

~~Amendments made prior to the hearing are shown in green highlight.~~

CRC192410 Discharge of Contaminants to Air
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, located on the land between Curraghs, Dawsons, Maddisons and Jones Road;~~ 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, NZMS 260 M26:6505-3830, shown as the area inside the site boundary in red on the Site Location Plan prepared by Golder Associates, dated November 2018, which is attached to these conditions.

The ~~discharge of~~ contaminants ~~into~~ authorised by this discharge to air consent shall only be generated ~~onsite~~ from the following quarrying activities:

- a) Site preparation, topsoil stripping, ~~and~~ overburden removal and storage;
- b) Construction and maintenance of bunds and stockpiles;
- c) Extraction, loading and transportation of material;
- ~~d)~~ Processing of aggregates (including crushing and screening of aggregates);
- ~~d)e)~~ Combustion products from the operation of -1.04 megawatt of diesel fired generation (up to 4 generators) of no more than four 0.26 megawatt diesel fired generators;
- ~~e)f)~~ Forming stockpiles of raw and processed aggregates;
- ~~f)g)~~ Deposition of cleanfill;
- ~~g)h)~~ Site rehabilitation; and
- ~~h)i)~~ Movement of vehicles associated with the above activities.

~~4)2)~~ The discharge of contaminants into air dust beyond the boundary of the consent holder's site described in Condition 1) shall not be offensive, ~~or~~ objectionable, noxious or dangerous. ~~-~~

Prior to Works

~~2)3)~~ At least ~~48 hours~~ one month prior to the commencement of activities authorised under this resource consent, 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

- ~~3)~~ ~~Prior to the commencement of activities listed in Condition 1) of this resource consent, a meteorological monitoring station, which measures and records wind direction and wind speed is to be installed on the site at a representative location free from interference from nearby structures, trees etc. The station must:~~
- ~~a)~~ ~~Be installed at a height of 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.~~

- b) ~~Wind speed resolution of measurement shall be not more than 0.1 metres per second and wind speed accuracy of measurement shall be at least within +/- 0.2 metres per second.~~
- e) ~~Wind speed and direction shall be continuously recorded with an averaging time for each parameter of one minute.~~
- d) ~~Record daily rainfall and evaporation.~~
- e) ~~Provide an alarm to site staff (for example via mobile phone) if the hourly rolling average wind speed trigger level is exceeded.~~
- f) ~~This data shall be:~~
 - i. ~~recorded using an electronic data logging system and retained for the duration of this consent; and~~

~~4) provided to the Canterbury Regional Council upon request. 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 shall be installed. The instruments shall be capable of continuous measurement and real time logging and reporting of the following:~~

- a) ~~Wind speed as 1-minute ~~vector scales~~ 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.~~
 - b) ~~Wind direction as 1-minute ~~vector scales~~ 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.~~
 - c) ~~Rainfall and Evaporation as hourly averages with maximum resolution of 1 mm/day and accuracy of at least within +/- 1.0 mm/day that meets standard good industry practice.~~
 - d) ~~Provide an alarm to site staff (for example via mobile phone) if the hourly rolling average wind speed trigger level is exceeded.~~
 - e) ~~Screened Temperature with accuracy of +/- 0.5 degree.~~
 - f) ~~Humidity (%RH) with accuracy of +/- 5 %.~~
 - g) ~~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.~~
 - h) ~~All measured data shall be:~~
 - i. ~~recorded using an electronic data logging system and retained for the duration of this consent; and~~
 - ii. ~~provided to the Canterbury Regional Council upon request.~~
- ~~provided to the Canterbury Regional Council upon request~~

~~4)5) The instruments specified in condition 1)4) shall be installed and maintained in accordance with the manufacturer's specifications. The consent holder shall keep a record of when maintenance~~

Commented [BK1]: These amendments reflect paragraph 24 of the rebuttal evidence of Mr Cudmore to Mr Kirkby's paragraph 25.2.

is undertaken, and the type of maintenance undertaken. This record shall be provided to the Canterbury Regional Council upon request.

