2017\_31, dated 12 August 2019 within the first planting season following the commencement of consent.
4. All planting required for this consent under this condition (condition 12)(i) to (m)) shall be maintained. Any dead, diseased, or damaged planting is to be replaced with plants of a similar species and as soon as practicable, having regard to planting seasons.
5. All planting will be established on the outer side of the bunds.
6. Any plantings along the Jones Road boundary will be maintained at a height of 5 m or less to limit shading of the road carriageway.

*Walking Track and Viewing Platform*

1. A walking track shall be established and maintained around the site perimeter generally in accordance with the Edge Treatments A to D (pages 19 to 22) of the LVIA prepared by DCM Urban, Project No. 2017\_31, dated 12 August 2019 and the subsequent figures prepared byDCM Urban,reference 2017\_031 / 0101 to 0102, dated 5 December 2019. This track shall be established on the consent holder’s land unless the Selwyn District Council agrees in writing that road reserve may be used for this purpose.
2. A viewing platform shall be provided by the applicant generally in accordance with that shown on the figure prepared byDCM Urban,Viewing Platform, reference 2017\_031 / 0102, dated 5 December 2019. The location of this platform may change as the quarry develops.

Site Access

1. Vehicle access shall be provided on Jones Road, between Curraghs and Dawsons Road, for light and heavy vehicles. This access point shall be designed and constructed/ upgraded in general accordance with the recommendations of the Stantec ITA (Appendix C of the AEE). The heavy vehicle access shall be located at least 250 me from the dwelling at 1090 Main South Road.
2. Roading upgrades shall be undertaken in general accordance with the Stantec ITA (Appendix C of the AEE). This shall include provision of a roundabout on Dawsons Road and roading upgrades on Jones Road.
3. The roading improvement schemes specified in conditions 13) and 14) above shall be constructed and be fully operational prior to any movement of materials to or from the site.
4. Prior to the commencement of the works required in conditions 13) and 14), the consent holder shall provide detailed designs to the Council’s Transportation Asset Manager for technical review and certification.
5. The consent-holder shall arrange for a detailed design road safety audit to be carried out of the Jones Road / Dawsons Road roundabout. The audit shall be carried out by a suitably-qualified, independent traffic engineer. Matters raised in the audit shall be considered by the consent-holder, and the audit and outcomes will be provided to the Council.

Operational

*General*

1. The hours of operation are 7.00 am to 8.00 pm, Monday to Saturday. Outside of these hours restricted processing operations and load out of trucks may occur as detailed in Table 1 below.

Table 1: Hours of operations/activities.

| **Hours** | **Duration** | **Range of activities** |
| --- | --- | --- |
| 6.00 am to 7.00 am | Monday to Saturday | Load out of trucks and truck movements, site pre-start up including operational warm up of conveyors and machinery.  Cleanfill deposition. |
| 7.00 am to 6.00 pm | Monday to Saturday | Full range of quarry activities. |
| 6.00 pm to 8.00 pm | Monday to Saturday on up to 150 days per annum. | Full range of quarry activities except mobile plant processing and working of cleanfill. |
| 8.00 pm to 6.00 am. | Monday to Saturday on up to 60 nights per annum. | Load out of trucks and truck movements, and cleanfill deposition. |
| Sunday and public holidays | For up to 15 days per year (but on no more than 5 public holidays). | Load out of trucks and truck movements and cleanfill deposition. |
| At all times, dust suppression, operation of weighbridge office activities, site security and light maintenance as required.  NB: ‘Cleanfill deposition’ above, means the unloading of cleanfill at the site, but not the working of cleanfill. | | |

1. No aggregate processing or transportation from the site shall take place prior to the opening of the Christchurch Southern Motorway Stage 2 (CSM2) and the establishment of the bunds required by condition 12).
2. Truck movements outside the hours of 6.00 am to 8.00 pm Monday to Saturday shall be restricted to no more than 30 vehicle movements per hour. Truck movements on Sundays and public holidays shall also not exceed 30 vehicle movements per hour.
3. Heavy vehicle movements leaving or accessing the Roydon Quarry between the hours of 8.00 pm and 6.00 am shall not travel on the following roads:
4. Jones Road west of access (between the access and Curraghs Road)
5. Dawsons Road north of Jones Road (between Jones Road and Maddisons Road)
6. Jones Road east of Dawsons Road (between Dawsons Road and Railway Terrace)

*Excavation*

1. The consent holder shall establish a surveyed datum point at local ground level in an area that will not be excavated. This point shall be used to certify the depth of excavation and cleanfill at any point within the consent holder’s site.
2. Should the groundwater water level increase (at times of high-water table) so that the separation is less than 1 m between the measured groundwater levels and the base of the quarry floor, the consent holder shall apply virgin materials (aggregate sourced from within the site, opposed to imported cleanfill) in these areas, so as to re-establish a 1 m separation distance. Such actions shall be reported to the Team Leader – Compliance Environmental Services, Selwyn District Council (compliance@selwyn.govt.nz) within one month of the work being undertaken. This requirement shall not apply to any areas which have already been rehabilitated.
3. All stockpile volumes shall have a maximum total volume of 200,000 m3 at any one time and shall be located below the height of the level of the bunds.
4. Site areas shall be limited to a maximum area in accordance with the following specified open ground limitations, at any one time, as set out in Table 2 below:

Table 2: Open area limits for active quarrying.

|  |  |
| --- | --- |
| **Purpose** | **Area (ha)** |
| Central processing area, its fixed plant, stockpiles, portable plant etc. | 7 |
| Excavation in process | 5 |
| Fill and rehabilitation in process | 5 |
| Site roads – unsealed | 5 |
| Field conveyor, service lanes | 4 |
| Total active area | 26 |
| The above areas exclude the sealed access road(s) and any site buildings. | |

1. Any roads within the central processing area shall be sealed as shall the access road(s) into the site.

*Setbacks*

1. Any fixed and mobile processing plant and associated stockpiling shall be set back at least 500 m from the site boundaries, within the CPSA.
2. No extraction shall occur within 200 m of any dwelling existing at [the date of consent being granted]as shown on RC185627A without the prior written consent of the owners of these dwellings.

*Keeping of Records*

1. At the conclusion of each stage, the consent holder shall forward a progress report to the Team Leader – Compliance Environmental Services, Selwyn District Council (compliance@selwyn.govt.nz). The report will note the volume of material extracted, the amount and type of fill placed, the area of excavation that remains open, and the number of daily truck movements associated with the operation during that stage. Each report will include a plan showing the area which has been worked during the applicable period.

Traffic

1. Heavy vehicle movements shall not exceed a maximum of 1,200 movements per day. For the avoidance of doubt, this would equate to 600 trucks entering the site each day, and 600 trucks exiting each day. Records of heavy vehicle movements shall be kept in sufficient detail to enable monitoring of this to take place and shall be provided to the Council on an annual basis together with confirmation that this has not been exceeded.
2. Heavy vehicle movements shall not exceed more than 800 movements per day, as an average, over any consecutive 60 calendar day period. For the avoidance of doubt, this would equate to 400 trucks entering the site each day, and 400 trucks exiting each day. Records of heavy vehicle movements shall be kept in sufficient detail to enable monitoring of this to take place and shall be provided to the Council on an annual basis together with confirmation that this has not been exceeded.
3. The Consent Holder shall take all practicable steps to ensure:
4. heavy vehicles associated with the operations of the quarry shall not travel on those parts of any roads within the area identified on Figure RC185627B, unless the vehicle movement is for a delivery to a site within the area identified on Figure RC185627B; and
5. heavy vehicles associated with the operations of the quarry do not use engine brakes when onsite and while on Jones Road approaching or leaving the site.

*Transportation Management and Routing Plan*

1. The consent holder shall prepare a Transportation Management and Routing Plan for certification by the Selwyn District Council in accordance with condition 6). The purpose of Transportation Management and Routing Plan is to provide detail on how condition 21) and condition 32) will be achieved, and to ensure all truck operators are aware of the potential safety hazards present on roads in the vicinity of the quarry, including safe travel procedures across the Dawsons Road railway level crossing. Quarry operations shall not occur until Selwyn District Council has certified the Transportation Management and Routing Plan in accordance with condition 6).

The Transportation Management and Routing Plan shall include, as a minimum:

1. Formal codes of practice for all drivers;
2. Formal induction processes for all drivers;
3. A requirement for non-consent holder controlled truck drivers accessing the site to sign on to codes of practice;
4. Appropriate onsite signage; and
5. The process for review of the Transportation Management and Routing Plan.

The consent holder shall ensure that all quarry activities are undertaken in a general accordance with the certified Transport Management and Routing Plan.

*Site Access*

1. The internal site access road will be sealed for its entire length and used in conjunction with a rumble strip and wheel wash to assist in removing muddy material from vehicle wheels before exiting the site.
2. To avoid material being deposited, dropped or tracked onto Jones Road from the application site, the following measures shall be put in place for the heavy vehicle access road:
3. Any unsealed portion of the access road connecting to the sealed part of access road is to have clean chip placed on it to minimise dust and movement of larger material to the sealed portion of the access;
4. At least the first 100 m of the sealed portion inside the site boundary of the heavy vehicle access road is to be inspected daily and debris swept as required.
5. The edges of the sealed access road shall be inspected and maintained, particularly where pot holes emerge. Before they are filled, pot holes shall be coned off to avoid further damage and likelihood of material transfer to the road;
6. Trucks shall be inspected (which may be by camera) at the weighbridge with the purpose of identifying and minimising the risk of material being carried onto Jones Road.
7. The length of Jones Road from Dawsons Road to the site’s vehicular entrance must be regularly inspected by the consent holder for sediment tracked by vehicles to and from the site. In the event that any sediment does get tracked onto the public roadway from the site, all material must be removed immediately. A record of when road cleaning has taken place must be retained and must be made available to Council on request and otherwise provided to the Council annually.

*Roydon Quarry, SH1 / Dawsons Road Queue Management Plan*

1. Within three months of the date of commencement of this consent the Consent Holder shall submit a Roydon Quarry, SH1 / Dawsons Road Queue Management Plan (‘the QMP’) to the Team Leader - Compliance Environmental Services, Selwyn District Council (compliance@selwyn.govt.nz) for certification in accordance with condition 6).
2. The QMP required by condition 37A) shall be prepared by a suitably qualified, independent and experienced traffic engineer and shall be in general accordance with the draft Roydon Quarry, SH1 / Dawsons Road Queue Management Plan attached as [insert reference to draft plan provided to hearing panel] (prepared by Stantec: Version X November 2019).
3. The objective of the QMP shall be to ensure that the operation of the quarry does not result in a change in safety risk at the roundabout on SH1 / Dawsons Road.
4. Safety at the roundabout shall be assessed in accordance with a fit for purpose Safety Risk Assessment which is carried out in accordance with the approach set out within Section 2 of the draft Roydon Quarry, SH1 / Dawsons Road Queue Management Plan attached as [insert reference to draft plan provided to hearing panel] (prepared by Stantec: Version X November 2019) or any subsequent amendment made to that Section within the Plan required by condition 37A).
5. The QMP shall include details relating to:
6. The monitoring required to identify any changes in the operation and safety risk at the SH1 / Dawsons Road roundabout arising from the impact of quarry operations on northbound traffic queuing back from the railway level crossing into the roundabout, and southbound traffic on Dawsons Road queuing back from SH1 towards the railway, including:
   * 1. baseline traffic monitoring (required to be undertaken prior to the quarry becoming operational);
     2. monitoring after the quarry is established, operational and open to the public; and
     3. where required, repeat monitoring for an established and operational quarry;
7. How it will be determined whether mitigation is required and the methods required to address the assessed safety risk arising from the operation of the quarry;
8. The procedures and timeframes for the installation of the mitigation measures (if any);
9. How any required mitigation will be monitored for effectiveness and any ongoing review requirements for the QMP; and
10. Reporting requirements.
11. Prior to submitting the Final Roydon Quarry, SH1 / Dawsons Road Queue Management Plan to the Council for certification the Consent Holder shall provide the New Zealand Transport Agency KiwiRail, Selwyn District Council and Christchurch City Council with the opportunity to participate in a collaborative workshop with the Consent Holder to discuss a draft of the QMP (‘Draft QMP).
12. If New Zealand Transport Agency, KiwiRail, Christchurch City Council and/or Selwyn District Council agree to participate in a workshop:
13. The Consent Holder shall provide a copy of the Draft QMP to these parties (depending on which attends) of the organisations at least 10 days before the workshop;
14. The Consent Holder shall circulate a record of the workshop discussion to the attendee(s) within 5 working days of the completion of the workshop.
15. The attendee(s) shall be given the opportunity to provide written feedback to the Consent Holder on the Draft QMP within 15 working days of the completion of the workshop.
16. If no feedback is received by that deadline the Consent Holder can proceed to finalise the QMP.
17. If New Zealand Transport Agency, Kiwi Rail, Christchurch City Council and/or Selwyn District Council decline the opportunity to participate in a collaborative workshop the Consent Holder shall provide a copy of the Draft QMP to the relevant organisation and they shall be given 15 working days to provide written feedback to the Consent Holder on its content.
18. At the completion of the process set out in conditions 37F), 37G) and/or 37H), the Consent Holder shall submit the completed QMP to the Consent Authority for certification that it is consistent with the objective set out in condition 37C). The Consent Holder shall ensure that all written feedback received from the New Zealand Transport Agency, Kiwi Rail, Christchurch City Council and/or Selwyn District Council on the Draft Plan in accordance with conditions 37G) or 37H) is provided to the Consent Authority at the time the Plan is submitted for certification, along with a clear explanation of where any comment has or has not been incorporated into the QMP and the reasons why.
19. The Consent Holder shall ensure that a copy of the certified QMP is provided to the Community Liaison Group at the nearest scheduled meeting.
20. Once certified, the Consent Holder shall implement the QMP.
21. Once the QMP is certified, the Consent Holder shall report to the New Zealand Transport Agency, Kiwi Rail, Christchurch City Council, Selwyn District Council, the Community Liaison Group at the following times:
22. At the completion of baseline monitoring and prior to the quarry commencing operation;
23. Six months after the quarry is established, operational and open to the public; and
24. Annually thereafter for a period of three years, or until the New Zealand Transport Agency and KiwiRail agree no further monitoring and mitigation is needed to achieve the objective set out in condition 37C), whichever is earlier.

Each report shall contain the following details:

1. A description of the monitoring undertaken during the reporting period and analysis of the results;
2. A description of any mitigation measures implemented during the reporting period, or planned for the following reporting period; and
3. Any amendments identified as being necessary to the QMP for the following reporting period.
4. The QMP is intended to be an adaptive document. It may be updated by the Consent Holder at any time provided that prior to doing so further consultation and collaboration occurs with the New Zealand Transport Agency and KiwiRail. Any changes made to the QMP shall be consistent with achieving the objective set out within condition 37C). Any updated provisions shall only apply once the updated QMP has been re-certified by the Consent Authority.

Noise

1. All activities on the site (other than construction), measured in accordance with the provisions of NZS 6801:2008 “Acoustics – Measurement of environmental sound”, and assessed in accordance with NZS 6802:2008 “Acoustics – Environmental Noise”, shall not exceed the following noise limits at any point within any other site, during the following times:
2. Daytime 0700 to 1800 hrs 55 dB LAeq
3. Evening 1800 to 2000 hrs 50 dB LAeq
4. Night 2000 to 0700 hrs 45 dB LAeq and 70 dB LAmax
5. In order to permit vehicle access onto the site, the noise limits above shall not apply to vehicle movements when measured within 250 m of the site’s heavy vehicle entrance.
6. Construction activities including the establishment of the site, roadworks, topsoil stripping, bund construction deconstruction and topsoil spreading, and formation of final batter slopes, shall be conducted in accordance with NZS 6803: 1999 “Acoustics - Construction Noise”, and shall comply with the “typical duration” noise limits contained within Table 2 of that Standard.
7. Should audible vehicle reversing alarms be required on quarry-based equipment or trucks owned by the consent holder, only broadband noise alarms are to be used.
8. Between the hours of 8.00 pm and 6.00 am, the consent holder shall not allow trucks or quarry-based equipment to be used on the site which use tonal reversing alarms. (i.e. machinery and trucks shall use broadband or hiss beepers or similar, or alternatively flashing lights, which meet workplace safety requirements).

*Noise Management Plan*

1. The consent holder shall prepare a Noise Management Plan for certification by the Selwyn District Council in accordance with condition 6). The purpose of the Noise Management Plan is to detail the methods that will be used to comply with conditions 38)to 42) and to manage noise effects to an acceptable level.

As a minimum the Noise Management Plan shall describe:

1. the proposed managerial measures to be used to control noise generated by the operator.
2. the role of staff in the management of noise and nominate the specific staff member(s) responsible for overseeing the implementation and upkeep of the Plan.
3. The procedures should any complaint in relation to noise be received.
4. A procedure for advising nearby properties of any proposed Sunday or public holiday works.
5. The process for review of the Noise Management Plan.
6. Noise emissions from the site shall be measured and assessed in accordance with condition 38) above, by a suitably qualified and experienced acoustic consultant at the following stages:
7. Once within the first 12 months following the commencement of gravel extraction activities,
8. Once when excavation advances to within 400 m of the dwellings at 319 Maddisons and 151 Curraghs Road
9. Once when rehabilitation activities are undertaken within 400 m of the dwellings at 319 Maddisons and 151 Curraghs Road

On each occasion, a report describing the measurement results shall be submitted to the Team Leader – Compliance, Environmental Services, Selwyn District Council ([compliance@selwyn.govt.nz](mailto:compliance@selwyn.govt.nz)) within 20 working days of completion of the survey.

Lighting and Glare

1. Lighting from the site shall be directed downwards and shall have a maximum light spill not exceeding 3-lux spill on to any part of any other adjoining property, in accordance with Rule 9.18.1.2 contained in Part C of the Rural Volume of the Selwyn District Plan.
2. All lighting for the site will be designed and installed by an appropriate and recognised lighting specialist, in general accordance with the Lighting Plan prepared by Ideal Supplies Ltd. Lighting Design reference 3242 and dated 5 August 2019.

Airport Operations and Bird Strike

1. No activities shall take place in the floor of the quarry which involve feeding and or encouragement of birds. The quarry shall be managed to ensure that any surface ponding drains freely while rehabilitated areas shall be designed and finished to be free draining surfaces, as provided for in the Draft Quarry Rehabilitation Plan (Appendix G of the AEE).
2. An emergency contact person responsible for on-site operations, and their contact details, shall be provided to Christchurch International Airport Limited (CIAL) prior to this consent being exercised. This will enable prompt contact with the consent holder to be made by CIAL for any issues that may arise on-site that need urgent action to prevent conflict with airport operations, including but not limited to dust generation, glare from any operations and bird management. If the emergency contact person should change during the exercise of this consent, the consent holder shall advise CIAL of the new contact details for the new emergency contact person.
3. Subject to prior contact with the on-site operations managers, CIAL’s planning staff and/or Wildlife Management Officer may arrange visits to the site by Ornithological or Pest Management Consultants and their staff for the purposes of pest bird monitoring or management and to assess and make recommendations that relate to the mitigation of bird strike risk.
4. Solid waste shall be disposed of to an approved solid waste facility by an appropriately-licenced operator. Solid waste shall be held in wheelie bins or similar appropriate containers designed to avoid attracting birds or rodents, to shelter the contents from rainfall, and to secure the waste in the event of windy conditions.
5. CIAL shall be provided with an opportunity to participate in the development and review of management plans for the duration of the consent to ensure that the plans are being implemented and as changes are needed, these are being actioned and implemented appropriately. CIAL shall also be consulted on the final land use and rehabilitation activity planned to allow CIAL to provide input on whether it increases risk to airport operations.

Hazardous Substances

1. The only hazardous substances to be stored on site shall be fuel and lubricants for quarry plant and machinery.
2. The total maximum volume of diesel to be stored on site shall not exceed 15,000 litres (L). Diesel storage shall have a Stationary Container Certificate and the storage of all hazardous substances on site shall be in accordance with the requirements of the Hazardous Substances and New Organisms Act 1996.

Demolition

1. Prior to any demolition of the dwellings on the site, asbestos surveys shall be undertaken, and any identified or suspected asbestos containing material (ACM) shall be removed. All asbestos work shall be undertaken by a suitably licenced person(s) in accordance with the Health and Safety at Work (Asbestos) Regulations 2016 and the WorkSafe New Zealand Approved Code of Practice: Management and Removal of Asbestos 2016. The results of the asbestos survey shall be used to determine if asbestos investigation of soil is required around the periphery of the dwellings.
2. When any dwellings on the site have been vacated, prior to demolition, the investigation of lead-based paint in soils around the periphery of the dwellings shall be undertaken and reported to Team Leader - Compliance Environmental Services, Selwyn District Council ([compliance@selwyn.govt.nz](mailto:compliance@selwyn.govt.nz)).

Remediation of Contaminated Material

1. The handling and reuse of contaminated material as identified in the “Preliminary and Detailed Site Investigation”, prepared by Golder Associates (NZ) Limited dated November 2018 and submitted with the application (Appendix H of the AEE) shall be undertaken in accordance with a Remediation Action Plan (RAP). The RAP shall be prepared and submitted to the Team Leader - Compliance Environmental Services, Selwyn District Council ([compliance@selwyn.govt.nz](mailto:compliance@selwyn.govt.nz)) and the Canterbury Regional Council prior to the remediation works commencing.
2. The material identified in condition 56) may be reused in the construction of earth bunds on the site and for rehabilitation of the base of the quarry excavation only if identified as being suitable for doing so in accordance with the RAP prepared under condition 56).
3. The excavation of the material identified in conditions 56) and 57) shall be supervised and validated by a Suitably Qualified and Experienced Practitioner as defined in the NES Contaminated Land Users’ Guide (MfE 2012). On completion of the works, the consent holder shall submit a site validation report to the Team Leader – Compliance, Environmental Services, Selwyn District Council ([compliance@selwyn.govt.nz](mailto:compliance@selwyn.govt.nz)).
4. Prior to undertaking quarrying activities in identified HAIL, the consent holder shall remove any contaminated soils. Validation sampling of the underlying soils shall be completed, to determine the land can be suitably reinstated for rural residential land use, upon the completion of quarrying activities.
5. An unexpected discovery protocol shall be prepared to address the potential for uncovering of contaminated soil/materials during earthworks and extraction, and shall be applicable to the whole development.
6. In the event that soils are unexpectedly found that have visible staining, odours and/or other conditions that indicate soil contamination then work must cease and all workers shall vacate the immediate area, notify the site manager and ensure that the local authorities are informed (via Selwyn District Council and the Environment Canterbury pollution hotline on 0800 76 55 88). No excavation of such soil shall occur without advice from a Suitably Qualified and Experienced Practitioner (**SQEP**) on land contamination and the agreement of the local authorities.