Dust Management Plan

~~5) The consent holder shall prepare and implement a Dust Management Plan (DMP):~~

~~The DMP shall be:~~

- ~~■ Reviewed every two years, or more frequently if required, by the consent holder in consultation with the Community Liaison Group as required under Condition 64) of Selwyn District Council resource consent RC185627.~~
- ~~■ Retained on the site at all times; and~~
- ~~■ Forwarded at least one month prior to the exercise of this consent to the Canterbury Regional Council Attention: RMA Monitoring and Compliance Manager. Any updated versions of the DMP shall be forwarded to this Manager within 30 days of completing a review.~~

~~The DMP and any revisions shall include all measures necessary to achieve compliance with the conditions of this consent.~~

6) The consent holder shall prepare and implement a Dust Management Plan (DMP) which~~The DMP~~ shall include, but not be limited to:

- i. A description of the dust sources on site;
- ii. 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;
- iii. A description of the site rehabilitation;
- iv. A description of the monitoring requirements;
- v. A system of training for employees and contractors to make them aware of the requirements of the DMP;
- vi. Identifying staff responsible for implementing and reviewing the DMP;
- vii. Procedures, processes and methods for managing dust when staff are not on site;
- viii. Methods for determining the weather conditions that will trigger a restriction of potentially dusty activities;
- ix. A method for recording and responding to complaints from the public; and
- x. A maintenance schedule for meteorological monitoring instruments and ~~PM₁₀~~ particulate monitoring.

7) The DMP shall be:

- Developed to include separate Standard Operating Procedures (SOPs), with each of these dedicated to the management of potential dust discharges from specific sources, including but not limited to:

- a. Central processing plant, associated product stockpiles;
- b. Site roads – sealed and gravelled;
- c. Excavation and cleaning filling area;

Commented [BK2]: These amendments to conditions 6 to 8 reflect the rebuttal evidence of Mr Cudmore to Mr Kirkby's paragraph 25.3 to 25.5.

- d. Exposed areas of the quarry such as stockpiles;
 - e. Soil and overburden stripping, and storage;
 - f. Location and calibration of ambient ~~PM₁₀ particulate and meteorological~~ monitoring equipment; and
 - g. 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.
- Reviewed ~~together with the SOPs,~~ every two years, or more frequently if required, by the consent holder in consultation with the Community Liaison Group as required under Condition 64) of Selwyn District Council resource consent RC185627.
 - Retained on the site at all times; and
 - Forwarded at least one month prior to the exercise of this consent to the Canterbury Regional Council Attention: RMA Monitoring and Compliance Manager. Any updated versions of the DMP shall be forwarded to this Manager within 30 days of completing a review.

The DMP and any revisions shall include all measures necessary to achieve compliance with the conditions of this consent.

~~8)~~ This consent shall not be exercised until the DMP has ~~been certified by a Suitably Qualified and Experienced Practitioner (SQEP) on-in~~ air quality ~~at the Canterbury Regional Council to confirm that the measures proposed in the DMP are appropriate to enable the management of discharge of contaminants into air beyond the boundary to a level that is offensive, objectionable, noxious or dangerous~~ and enable compliance with the conditions of this consent.

~~7)9)~~ If the Canterbury Regional Council confirms receipt 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.

~~8)10)~~ The Quarry Manager, or nominated person, shall be available at all times (including outside quarry operation hours) to respond to dust emission issues.

Excavation and Rehabilitation

~~9)11)~~ 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, and shall have a~~ 1 m wide top 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.

~~40)12)~~ 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.

~~14)13)~~ 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. 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.

~~42)14)~~ The grassed and vegetated bunds shall be watered, when required to suppress potential dust, until a grass or vegetative cover has been established.

~~13)~~15) 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:

- a) Reshaping the relevant areas;
- b) Spreading of topsoil;
- c) Re-vegetating; and
- d) 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 suppress dust from the area until it is appropriate to re sow grass.

Generator Operation

16) Diesel generators associated with mobile plant should only be used between 7 am and 8 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.

Dust Mitigation

~~14)~~17) The consent holder shall take all reasonably practicable measures to minimise the discharge of dust from stockpiles. These shall include but not be limited to:

- a) After the initial site preparation and establishment, locating stockpiles of processed aggregate below natural ground level;
- b) All processed aggregate products shall be stockpiled by grade within the quarry floor area.
- c) Stockpile volumes will have a maximum total volume of 200,000m³ at any one time;
- a)d) All stockpiles associated with the fixed plant will be set back at least 500 metres from site boundaries and stockpiles associated with the mobile plant will be set back at least 500m from the eastern site boundary, 250 metres from all other site boundaries
- b)e) During initial site preparation, limiting the height of stockpiles to no more than 3 m above natural ground level at any one time;
- c)f) Vegetating any long term over burden or soil stockpiles, including any unprocessed aggregate up to a height of 3 m above natural ground; and
- d)g) Spraying stockpiles with water as required.

~~15)~~18) 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:

- a) Maintaining haul roads so that they are comprised of an aggregate base, with surfaces that are graded so they are free of pot holes; and sealing of the site access/exit ring road.

Commented [BK3]: This amendment and that to 18 i) are as per Mr Cudmore's supplementary rebuttal evidence to Louise Wickham paragraphs 61-62.