Rehabilitation

1. At least one month prior to the commencement of any activities authorised by this resource consent, the consent holder shall submit a Quarry Rehabilitation Plan (**QRP**) via email to the Team Leader - Compliance Environmental Services, Selwyn District Council ([compliance@selwyn.govt.nz](mailto:compliance@selwyn.govt.nz)) for technical review and certification (or their nominee) in accordance with condition 6). The purpose of the QRP is to describe:
2. The progressive rehabilitation of the site through the stages of extraction; and
3. The methods that will be used to comply with conditions 63) to 71).
4. The QRP shall be in general accordance with the draft QRP submitted to the Selwyn District Council in November 2018 and, as a minimum shall include the following:
5. A description of the proposed rehabilitation works including:
6. The proposed final landform;
7. Whether clean fill or other material will be used in the rehabilitation;
8. The type of land uses that the rehabilitated quarry could support following rehabilitation;
9. The patterns of surface drainage and subsoil drains; and
10. Any landscaping and planting.
11. A program and reasonable timescales for progressive rehabilitation.
12. Measures to mitigate any potential effects arising from undertaking rehabilitation other than those already addressed through quarry site mitigation.
13. Measures to mitigate potential ongoing adverse effects on the stability of adjoining land and its susceptibility to subsidence and erosion.
14. A process for review of the QRP.
15. Rehabilitation of the site shall be undertaken in accordance with the certified QRP and implemented at the completion of each stage of extraction.
16. Rehabilitation work shall only be undertaken during the relevant consented hours.
17. The QRP shall be reviewed annually to assess the need for it to be updated.

A scheduled review of the QRP shall consider the following matters:

1. The rehabilitation activities undertaken during the reporting period.
2. Areas of the site to be quarried (extraction) over the next 12 months.
3. Plans for earthworks, including overburden stripping and disposal, over the next 12 months.
4. Areas of vegetation removed and areas planted during the reporting period.
5. An unscheduled update (out of annual review timeframe) of the QRP shall be triggered, should any of the following circumstances occur:
6. There is a fundamental shift in operational activities relative to those contemplated at the time the QRP was last reviewed (e.g. unscheduled move to a new area).
7. A significant environmental incident occurs (e.g. flooding on the site, causing damage to assets).
8. The final internal slopes of the quarry should be formed to provide an irregular form to the edge of the quarry but at gradients which allow for the placement of topsoil and grass growth. The slope gradient should vary between 1 in 3 and 1 in 6 with an irregular form to negate a linear, uniform appearance of the slopes and to create a more natural appearance.
9. Following completion of quarrying and within 6 months of completion of cleanfilling in a sub-stage, a minimum 300 mm topsoil layer shall be applied over the finished surface level and sown with a suitable grass species or planted with another suitable vegetation.
10. Re-grassing or otherwise vegetating final top soil layers within each rehabilitated sub-stage shall occur within 60 days, to minimise dust generation and erosion losses. If this work is required outside of spring or autumn, the area can be suitably mulched or covered with another form of material to suppress dust from the area until it is appropriate to re sow grass. Irrigation of grass-seeded areas shall be undertaken as required to ensure establishment.
11. Within 12 months, following completion of all aggregate extraction on site, all equipment and machinery shall be removed from the site, and a minimum 300 mm topsoil layer shall be applied over the finished surface level and sown with a suitable grass species or planted with another suitable vegetation. All finished surfaces are to be designed and constructed to be free draining.

Consultation

1. The consent holder shall establish a Community Liaison Group (CLG) in accordance with the following requirements:
2. The purpose of the CLG shall include, but not be limited to, the following:
3. To engage on an on-going and regular basis about matters associated with the operation of the quarry where those matters affect the community and are of mutual interest to the representative parties.
4. to promote the free flow of information between the local community and the consent holder so as to, wherever possible, address any issues that may arise; and
5. to discuss the results of monitoring and any matters that may arise as a result of the monitoring.
6. The CLG shall initially comprise up to two representatives of the consent holder and the consent holder shall invite one representative of the Selwyn District Council, one representative of the Canterbury Regional Council, one representative of the Templeton Residents Association (TRA), one representative of the Weedon’s Residents Association (WRA), one representative of the New Zealand Motor Caravan Association Incorporated, one representative of Southern Woods Nursery, and representatives of the relevant Kaitiaki *Runanga.*

*Advice note: This condition only governs initial membership for the purposes of convening the first meeting of the CLG. On-going membership will be determined by the CLG.*

1. The consent holder shall ensure that members of the CLG are provided with the opportunity and facilities to meet:
2. At least 30 working days prior to the start of any construction activities on the site;
3. Not less frequently than quarterly during the first year of the quarry being established, and biannually thereafter, unless all members of the CLG agree there is no need for a meeting;
4. If the consent holder, in progressing any element of the quarry, wishes to call a meeting of the CLG to obtain community input, the meeting regime may be shifted to accommodate such a request.
5. Proposed meetings shall be notified to members of the CLG and to any members of the local community whose contact details have been provided to the consent holder.
6. Minutes of the CLG meetings shall be made publicly available.
7. The CLG shall be provided with copies of any management plans in draft, at least 20 working days prior to the next CLG meeting. The consent holder shall invite the CLG to provide a written response to the management plan within 10 working days after this CLG meeting. Prior to submitting these management plans for certification to SDC or CRC, the consent holder shall outline how this feedback has been incorporated or not into each management plan.
8. The consent holder shall engage an independent chairperson to oversee the CLG meetings, with meeting minutes taken and distributed to members of the CLG.
9. The consent holder shall meet any reasonable administrative costs of the CLG meetings (e.g. meeting invitations; meeting venue; preparation of meeting notes) and facilitation of meetings by an independent chair, seems reasonable.

*Advice note: In the event that it is not possible to establish a CLG or convene meetings through lack of interest or participation from the local community, then such failure to do so shall not be deemed a breach of these conditions. Should the local community wish to re-establish meetings after a period of inactivity then the conditions above continue to apply.*

Accidental Discovery Protocol

1. Immediately following the discovery of material suspected to be a taonga, kōiwi or Māori archaeological site, the following steps shall be taken:
2. All work in the vicinity of the discovery will cease and the Council advised.
3. Immediate steps will be taken to secure the site to ensure the archaeological material is not further disturbed.
   * 1. Notify the Kaitiaki Rūnanga and the Area Archaeologist Heritage New Zealand (. In the case of kōiwi (human remains), the New Zealand Police must be notified. The Kaitiaki Rūnanga and HNZPT will jointly appoint / advise a qualified archaeologist who will confirm the nature of the accidentally discovered material. If the material is confirmed as being archaeological, the consent holder will ensure that an archaeological assessment is carried out by a qualified archaeologist, and if appropriate, an archaeological authority is obtained from HNZPT before work resumes (as per the Heritage New Zealand Pouhere Taonga Act 2014).
     2. The consent holder will also consult the Kaitiaki Rūnanga on any matters of tikanga (protocol) that are required in relation to the discovery and prior to the commencement of any investigation.
     3. If kōiwi (human remains) are uncovered, in addition to the steps above, the area must be treated with utmost discretion and respect, and the kōiwi dealt with according to both law and tikanga, as guided by the Kaitiaki Rūnanga.
     4. Works in the site area shall not recommence until authorised by the Kaitiaki Rūnanga, the HNZPT (and the NZ Police in the case of kōiwi) and any other authority with statutory responsibility, to ensure that all statutory and cultural requirements have been met. The Council shall be advised of the outcomes prior to the recommencement of work, and copies of all relevant approvals shall be provided to the Council for the consent file.
     5. All parties will work towards work recommencing in the shortest possible time frame while ensuring that any archaeological sites discovered are protected until as much information as practicable is gained and a decision regarding their appropriate management is made, including obtaining an archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014 if necessary. Appropriate management may include recording or removal of archaeological material.
     6. Although bound to uphold the requirements of the Protected Objects Act 1975, the contractor / works supervisor / owner recognises the relationship between Ngāi Tahu whānui, including its Kaitiaki Rūnanga, and any taonga (Māori artefacts) that may be discovered.

Reporting and Review

1. The consent holder shall maintain a complaints register. The Complaints Register shall include details of when a complaint was received, the steps taken by the consent holder, and any steps taken to address the issue raised. The complaints register shall be provided to the Team Leader, Compliance, Selwyn District Council ([compliance@selwyn.govt.nz](mailto:compliance@selwyn.govt.nz)) annually, and otherwise shall be available on request.
2. Records of all staff training shall be retained on site and provided to the Council immediately upon request.
3. The Selwyn District Council may, during the month of May or November each year, review any or all of the conditions of the consent pursuant to section 128 of the Resource management Act 1991 for all or any of the following purposes:
4. To deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or
5. To require the consent holder to adopt the best practical option to remove, remediate or reduce any adverse effects on the environment resulting from the activity; and/or
6. To review the noise limits and traffic effects; and/or
7. To review the methodology of the operation should noise, dust and nuisance effects become an issue; and/or
8. To require consistency with any relevant Regional Plan, District Plan, National Environmental Standard, Water Conservation Order or Act of Parliament.

Advice Notes to the Consent Holder

*Lapse Period*

1. Pursuant to section 125 of the Resource Management Act 1991, if not given effect to, this resource consent shall lapse five years after the date of this decision unless a longer period is specified by the Council upon application under section 125 of the Act.

*Monitoring*

1. In accordance with section 36 of the Resource Management Act 1991, the Council’s specialised monitoring fee will be charged.
2. If the conditions of this consent require any reports or information to be submitted to the Council, additional monitoring fees for the review and certification of reports or information will be charged on a time and cost basis. This may include consultant fees if the Council does not employ staff with the expertise to review the reports or information.
3. Where the conditions of this consent require any reports or information to be submitted to the Council, please forward to the Council’s Compliance and Monitoring Team ([compliance@selwyn.govt.nz](mailto:compliance@selwyn.govt.nz).
4. Any resource consent that requires additional monitoring due to non-compliance with the conditions of the resource consent will be charged additional monitoring fees on a time and cost basis.

*Vehicle Crossings*

1. Any new or upgraded vehicle crossing requires a vehicle crossing application from Council’s Assets Department prior to installation. For any questions regarding this process please contact [transportation@selwyn.govt.nz](mailto:transportation@selwyn.govt.nz). You can use the following link for a vehicle crossing information pack and to apply online: <http://www.selwyn.govt.nz/services/roading/application-to-form-a-vehicle-crossing-entranceway>

*Building Act*

1. This consent is not an authority to build or to change the use of a building under the Building Act. Building consent will be required before construction begins or the use of the building changes.

*Regional Consents*

1. This activity may require resource consent from Environment Canterbury. It is the consent holder’s responsibility to ensure that all necessary resource consents are obtained prior to the commencement of the activity.

*Impact on Council Assets*

1. Any damage to fixtures or features within the Council road reserve that is caused as a result of construction or demolition on the site shall be repaired or reinstated and the expense of the consent holder.

*Property Access*

1. Access by the Council’s Officers or its agents to the property is reserved pursuant to Section 332 of the Resource management Act 1991.

**FOR DISCUSSION PURPOSES ONLY – FURTHER REFINEMENTS MAY BE MADE BY THE APPLICANT PRIOR TO CLOSING.**

CRC192410 Discharge permit to discharge contaminants into air from an industrial or trade premise or process

1. The discharge of contaminants to air shall only be from quarrying activities at 107 Dawsons Road and 220 Jones Road, Templeton, legally described as Rural Section 6475 and Rural Section 6324, Lot 1 Deposited Plan 4031, Rural Section 6342, Section 7 Survey Office Plan 510345, Rural Section 5381 and Section 6 Survey Office Plan 510345, at or about map reference NZTM2000 1555356mE, 5177132mN. As shown on Plan CRC192408A, attached to and forming part of this resource consent.

The discharge of contaminants into air shall only be generated from the following quarrying activities:

1. Site preparation, topsoil stripping, overburden removal and storage;
2. Construction and maintenance of bunds and stockpiles;
3. Extraction, loading and transportation of material;
4. Processing of aggregates (including crushing and screening of aggregates);
5. Combustion products from the operation of 1.04 megawatt of diesel fired generation (up to 4 generators));
6. Stockpiling of aggregates;
7. Deposition of cleanfill;
8. Site rehabilitation; and
9. Movement of vehicles associated with the above activities.
10. For the purposes of this consent:
11. Quarry activities means the activities listed in condition 1)(a) to (i).
12. Site preparation means the activities listed in condition 1)(a) to (b).
13. Quarrying operations means the activities listed in condition 1)(c) to (i).

Prior to Works

1. At least one month prior to the commencement of quarrying activities, the consent holder shall inform the Canterbury Regional Council, Attention RMA Monitoring and Compliance Manager (the Manager), in writing of the start date of the works.

Monitoring

1. Prior to the commencement of quarrying activities, a meteorological station shall be installed at the site with instruments capable of continuously monitoring and providing representative metrological data for the site and surrounding area. The instruments shall be capable of continuous measurement and real time logging and reporting of the following:
2. Wind speed as 1-minute vector averages with maximum resolution of 0.1 m/s and accuracy of at least within +/-0.2 m/s, and a stall speed no greater than 0.5 m/s.
3. Wind direction as 1-minute vector averages with maximum resolution of 1.0 degree and accuracy of at least within +/- 1.0 degree, and a stall speed no greater than 0.5 m/s.
4. Rainfall and evaporation as hourly averages with maximum resolution of 1 mm/day and accuracy that meets standard good industry practice as specified by the National Environmental Monitoring Standards (NEMS) for Rainfall Recording (Version 1.0 June 2013).
5. Screened temperature with accuracy of +/- 0.5 degree.
6. Humidity (%RH) with accuracy of +/- 5 %.
7. The instruments shall provide an alarm to site staff (for example via mobile phone) if the hourly rolling average wind speed trigger level in condition 12)is exceeded.
8. The instruments shall be installed on mast such that their height is at least four metres above pre-quarrying ground level and in accordance with AS 2923 – 1987 Ambient Air Guide for Measurement of Horizontal Wind for Air Quality Applications.
9. All measured data shall be:
10. recorded using an electronic data logging system and retained for the duration of this consent; and
11. provided to the Canterbury Regional Council upon request.
12. A permanent real-time PM10 monitor (US EPA or National Environmental Standards for Air Quality 2004 (NES)) compliant equipment) shall be installed and operated at or near the eastern site boundary. This monitor is to record hourly and 24-hourly average PM10 concentrations.
13. At least two real-time PM10 monitors (referred to as the “mobile monitors”) shall be operated on the quarry’s site boundary and shall be located between the active quarrying/clean filling area and each off-site sensitive location that is less than 500 m away from the active quarrying/clean filling area. Mobile monitors can be of a type that is suitable for dust management but does not need to meet the standard for NES compliance monitoring. These monitors shall be calibrated against the reference monitor method in condition 5).
14. The consent holder shall design and operate a Respirable Crystalline Silica (RCS) monitoring campaign in consultation with the Canterbury District Health Board (CDHB) and the Canterbury Regional Council.
15. The instruments specified in conditions 4), 5) and 6) shall be installed and maintained in accordance with the manufacturer’s specifications. The consent holder shall keep a record of when maintenance is undertaken, and the type of maintenance undertaken. This record shall be provided to the Canterbury Regional Council upon request.

**Limits**

1. There shall be no noxious, dangerous, objectionable or offensive dust to the extent that it causes an adverse effect beyond the boundary of the site.
2. No extraction shall occur within 200 m of any dwelling existing at [the date of consent being granted], as shown on RC192408A, without the prior written consent of the owners of these dwellings.
3. When quarrying and/or clean filling operations cause continuously recorded PM10 concentrations at one of the real-time PM10 monitors installed in accordance with condition 6), to reach or exceed 150 micrograms per cubic metre (1-hour average) updated every 10 minutes:

(a) additional dust control measures shall be implemented; and

(b) all dust generating activities being undertaken upwind and within 250 m of sensitive receptor locations shall cease.

1. All dust-generating activities being undertaken within 250 m of sensitive receptor locations, shall cease when the wind direction (10-minute average) places active quarrying/clean filling areas directly upwind of these sensitive locations when the wind speed exceeds 7 m/s and following a period of 12 hours or more of there being no rain at the quarry site.
2. If quarrying activities cease under condition 12), they may resume once:

(a) the rolling one-hour average wind speed falls back to or below 7 m/s; or

(b) when detailed investigations by site personnel, or council enforcement officers, clearly confirms that there are no visible dust impacts or related dust nuisance effects occurring at the downwind sensitive receptor locations. This can include confirmation from occupants that they are not concerned with any nuisance dust effects occurring at the time of investigation and/or when the criteria listed in condition 12) are breached.

1. At any time, if visible dust is blowing beyond the site boundary or if targeted monitoring triggers are breached, the consent holder shall:
2. Cease all dust generating activities;
3. Initiate all dust suppression activities;
4. Carry out the investigation of possible causes immediately and respond with appropriate corrective and preventive actions (Note: This may include immediate watering of both active and inactive exposed surfaces, even if dust generating activities have been ceased);
5. Only resume site activities (other than dust suppression) once the appropriate mitigation measures are in place to prevent visible dust blowing beyond the site boundary; and when monitoring triggers as set out in condition 11) are no longer being breached
6. Notify the Canterbury Regional Council within one working day of the event, including the cause of the event and results of the investigation.

Excavation and Rehabilitation

1. Prior to quarrying operations commencing onsite the consent holder shall establish at least 3 m high vegetated earth bunds around the site perimeter, with the exception of site accessways, which shall be constructed with a 1 m wide flat top around the site. The bunds shall have a profile with an outside slope of up to 1:3 (one vertical to three horizontal), be compacted to minimise top soil loss, shall have atop at least 1 m wide, and shall have a minimum width of 15 m, to remain in place for the duration of extraction and rehabilitation activities.
2. As soon as practicable, but within 14 days, following construction, the bunds are to be sown with grass (or another suitable vegetative cover) or hydro-seeded to achieve swift grass cover and watered regularly to ensure grass cover is established and maintained.
3. To assist in achieving swift grass and vegetative cover, construction of the bunds shall take place outside of summer months and in favourable weather, to avoid significant potential dust risk (e.g. construction shall occur during the months of May to October inclusive) and enable grassing of the bunds to occur in autumn or spring, in order to align with periods of good grass strike.
4. The grassed and vegetated bunds shall be watered, when required to suppress potential dust, until a grass or vegetative cover has been established.
5. Each quarry sub-stage shown in the plan attached to CRC192408 & CRC192409 as CRC192408A, with the exception of any active haul roads, shall be rehabilitated within six months of the completion of cleanfilling. Rehabilitation shall include but not be limited to:
6. Reshaping the relevant areas;
7. Spreading of topsoil;
8. Re-vegetating; and
9. Undertaking all reasonably practicable measures to prevent a dust nuisance from the rehabilitated area, including but not limited to watering of exposed soil to prevent production of dust.

If this work is required outside of spring or autumn, the area can be suitably mulched or covered with another form of material to supress dust from the area until it is appropriate to re sow grass.

Dust Mitigation

1. The consent holder shall assess weather and ground conditions (wind and dryness) at the start of each day and ensure that applicable dust mitigation measures and methods are ready for use prior to commencing works for the day.
2. The consent holder shall take all reasonably practicable measures to minimise the discharge of dust from overburden, topsoil and aggregate stockpiles. These shall include but not be limited to:
3. During site preparation, limiting the height of stockpiles to no more than 3 m above natural ground level at any one time;
4. During quarry operations locating stockpiles of processed aggregate below natural ground level;
5. All processed aggregate products shall be stockpiled by grade within the quarry floor area.
6. Stockpile volumes will have a maximum total volume of 200,000m³ at any one time;
7. All stockpiles associated with the fixed and mobile plant will be set back at least 500 m from site boundaries within the central processing and stockpiling area (CPSA).
8. Vegetating any over burden or soil stockpiles which remain in place longer than 2 months; and
9. Spraying stockpiles with water as required.
10. The consent holder shall take all reasonably practicable measures to minimise the discharge of dust from the site. These measures shall include but not be limited to:
11. Constructing and maintaining haul roads so that they are comprised of an aggregate base, with surfaces that are graded so they are free of pot holes;
12. Using field conveyors as the primary form of transporting aggregate from the active quarry area to the CPSA;
13. Note: this does not apply to stripping or overburden material.
14. Minimising drop heights when loading trucks, conveyor hoppers and when moving material;
15. Pre-dampening soil with a water cart or sprinklers prior to removing overburden and carrying out land stripping and land rehabilitation during favourable weather conditions (avoiding winds above 7 m/s) and at times of least vulnerability to neighbouring properties;
16. Locating the fixed plant in the centre of the site and below ground level;
17. Any processing plant shall be set back at least 500 m from the site boundaries;
18. Only operating mobile and the central processing plants with the use of water dust suppression (either sprays or high pressure fogging system) fixed to the plant or located beside the plant;
19. Maintaining, establishing and enhancing shelter belt plants around the site boundaries;
20. All trucks leaving the site that predominantly contain sands and fine material that are dusty shall be covered. For all other trucks, measures shall be taken such as covering or spraying loads with water, to effectively control windblown dust from vehicles when in transit;
21. Regularly applying dust suppression measures such as applying reject material or water to unsealed haul and access roads during any conditions when dust is likely to be discharged from them (i.e. dry and windy conditions);
22. Undertaking routine site inspections of visible dust emissions throughout each day of operation, and logging findings and any mitigation actions electronically;
23. The use of pea gravel, reject gravel, or pit run gravel and dust suppressants on exposed surfaces, including internal unsealed roads and loader working areas, and additional use of suppressants (water or chemical dust suppressants as necessary to comply with ambient dust monitoring triggers in condition 11) and avoid visible dust plumes extending beyond the site boundary);
24. Taking wind direction and speed into account in planning and carrying out work so as to minimise the risk of dust dispersion towards any residential dwellings that are within 250 m of the area where works are planned (e.g. stripping of overburden);
25. Using water and/or dust suppressants on stockpiles when required to avoid visible dust plumes extending beyond the site boundary;
26. Maintaining an adequate supply of water and equipment on the Roydon Quarry site for the purposes of dust suppression at all times;
27. Using chemical stabilisers or other equivalent measures on unsealed surfaces, if water application is insufficient or unavailable and as necessary to avoid visible dust plumes extending beyond the site boundary;
28. Applying a speed restriction on all internal unsealed roads of 15 kilometres per hour at all times and clearly signpost this limit on all internal roads;
29. Keeping sealed roads and yard areas free of dust by using vacuum sweepers;
30. Sections of the internal site access road will be sealed and use of a rumble strip and wheel wash as appropriate to assist in removing muddy material from vehicle wheels before exiting the site.
31. Maintaining an automated dust suppression system for dust prone areas that can be activated remotely outside of working hours.

*Advice note: The internal access road for the purposes of condition 22)(t) includes the access road from the site access point on Jones Road to where it meets the CPSA.*

1. Water carts as a back-up will be used, as required, for dust suppression during dry weather, so that dust emissions from working areas, haul roads and stockpiles do not cause breaches of the trigger level listed in condition 11) or any visible dusty plumes beyond the site boundary. Water will be available for dust suppression from an existing bore (M36/0257) on the site, in association with stored water (i.e. water tanks or similar vessels) in accordance with the conditions of CRC192414.
2. Where the take of groundwater from the existing bore (M36/0257) is reduced in accordance with condition 2(a) or (b) of CRC182422, the consent holder shall undertake dust suppression measures using the reduced bore take, water storage capacity on site (i.e. water tanks or similar vessels), and if necessary, chemical dust suppressants .
3. Should the ability to take water authorised under CRC182422 cease at any time in accordance with condition 2(c) of CRC182422, the consent holder shall assess the need to temporarily cease some or all parts of site operations requiring water usage to manage dust, including any mobile processing and acceptance of cleanfill, until such time when water can be taken again.

Dust Management Plan

1. Prior to the exercise of this consent the consent holder shall provide a Dust Management Plan (DMP) to the Canterbury Regional Council for certification. The purpose of the DMP is to identify and implement the best practicable option (BPO) for minimising the release of particulate matter beyond the boundary of the site, and to provide detail on how the conditions of this consent will be achieved.

The DMP is to be prepared by a suitably qualified and experienced air quality expert and shall include, but not be limited to:

1. A description of the dust sources on site;
2. A description of the receiving environment and identification of sensitive receptors within 150 m of site boundaries;
3. The methods to be used for controlling dust at each source during site construction, operation of the quarry, aggregate crushing and screening, cleanfill deposition and rehabilitation including dust reduction through design methodologies;
4. A description of the site rehabilitation;
5. A description of the monitoring requirements;
6. A system of training for employees and contractors to make them aware of the requirements of the DMP;
7. Identifying staff responsible for implementing and reviewing the DMP;
8. Procedures, processes and methods for managing dust when staff are not on site;
9. The weather conditions i.e. rainfall, wind direction and strength, that will trigger a restriction of undertaking potentially dusty activities and procedures for responding to triggers;
10. A method for recording and responding to complaints from the public; and
11. A maintenance and calibration schedule for meteorological monitoring instruments and particulate monitoring.
12. Separate Standard Operating Procedures (SOPs) dedicated to
13. the management of potential dust discharges from specific sources, including but not limited to:
    1. Central processing plant, associated product stockpiles;
    2. Site roads – sealed and gravelled;
    3. Excavation and clean filling area;
    4. Exposed areas of the quarry including stockpiles;
    5. Soil and overburden stripping, and storage areas;
14. The location and calibration of ambient PM10 particulate and meteorological monitoring equipment; and
15. Environmental information management for recording, quality assurance, archiving and reporting the quantity and types of data including all ambient environmental data for wind, rainfall-evaporation, PM10 concentrations, community feedback, and all data required for dust management of the site.
16. The exercise of this consent shall be in accordance with the certified DMP. In the event of any inconsistency between the conditions of this consent and the provisions of the DMP, then the conditions of this consent shall prevail.
17. The DMP, including the SOPs shall be updated and forwarded to the Canterbury Regional Council Attention: RMA Monitoring and Compliance Manager for certification at no greater than two yearly intervals.
18. The DMP may be amended at any time. Any amendment shall be:
19. Consistent with the conditions of the resource consent and the original objectives or purpose stated within the DMP;
20. Submitted in writing to the Canterbury Regional Council Attention: RMA Monitoring and Compliance Manager, for re-certification, prior to any amendment being implemented.
21. Any changes shall be reported at the following Community Liaison Group meeting.
22. If the Canterbury Regional Council confirms receipt of a DMP for certification under condition 27) or condition 30)but then fails to provide any further response to the consent holder within a period of one month then the DMP shall be deemed to be certified.
23. The Quarry Manager, or nominated person, shall be available at all times (including outside quarry operation hours) to respond to dust emission issues.

Generator Operation

1. Diesel generators associated with mobile plant should only be used between 7.00 am and 8.00 pm, excluding any warm up and cool down period. The generators shall be serviced at least once every year by a person competent in the servicing of such appliances. The servicing shall include internal cleaning and replacement or repair of damaged equipment and services as necessary.

**PM10 Offset Conditions**

1. The consent holder may only discharge contaminants to air from quarrying operations in the Stage 1 and Stage 2 areas shown in the plan attached to CRC192408 & CRC192409 as CRC192408A (the Offset Area) if it has reduced the authorised discharge of PM10 into the Christchurch Airshed from another source by a minimum of 1,000 kg of PM10 per annum discharged into the Christchurch airshed from another source (the Offset).
2. The Offset required by condition 34) shall remain effective until land in the Offset Area has been rehabilitated in accordance with conditions 29 and 31 of CRC192408 and CRC192409.
3. No less than 6 months prior to extraction being undertaken in the Offset Area, the consent holder shall provide a report prepared by a suitably qualified and experienced air quality expert to the Canterbury Regional Council for certification which describes how conditions 34) and 35) will be achieved (the Offset Plan).
4. No less than 4 weeks prior to extraction being undertaken in the Offset Area the consent holder shall provide written confirmation from a suitable qualified and independent person confirming the certified Offset Plan has been fully implemented.

Reporting and Review

1. The consent holder shall keep a record of any complaints relating to dust, and shall include:
2. The location where the dust was detected by the complainant;
3. The date and time when the dust was detected;
4. A description of the wind speed and wind direction when the dust was detected by the complainant;
5. The most likely cause of the dust detected;
6. Any corrective action undertaken by the consent holder to avoid, remedy or mitigate the dust detected by the complainant; and
7. This record shall be provided to the Canterbury Regional Council upon request.
8. The lapsing date for the purposes of section 125 of the Resource Management Act 1991 shall be 5 years from the date of issue of this consent.
9. The Canterbury Regional Council may, once per year, on any of the last five working days of May or November serve notice of its intention to review the conditions of this consent for the purposes of:
10. Dealing with any adverse effect on the environment which may arise from the exercise of this consent and which it is appropriate to deal with at a later stage; or
11. Dealing with dust suppression requirements;
12. Altering the suspended particulate monitoring requirements of the relevant condition;
13. Ensuring compliance with any relevant National Environmental Standards.

**FOR DISCUSSION PURPOSES ONLY – FURTHER REFINEMENTS MAY BE MADE BY THE APPLICANT PRIOR TO CLOSING.**

CRC192408 & CRC192409 Land use consent to excavate material and deposit cleanfill material over an unconfined/semi-confined aquifer-confined aquifer

Description

1. The activities shall be only:
2. Site preparation works including the excavation of topsoil and overburden material for the purpose of constructing bunds and storage of soil for site rehabilitation;
3. Excavation of aggregate;
4. Temporary stockpiling of excavated aggregate;
5. Deposition of cleanfill; and
6. Progressive remediation

At 107 Dawsons Road and 220 Jones Road, Templeton, legally described as Rural Section 6475 and Rural Section 6324, Lot 1 Deposited Plan 4031, Rural Section 6342, Section 7 Survey Office Plan 510345, Rural Section 5381 and Section 6 Survey Office Plan 510345, at or about map reference NZTM2000 1555356mE, 5177132mN, as shown on Plan CRC192408A, attached to and forming part of this resource consent.

For the avoidance of doubt, no blasting is authorised by this consent.

**Preliminary Works**

1. Site Management:
2. The perimeter of the quarry site shall be surrounded by secure fencing, with lockable access gates;
3. The consent holder shall ensure that warning notices are erected and maintained at all entrances to the site;
4. Warning notices shall be able to be read from a distance of five metres;
5. The warning notices shall state the:
6. Name of the site;
7. Name of the owner of the site and a contact telephone number;
8. Groundwater is vulnerable to contamination;
9. Only clean soil may be deposited at this site; general refuse and hazardous waste shall not be dumped at this site.

**Extraction Depth**

1. The consent holder shall ensure the natural ground level of the site is surveyed prior to excavation of overburden material, and annually thereafter to determine elevations of the site relative to Mean Sea Level, including the depth of excavations. The survey:
2. Shall be undertaken by a registered surveyor;
3. Results shall be to an accuracy of +/- 50 millimetres vertically;
4. Results of each survey shall be provided to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, in February of each year or on request; and provide a contour map showing the surveyed maximum quarry depth relative to the highest groundwater level.
5. Prior to undertaking the activities authorised by this consent at the site, the consent holder shall establish a surveyed datum point at natural ground level in an area that will not be excavated. This point shall be used to certify the depth of excavation at any point within the site described in condition 1).
6. The depth of quarrying shall not exceed a depth as shown in accordance with the contour plan included as Figure CRC192408B.
7. The consent holder shall monitor water levels after commencement of consent in the four bores specified below:

*Upgradient*

* BX23/0833 (Bore ID DRBH1). Located at or about map reference: NZTM X and Y 1554612 – 5177022
* BX23/0836 (Bore ID DRBH2). Located at or about map reference: NZTM X and Y 1554914 – 5177686

*Downgradient*

* BX23/0835 (Bore ID DRBH4). Located at or about map reference: NZTM X and Y 1556077 – 5177047
* BX23/0834 (Bore ID DRBH3). Located at or about map reference: NZTM X and Y 1555397 – 5176416

Based on this information and historical water level records of nearby Canterbury Regional Council’s groundwater monitoring wells the consent holder shall submit a report to the Canterbury Regional Council by 30 November of every 5th year after the commencement date of this consent. This report shall be prepared by an independently qualified person with expertise in groundwater monitoring. The report shall confirm, having regard to the water level monitoring information, whether the established seasonal high water table and associated maximum depth of quarrying set out in conditions 3) to 5) remains appropriate or requires revision due to the data collected during the prior 5 year period. Provided that the Canterbury Regional Council certifies in writing that the findings of the independent report are accepted, the depth of quarrying may be amended in accordance with the report recommendations. Notwithstanding the aforementioned certification process, at all times and in all circumstances the consent holder shall limit quarrying to 1 m above the seasonal high water table referenced to the datum point in condition 4).

1. Should the groundwater water level increase (at times of high-water table) so that the separation is less than 1 m between the measured groundwater levels and the base of the quarry floor, the consent holder shall apply virgin materials in these areas, so as to re-establish a 1 m separation distance. This requirement shall not apply to any areas which have already been rehabilitated.

*Advice Note: For the purpose of this consent, ‘virgin materials’ is aggregate sourced from the quarry pit that is of comparable quality and composition to aggregate which was excavated or replacement of the same material.*

1. If groundwater levels rise within the 1 m separation depth, then any machinery (other than that used for backfilling of virgin materials) shall be moved away from these areas and contingency backfilling measures shall be undertaken in accordance with those set out in condition 7).
2. Should groundwater levels rise into the quarry floor during excavation or deposition of cleanfill, the consent holder shall notify the Canterbury Regional Council, Attention: Regional Leader – Monitoring and Compliance within 24 hours.
3. Once aggregate extraction has commenced the consent holder shall provide, at three-monthly intervals, and on request from the Canterbury Regional Council Manager Monitoring and Compliance (The Manager), a laser level survey of all depths of excavated and filled areas on the site. Such a survey shall not be required if there has been no excavation in the preceding three-month period. Alternative methods for achieving this condition, such as GPS depth technology on excavation machinery may be used subject to approval in writing from the Manager.

**Excavation of Aggregate**

1. Excavation of aggregates shall commence with extraction in the centre of the site (adjacent to the CPSA shown in green) and shall occur in a progressive sequence (moving southward and then anticlockwise) generally in accordance with the diagram in the plan attached as CRC192408A.
2. The excavation of aggregates and deposition of cleanfill shall be setback 20 m from the boundaries of the site.
3. Haul roads shall be constructed and maintained so that they are comprised of an aggregate base, with surfaces that are graded so they are free of pot holes and sealing at least the first 100 m of the site access road;

**Cleanfilling**

1. Where additional fill is required to be brought to the site for rehabilitation purposes, the consent holder shall ensure that all material deposited in the excavated area is:
2. Only material which meets the following definition of Cleanfill:

*Material that when buried will have no adverse effect on people or the environment. Cleanfill material includes virgin natural materials such as clay, soil and rock, and other inert materials such as concrete or brick that are free of:*

* *combustible, putrescible, degradable or leachable components*
* *hazardous substances*
* *products or materials derived from hazardous waste treatment, hazardous waste stabilisation or hazardous waste disposal practices*
* *materials that may present a risk to human or animal health such as medical and veterinary waste, asbestos or radioactive substances and liquid waste,*

1. Only material which meets the Canterbury Regional background levels which are described in Canterbury Regional Council, 2007.  *Background concentrations of selected trace elements in Canterbury soils. Addendum 1: Additional samples and Timaru specific background levels.* Environment Canterbury Report R07/1/2, Trace Elements Level 2: Regional – Recent for Heavy Metals.
2. Not deposited into groundwater; and is at least one metre above the highest recorded groundwater table recorded at the site, subject to condition 6).
3. Not sourced from a site defined as ‘potentially contaminated’.

*For the purpose of this consent, ‘potentially contaminated’ means a part of a site where an activity or industry described in the list in Schedule 3 of the Canterbury Land and Water Regional Plan, which is attached as Attachment 1 and forms part of this resource consent, has or is being undertaken on it or where it is more likely than not an activity or industry described in the list in Schedule 3, is being or has been undertaken on it, but excludes any site where a detailed site investigation has been completed and reported and which demonstrates that any contaminants in or on the site are at, or below, background concentrations.*

1. All cleanfill stockpiles shall be inspected and spread the working area on a regular basis.
2. Any mixed fill arriving at the site shall be thoroughly inspected to ensure it contains no unacceptable materials or shall otherwise be rejected. This inspection shall include a review of the fill disposal application and information related to the material source and site use, a visual inspection to identify unacceptable material, and adequate analytic testing guided by potential sources of contamination, to confirm the material meets the relevant acceptance criteria.
3. Any contractor depositing material at the site shall have a written contract with the consent holder and shall be provided with a copy of this consent prior to entering the site. Site inductions will be held on a quarterly basis for contractors using the site, and records of these inductions shall be kept and made available to Council on request.
4. The consent holder shall keep a detailed record of all cleanfill materials brought onto the site for rehabilitation purposes, including as a minimum the following information:
5. The name of the company delivering the material;
6. The date of deposition;
7. The physical address of the land the material was sourced from;
8. A description of the material;
9. Any laboratory reports;
10. Any authorisation under which the material was removed from the source site (e.g., resource consent); and
11. The weight or volume of the material deposited.

Copies of this documentation shall be made available to the Council on request.

1. At least one month prior to the commencement of any cleanfilling activity authorised by this consent the consent holder shall submit a Cleanfill Management Plan to the Canterbury Regional Council, Attention: RMA Monitoring and Compliance Manager. The purpose of the CMP is to describe the methods to achieve conditions 14) to 18) of this consent. The CMP shall be prepared in accordance with Section 8.1 and Appendix B of "A Guide to the Management of Cleanfills", Ministry for the Environment, January 2002, and shall include but not be limited to the following:
2. Describing the content and purpose of the CMP;
3. Detailing the operation of the site including details of staging of works, area, depth and proposed start and finish date of deposition of cleanfill material;
4. Discussing the actions to be undertaken to ensure compliance with the conditions of this resource consent and actions to be undertaken in response to any incident that may adversely affect the environment;
5. Identifying and providing contact details of the staff member responsible for each action;
6. Discussing the steps to be undertaken to correct incidences of non-compliance;
7. Identifying timeframes for site rehabilitation;
8. The specific location of the cleanfill placement area;
9. A description of operational procedures and monitoring that will be implemented to prevent unauthorised material from entering the site;
10. How rejected material will be stored pending disposal to an authorised landfill;
11. Where rejected material will be disposed of;
12. The maximum length of time that rejected material will be stored on site pending removal;
13. Construction procedures to ensure the long-term stability of cleanfill areas;
14. Timetable of works and re-vegetation measures;
15. Procedures for improving and/or reviewing the CMP;
16. A list of all material accepted in the cleanfill; and
17. Procedure for responding to complaints.

The consent holder shall ensure that a copy of the CMP is held at the site and all personnel working on the site are made aware of and have access to this consent document and the CMP.

1. Specific staff training shall be provided in accordance with Section 8.2.2 of “A Guide to the Management of Cleanfills” (MfE Guide), Ministry for the Environment, January 2002. All records of staff training shall be retained on site and provided to the Canterbury Regional Council on request.
2. Annual refresher training shall be provided by a Suitably Qualified and Experienced Practitioner (SQEP) as part of the training programme and as specified in the MfE Guide. The consent holder shall maintain a complaints register at the Roydon Quarry site office and make this available to officers of the Canterbury Regional Council on request.
3. The exercise of this consent shall be in accordance with the certified CMP. In the event of any inconsistency between the conditions of this consent and the provisions of the CMP, then the conditions of this consent shall prevail.
4. The CMP shall be updated and forwarded to the Canterbury Regional Council Attention: RMA Monitoring and Compliance Manager for certification at no greater than two yearly intervals.
5. If the Canterbury Regional Council confirms receipt of a CMP for certification under condition 19) or condition 22A) but then fails to provide any further response to the consent holder within a period of one month then the CMP shall be deemed to be certified.
6. The CMP may be amended at any time. Any amendment shall be:
7. Consistent with the conditions of the resource consent and the original objectives or purpose stated within the CMP;
8. Submitted in writing to the Canterbury Regional Council Attention: RMA Monitoring and Compliance Manager, for re-certification, prior to any amendment being implemented.
9. Any changes shall be reported at the following Community Liaison Group meeting.

**Groundwater quality monitoring**

1. The following groundwater sampling regime shall be implemented by the consent holder:
2. Two additional monitoring wells are to be installed on the site at the boundary at the same depth as the existing four monitoring wells prior to extraction commencing. These should be installed downgradient in respect to the groundwater flow and assist in identifying groundwater quality changes caused by quarry activities.
3. Representative samples of groundwater shall be taken from bores BX23/0833 (Bore ID DRBH1), BX23/0836 (Bore ID DRBH2), BX23/0835 (Bore ID DRBH4) and BX23/0834 (Bore ID DRBH3) specified in condition 6), including onsite bore M36/2743, at three-monthly intervals, for a period of five years after quarrying activities commence, and thereafter at a six-monthly interval, from the two upgradient and two downgradient bores and for a period of 5 years after quarrying and cleanfilling ceases;
4. At least once prior to commencement of excavation activities, representative samples of groundwater shall be taken from all domestic water supply wells within 500 m downgradient of the site as indicated in map CRC192408C and listed on CRC’s wells database (subject to landowner approval and if practically possible), to establish baseline water quality conditions;
5. Samples shall be taken after adequate purging to remove all stagnant water from the bores or by using an alternative method, such as low-flow sampling technique, to ensure that fresh groundwater is drawn through the bore screens; and
6. All samples shall be taken by a suitably qualified practitioner and analysed by an accredited laboratory. Groundwater samples shall be analysed for the contaminants shown in Table 1;
7. The water quality monitoring results, and those of public water supply well M36/7575 as provided by the Selwyn District Council, shall be supplied annually to the Canterbury Regional Council, RMA Compliance and Monitoring Manager.

**Responses to Monitoring**

1. The results of analysis of groundwater samples tested shall be compared with the contaminant trigger values in Table 1. Any contaminant concentration in the downgradient bores shall be deemed an exceedance if:
2. The tested result is in excess of the trigger values for a contaminant given in Table 1 in case the same contaminant upgradient median concentration is less than the Table 1 trigger levels; or
3. Any median contaminant concentration in the upgradient bores exceeds the Table 1 trigger values for that contaminant and if the median contaminant concentration in the downgradient bores exceed the upgradient bores median contaminant concentration by more than 10 percent of the respective Table 1 contaminant trigger value.
4. If there is an exceedance in a downgradient bore as determined by condition 24), the consent holder shall within one month of receiving the results:
5. Obtain a second sample of groundwater from the bore sampled in accordance with condition 24); and
6. Obtain a sample of groundwater from the upgradient bore specified in condition 24); and
7. Analyse these samples in accordance with condition 24).
8. If the results of analysis of groundwater samples carried out in accordance with condition 24) show that none of the concentrations of contaminants analysed exceed the trigger concentrations given in Table 1, the consent holder shall continue to sample groundwater in accordance with condition 24).
9. If the results of analysis of groundwater in down-gradient bores sampled in accordance with condition 24), for any contaminant analysed show an exceedance of a trigger value, as determined by condition 24) above, the consent holder shall:
10. Notify the Canterbury Regional Council, RMA Compliance and Monitoring Manager; and
11. Notify the residential occupiers with domestic water supply bores 500m downgradient of the affected monitoring well; and
12. Sample all domestic wells within 500 m downgradient of the affected monitoring wells (subject to well owner approval); and
13. Implement necessary measures to reduce the concentration of the identified contaminant in groundwater. Such measures may include:
14. cessation of activities that may have caused the excessive concentrations;
15. removal of the contaminant source(s);
16. stabilisation or capping of the contaminant source(s); and
17. revision of cleanfill management procedures.
18. Undertake additional monitoring beyond the routine sampling.
19. Any material removed in accordance with condition 27)(d)(ii) shall be disposed of at an appropriate facility, and the consent holder shall provide the Manager, with written confirmation of such disposal within ten working days of the disposal taking place.
20. If the domestic well monitoring completed under condition 23)(c) in accordance with condition 23)(d) and 23)(e) reveals that any well used to supply domestic drinking water is experiencing an adverse effect on drinking-water quality which is more than likely attributable to the consent holder’s activities, including on its taste, clarity and smell, the consent holder shall implement measures necessary to provide the owner of that well with a water supply of similar, or better quality and quantity to address the effect.

**Rehabilitation**

1. Each sub-stage, with the exception of any active haul roads, shall be rehabilitated within six months of the completion of cleanfilling. Rehabilitation shall include but not be limited to:
2. Reshaping the relevant areas;
3. Spreading a minimum 300 mm layer of topsoil;
4. Re-vegetating; and
5. Undertaking all practicable measures to prevent a dust nuisance from the rehabilitated area, including but not limited to watering of exposed soil to prevent production of dust.

If this work is required outside of spring or autumn, the area may be suitably mulched or covered with another form of material to supress dust from the area until it is appropriate to re sow grass.

The rehabilitated grassed areas shall be monitored and maintained to ensure they are functioning appropriately for a period of 24 months following rehabilitation being completed.

1. Within 12 months, following completion of all aggregate extraction on site, all equipment and machinery shall be removed from the site, and a minimum 300 mm topsoil layer shall be applied over the finished surface level and sown with a suitable grass species or planted with another suitable vegetation.
2. All finished surfaces to be designed and constructed to be free draining, and the final finished floor level shall not be above the ground level that predated quarrying.

**Spills**

1. The consent holder shall take all practicable measures to prevent leaks and avoid spills of fuel or any other hazardous substances in accordance with a Spill Management Plan. This shall include but not be limited to:
   * + 1. Refuelling or maintenance of vehicles or machinery maintenance shall not occur on the quarry pit floor with the exception of generators for mobile plant;
       2. Appropriate servicing and maintenance of vehicles and machinery such that they do not result in leaks or spills;
       3. Only undertaking refuelling or maintenance on vehicles or machinery on hardstand surfaces that are roofed;
       4. A spill kit capable of absorbing all fuel and oil products shall be kept on site and available at all times. All staff involved in the implementation of activities in condition 1) are to be trained in the use of spill kits
2. In the event of a spill of fuel or any other hazardous substances:
3. The spill shall be cleaned up as soon as practicable, and measures taken to prevent a recurrence;
4. The Canterbury Regional Council, Attention: Regional Leader – Monitoring and Compliance shall be informed within 24 hours of a spill event exceeding four litres and the following information provided:
5. The date, time, location and estimated volume of the spill;
6. The cause of the spill;
7. The type of hazardous substance(s) spilled;
8. Clean up procedures undertaken;
9. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;
10. An assessment of any potential effects of the spill;
11. Measures to be undertaken to prevent a recurrence
12. At least one month prior to exercise of this consent the consent holder shall submit Spill Management Plan to the Canterbury Regional Council, Attention: RMA Monitoring and Compliance Manager. The purpose of the Spill Management Plan is to demonstrate how conditions 32) and 33) will be achieved. The Spill Management Plan shall as a minimum:
13. Document the measures to prevent leaks and avoid spills of fuel or any other hazardous substance (including fuel reconciliations);
14. Set out the procedure to be undertaken in the event of a spill of fuel of any hazardous substance, in accordance with condition 33); including procedures for immediately addressing any spill on a site access road.
15. Set out staff training requirements for responding to spills.
16. The exercise of this consent shall be in accordance with the certified Spill Management Plan. In the event of any inconsistency between the conditions of this consent and the provisions of the Spill Management Plan, then the conditions of this consent shall prevail.
17. The Spill Management Plan shall be updated and forwarded to the Canterbury Regional Council Attention: RMA Monitoring and Compliance Manager for certification at no greater than two yearly intervals.
18. If the Canterbury Regional Council confirms receipt of a Spill Management Plan for certification under condition 34) or condition 36) but then fails to provide any further response to the consent holder within a period of one month then the CMP shall be deemed to be certified.
19. The SMP may be amended at any time. Any amendment shall be
20. Consistent with the conditions of the resource consent and the original objectives or purpose stated within the SMP;
21. Submitted in writing to the Canterbury Regional Council Attention: RMA Monitoring and Compliance Manager, for re-certification, prior to any amendment being implemented.
22. Any changes shall be reported at the following Community Liaison Group meeting.

**Bond Conditions**

1. Prior to the first exercise of this consent, the consent holder shall enter into an enforceable written agreement acceptable to the Canterbury Regional Council, that provides for a bond in favour of Canterbury Regional Council pursuant to sections 108(2)(b) and 108A of the Resource Management Act 1991. The purpose of the bond is to secure the rehabilitation of the site, in accordance with conditions 29) to 31) of this consent in the event of any default by the consent holder and undertaking groundwater monitoring in accordance with conditions 23) to 28).
2. The bond amount shall include:
3. The estimated costs associated with progressively rehabilitating the site at any one time, in accordance with conditions 29) to 31) of this consent.
4. The estimated costs of complying with the groundwater monitoring regime set out in conditions 23) to 28) for 5 years following the completion of cleanfilling activities.
5. The estimated bond costs shall be provided to the Canterbury Regional Council, Attention: RMA Monitoring and Compliance Manager, prior to the commencement of this consent for the purpose of establishing a bond agreement with the Canterbury Regional Council.
6. The Canterbury Regional Council shall engage a suitably qualified and experienced person to peer review the bond amount proposed by the consent holder.
7. The bond must be with a registered trading bank of New Zealand, to be provided as surety to the satisfaction of the Canterbury Regional Council. The purpose of the bond is to secure performance with the conditions of this consent.
8. The costs of, and incidental to, the preparation of documentation to meet conditions 38) to 42), including the consent authority's costs, shall be met by the consent holder.
9. The Canterbury Regional Council shall release the bond once:
10. The site has been inspected by a Canterbury Regional Council Monitoring and Compliance Officer and has been found to be compliant with conditions 29) to 31) of this consent; and
11. The groundwater monitoring requirements as specified in conditions 23) to 28) have continued for a period of five years following years following the completion of backfilling.
12. The bond amount may be adjusted by the Canterbury Regional Council giving notice on fifth anniversary of the commencement of this consent and every five years thereafter. The consent holder shall provide a report to the Canterbury Regional Council which addresses whether the bond quantum should be revised. The purpose of the adjustment is to reflect changes in the risk profile of the project or to the Consumer Price Index. The Canterbury Regional Council shall engage a suitably qualified and experienced person to peer review the report and respond within two months of receipt of the report on the appropriateness of any proposed revised bond quantum.
13. If the consent holder and the Canterbury Regional Council cannot agree on the terms of the bond as per conditions 39) and 45), the dispute shall be resolved through an agreed disputes resolution process or referred to arbitration.
14. If the consent is transferred in part or whole to another party or person, the bond lodged by the transferor shall be retained until a replacement bond is entered into by the transferee to ensure compliance with conditions of the consent unless condition 44) is already complied with.

**Reporting and Review**

1. The consent holder shall maintain a complaints register at the Roydon Quarry site office and make this available to the Canterbury Regional Council on request.
2. The Canterbury Regional Council may, once per year, on any of the last five working days of May or November serve notice of its intention to review the conditions of this consent for the purposes of:
3. Dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
4. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
5. The lapsing date for the purposes of section 125 of the Resource Management Act 1991 shall be 5 years from the date of issue of this consent.
6. A copy of this consent shall be provided to all persons operating or carrying out the activities as authorised by the consent holder.
7. The consent holder shall inform the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, of the date on which this consent is first exercised.
8. At least one month prior to commencement of works authorised by this consent, the Consent Holder or their agent shall arrange and conduct a pre-construction site meeting between the Canterbury Regional Council and all relevant parties. At a minimum, the following shall be covered at the meeting:
9. Scheduling and staging of the works, including the proposed start date;
10. Responsibilities of all relevant parties;
11. Contact details for all relevant parties;
12. Expectations regarding communication between all relevant parties;
13. Procedures for implementing any amendments;
14. Site inspection;
15. Confirmation that all relevant parties have copies of the contents of this consent document and all associated cleanfill management and dust management plans and methodology; and
16. Methods for resolution of non-compliance with the conditions of this consent.

Table 1: Contaminants and trigger concentrations.

| **Contaminant** | **Property or trigger value** |
| --- | --- |
| Acidity | No testing |
| Alkalinity | 100 g/m3 as CaCO3 |
| Ammoniacal N | 1.2 g/m3 as N |
| Chloride | 250 g/m3 |
| Electrical Conductivity | 50 mS/m at 25°C |
| *E.coli* bacteria | 1 MPN/100 ml median of samples |
| Total Hardness (calcium + magnesium) | 100 g/m3 as CaCO3 |
| Dissolved Iron | 0.2 g/cm3 |
| pH | 8.5 |
| Dissolved Zinc | 1.5 g/cm3 |
| Total Petroleum Hydrocarbons | Any detection >0.1 g/m3 |
| Dissolved Aluminium | 0.1 g/m3 |
| Dissolved Arsenic | 0.005 g/m3 |
| Dissolved Boron | 0.7 g/m3 |
| Dissolved Cadmium | 0.002 g/m3 |
| Dissolved Chromium | 0.025 g/m3 |
| Dissolved Copper | 1 g/m3 |
| Dissolved Lead | 0.005 g/m3 |
| Dissolved Manganese | 0.04 g/m3 |
| Dissolved Nickel | 0.04 g/m3 |
| Nitrate-Nitrogen | No testing |
| Dissolved Sodium | 200 g/m3 |
| Sulphate | 250 g/m3 |

**FOR DISCUSSION PURPOSES ONLY – FURTHER REFINEMENTS MAY BE MADE BY THE APPLICANT PRIOR TO CLOSING.**

CRC192414 – Water permit to use groundwater (new use)

**New conditions**

1. The volume of water taken in terms of this permit from bore M36/0257 shall be in accordance with CRC182422 and at a rate not exceeding 9.5 litres per second, with a volume not exceeding 752 cubic metres in any one day and 5,267 cubic metres in any period of seven consecutive days, and 112,375 cubic metres between 1 July and the following 30 June.
2. The volume used under this resource consent shall not exceed 119,920 cubic metres, less any volume of water used under resource consent CRC182422.
3. Water shall only be used for quarrying activities including:
   * + - 1. dust suppression;
         2. truck washing;
         3. staff amenities; and
         4. Irrigation of vegetated bunds and rehabilitated areas

At 107 Dawsons Road and 220 Jones Road, Templeton, legally described as Rural Section 6475 and Rural Section 6324, Lot 1 Deposited Plan 4031, Rural Section 6342, Section 7 Survey Office Plan 510345, Rural Section 5381 and Section 6 Survey Office Plan 510345, at or about map reference NZTM2000 1555356mE, 5177132mN. As shown on Plan CRC192414A, attached to and forming part of this resource consent.

1. Prior to the exercise of this consent the consent holder shall:
2. :
3. install a water meter(s) that has an international accreditation or equivalent New Zealand calibration endorsement, and has pulse output, suitable for use with an electronic recording device, which will measure the rate and the volume of water used to within an accuracy of plus or minus five percent as part of the pump outlet plumbing, or within the mainline distribution system, at a location(s) that will ensure the total volume of water used is measured; and
4. install a tamper-proof electronic recording device such as a data logger(s) that shall time stamp a pulse from the flow meter at least once every 60 minutes, and have the capacity to hold at least one season’s data of water taken as specified in clauses (b)(i) and (b)(ii), or which is telemetered, as specified in clause (b)(iii).
5. The recording device(s) shall:
6. be set to wrap the data from the measuring device(s) such that the oldest data will be automatically overwritten by the newest data (i.e. cyclic recording); and
7. store the entire season’s data in each 12 month period from 1 July to 30 June in the following year, which the consent holder shall then download and store in a commonly used format and provide to the Canterbury Regional Council upon request in a form and to a standard specified in writing by the Canterbury Regional Council; and
8. shall be connected to a telemetry system which collects and stores all of the data continuously with an independent network provider who will make that data available in a commonly used format at all times to the Canterbury Regional Council and the consent holder. No data in the recording device(s) shall be deliberately changed or deleted.
9. The water meter and recording device(s) shall be accessible to the Canterbury Regional Council at all times for inspection and/or data retrieval.
10. The water meter and recording device(s) shall be installed and maintained throughout the duration of the consent in accordance with the manufacturer’s instructions.
11. All practicable measures shall be taken to ensure that the water meter and recording device(s) are fully functional at all times.
12. Within one month of the installation of the measuring or recording device(s), or any subsequent replacement measuring or recording device(s), and at five-yearly intervals thereafter, and at any time when requested by the Canterbury Regional Council, the consent holder shall provide a certificate to the Canterbury Regional Council, Attention Regional Leader - Monitoring and Compliance, signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
13. The measuring and recording device(s) have been installed in accordance with the manufacturer’s specifications; and
14. Data from the recording device(s) can be readily accessed and/or retrieved in accordance with clauses (b) and (c) of condition 4).
15. The Canterbury Regional Council, Attention: Regional Leader – Monitoring and Compliance, shall be informed within five days of first exercise of this consent by the consent holder.
16. The Canterbury Regional Council may, once per year, on any of the last five working days of May or November, serve notice of its intention to review the conditions of the consent for the purpose of:
17. Dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
18. Requiring the adopting of the best practicable option to remove or reduce any adverse effect on the environment.

**FOR DISCUSSION PURPOSES ONLY – FURTHER REFINEMENTS MAY BE MADE BY THE APPLICANT PRIOR TO CLOSING.**

CRC192411 and CRC192412 - Discharge permit to discharge stormwater to land where contaminants may enter groundwater and discharge contaminants which may enter water from an industrial or trade process

**Description**

1. The activity shall be limited to the discharge of stormwater and contaminants from hardstand surfaces and rooves to land at 107 Dawsons Road and 220 Jones Road, Templeton, legally described as Rural Section 6475 and Rural Section 6324, Lot 1 Deposited Plan 4031, Rural Section 6342, Section 7 Survey Office Plan 510345, Rural Section 5381 and Section 6 Survey Office Plan 510345, at or about map reference NZTM2000 1555356mE, 5177132mN, as shown on Plan CRC192411A and CRC192612A, attached to and forming part of this resource consent.

**Stormwater**

1. Stormwater that falls on unsealed surfaces shall infiltrate to ground. Stormwater runoff from road surfaces shall infiltrate to ground along the road edges. Stormwater runoff from roofs and other hardstand surfaces shall be discharged into land via stormwater basins. If stormwater treatment basins are used for treatment then they shall be‘dry ponds’ in which stormwater will infiltrate and no ponding occurs for more than 48 hours, in accordance with the certified Stormwater Management Plan.
2. Stormwater basins shall provide no less than 1 metre of separation between the highest recorded groundwater level at the site at the basin invert.
3. Prior to the exercise of this consent the consent holder shall provide a Stormwater Management Plan (SWMP) to the Canterbury Regional Council for review and technical certification. The purpose of the SWMP is the provide detail on how the conditions of this consent will be achieved and to implement the stormwater management and treatment systems for the site.

The SWMP is to be prepared by a suitably qualified and experienced person and shall include, but not be limited to:

1. A description of the various site surfaces from which stormwater is discharged;
2. A document of the design and installation methods for all stormwater management and treatment systems for the site;
3. The relevant contaminant removal efficiencies in accordance with the Ministry for the Environment On-Site Stormwater Management Guidelines (NZWERF 2004), if stormwater basins are used for treatment;
4. Maintenance requirements for stormwater diversion and treatment systems in accordance with appropriate stormwater treatment and discharge guidelines from Selwyn District Council or Christchurch City Council;
5. A system of training for employees and contractors to make them aware of the requirements of the SWMP;
6. Identifying staff responsible for implementing and reviewing the SWMP.
7. The exercise of this consent shall be in accordance with the certified SWMP. In the event of any inconsistency between the conditions of this consent and the provisions of the SWMP, the conditions of this consent shall prevail.
8. The SWMP shall be updated and forwarded to the Canterbury Regional Council Attention: RMA Monitoring and Compliance Manager for certification at no greater than two yearly intervals.
9. If the Canterbury Regional Council confirms receipt of a SWMP for certification under condition 4 or 6 but then fails to provide any further response to the consent holder within a period of one month, then the SWMP shall be deemed to be certified.
10. The SWMP may be amended at any time. Any amendment shall be:
11. Consistent with the conditions of the resource consent and the original objectives or purpose stated within the SWMP;
12. Submitted in writing to the Canterbury Regional Council Attention: RMA Monitoring and Compliance Manager, for re-certification, prior to any amendment being implemented.
13. Any changes shall be reported at the following Community Liaison Group meeting.
14. If stormwater basins are used for treatment, these shall be lined with soils to ensure the removal of contaminants. The removal efficiencies of these systems shall be in accordance with the Ministry for the Environment On-Site Stormwater Management Guidelines (NZWERF 2004).
15. 90% removal of Total Suspended Solids;
16. 90% removal of Biochemical Oxygen Demand (BOD);
17. 75% removal of hydrocarbons; and
18. 85% removal of heavy metals (zinc, copper, lead).
19. Soils referred to in condition 9) shall not be sourced from contaminated land or potentially contaminated land.

*For the purpose of this consent ‘contaminated land’ is defined as land that has a hazardous substance in or on it that-*

1. *has significant adverse effects on the environment; or*
2. *is reasonably likely to have significant adverse effects on the environment.*

*For the purpose of this consent ‘potentially contaminated land’ means that part of a site where an activity or industry described in the list in Schedule 3 of the Canterbury Land and Water Regional Plan, attached to and forming part of this resource consent, has been or is being undertaken on it or where it is more likely than not that an activity or industry described in the list in Schedule 3 is being or has been undertaken on it, but excludes any site where a detailed site investigation has been completed and reported and which demonstrates that any contaminants in or on the site are at, or below, background concentrations.*

**Hazardous Activities**

1. Truck washing shall be undertaken on a roofed wash pad formed of hardstand. Truck wash water not being collected and recycled in the wash process shall be collected in holding tanks and transported offsite to be discharged as trade waste.

*Advice note: The above condition shall not apply to water which is used only for tray washing. This water may be collected and reused on the site.*

1. All sediment collected from the sump of the truck washdown pad shall be periodically excavated and disposed of to an approved offsite facility. All stormwater diversion and treatment systems shall be maintained in accordance with appropriate stormwater treatment and discharge guidelines from Selwyn District Council or Christchurch City Council, as specified in the SWMP.
2. No concrete barrels shall be washed out on site.

***Advice note:***

*For the avoidance of doubt, this discharge permit does not authorise:*

1. *The discharge of wastewater from staff amenity blocks; or*
2. *The discharge of concrete washwater; or*
3. *The discharge of truck washdown water.*

**Spills**

1. When any mobile tankers are used on site, refuelling with such tankers shall take place well in roofed facilities with spill management provisions. Mobile tankers shall not be present on site outside of refuelling areas. This condition does not apply to the refuelling of generators associated with mobile plant.
2. The consent holder shall take all practicable measures to prevent leaks and avoid spills of fuel or any other hazardous substances in accordance with a Spill Management Plan developed for the site, as required by the conditions of CRC192408 and CRC192409. In the event of a spill of fuel or any other hazardous substances:
3. The spill shall be cleaned up as soon as practicable, and measures taken to prevent a recurrence;
4. The Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance shall be informed within 24 hours of a spill event exceeding four litres and the following information provided:
5. The date, time, location and estimated volume of the spill;
6. The cause of the spill;
7. The type of hazardous substance(s) spilled;
8. Clean up procedures undertaken;
9. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;
10. An assessment of any potential effects of the spill; and
11. Measures to be undertaken to prevent a recurrence

**Reporting and Review**

1. The consent holder shall maintain a complaints register at the Roydon Quarry site office and make this available to the Canterbury Regional Council on request.
2. The Canterbury Regional Council may, once per year, on any of the last five working days of May or November serve notice of its intention to review the conditions of this consent for the purposes of:
3. Dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
4. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
5. The lapsing date for the purposes of section 125 of the Resource Management Act 1991 shall be 5 years from the date of issue of this consent.

**FOR DISCUSSION PURPOSES ONLY – FURTHER REFINEMENTS MAY BE MADE BY THE APPLICANT PRIOR TO CLOSING.**

CRC192413 – Discharge to land where contaminants may enter groundwater associated with the deposition of cleanfill for site rehabilitation

1. Theactivity shall be limited to the discharge of contaminants into land, where contaminants may enter groundwater as a result of cleanfilling activities at 107 Dawsons Road and 220 Jones Road, Templeton,legally described as Rural Section 6475 and Rural Section 6324, Lot 1 Deposited Plan 4031, Rural Section 6342, Section 7 Survey Office Plan 510345, Rural Section 5381 and Section 6 Survey Office Plan 510345, at or about map reference NZTM2000 1555356mE, 5177132Mn, as shown on Plan CRC192413A, attached to and forming part of this resource consent.
2. The deposition of cleanfill shall be undertaken in accordance with CRC192409.
3. Soils from HAIL areas within the site, validated as being below applicable standards/guidelines for rural residential land use but above background soil levels for the local soil type, shall not be deposited more than 5 m below original ground level, unless otherwise approved in writing by the Canterbury Regional Council, Regional Leader - Monitoring and Compliance.
4. The Canterbury Regional Council may, once per year, on any of the last five working days of May or November serve notice of its intention to review the conditions of this consent for the purposes of:
5. Dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
6. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
7. The lapsing date for the purposes of section 125 of the Resource Management Act 1991 shall be 5 years from the date of issue of this consent.