Commented [BK4]: Amendment to clarify conditions relating to haul roads and site access / exit ring road as per paragraph 31 of Mr Cudmore's evidence and paragraph 25.8.4 of Mr Kirkby.

Now – (a) only specifies requirement for haul roads, and (x) only specifies requirement for site access / exit ring road.

- a)b) Using field conveyors as the primary form of transporting aggregate for processing within the site. Note: this does not apply to stripping or overburden material;
- b)c) Minimising drop heights when loading trucks, conveyor hoppers and when moving material;
- e)d) 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;
- d)e) Locating the fixed plant in the centre of the site and below ground level;
- e)f) Any fixed processing plant and associated stockpiling shall be set back at least 500 m from the site boundaries;
- f)g) Only using-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;
- g)h) All mobile processing plant and associated stockpiled processed aggregates will be located within the quarry floor and set back at least 500 m from the eastern site boundary and 250 m from all other site boundaries;
- h)i) All processed aggregate products shall be stockpiled by grade within the quarry floor area. 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, following the establishment of the quarry pit;
- i)j) Maintaining, establishing and enhancing shelter belt plants around the site boundaries;
- j)k) All trucks leaving the site that 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 reduce the potential for material to be windblown, effectively control windblown dust from vehicles when leaving the site in transit;
- k)l) Regularly applying dust suppression measures such as water to unsealed haul and access roads during any conditions when dust is likely to be discharged from them (dry and windy);
- l)m) Undertaking routine site inspections of visible dust emissions throughout each day of operation, and logging findings and any mitigation actions electronically;
- m)n) Overburden stockpiles and bunds are to be re-vegetated or planted;
- n)o) The site will be rehabilitated as soon as reasonably practicable to limit potential for dust generation by minimising exposed surfaces;
- e)p) The use of pea gravel, reject gravel, or pit run gravel and -and dust suppressants as appropriate on exposed surfaces and additional use of suppressants (water or chemical dust suppressants as necessary to comply with ambient dust monitoring triggers and avoid visible dust plumes extending beyond the site boundary);
- p)q) Taking wind conditions-direction and speed into account in planning and carrying out work so as to minimise dust dispersion dispersion towards any residential dwellings that are within 250 m of the area where works are planned (e.g. stripping of overburden);

Commented [BK5]: The amendments to condition 18 reflect the rebuttal evidence of Mr Cudmore to Mr Kirkby's paragraph 25.8.

- q)r) Using water and/or dust suppressants on all ~~disturbed~~ exposed surfaces including extraction areas, roads and stockpiles when required to avoid visible dust plumes extending beyond the site boundary;
- r)s) Regularly maintaining unsealed internal roads and yard areas by grading and laying fresh gravel, ~~as necessary to avoid visible dust plumes extending beyond the site boundary~~;
- s)t) Maintaining an adequate supply of water and equipment on the Roydon Quarry site for the purposes of dust suppression at all times;
- t)u) Using chemical stabilisers or other equivalent measures on unsealed road surfaces, if water application is insufficient or unavailable and as necessary to avoid visible dust plumes extending beyond the site boundary;
- u)v) Applying a speed restriction on all internal roads of 15 kilometres per hour at all times and clearly signpost this limit on all internal roads;
- v)w) Keeping paved roads and yard areas free of dust by ~~either washing or use of~~ using vacuum sweepers;
- x) ~~Sections of the~~ The internal site access road will be sealed ~~for its entire length~~ and used in conjunction with a rumble strip to assist in removing muddy material from vehicle wheels before entering and exiting the site.

Advice note: The internal access road for the purposes of condition 18 (x) includes the access road from the site access point on Jones Road to where it meets the Central Processing and Stockpiling area.

Commented [BK6]: Advice note inserted as per recommendation in Mr Bligh's rebuttal evidence paragraph 28.

~~16)~~ 19) No extraction shall occur within 100 m of any dwelling existing at [the date of consent being granted], without the prior written consent of the owners and occupiers of these dwellings.

~~17)~~ 20) A permanent real-time PM₁₀ monitor (US EPA or National Environmental Standards for Air Quality 2004 (NES)) compliance equipment) shall be installed and operated at the eastern boundary directly downwind of the active quarry area for southwest wind conditions. This monitor is to record hourly and 24-hourly average PM₁₀ concentrations.

~~18) Wind speed and direction will be monitored continuously on site by equipment fitted with an alarm system to advise site personnel when the above triggers are exceeded.~~

~~19)~~ 21) A real-time Total Suspended Particles (TSP) and PM₁₀ monitor (referred to as the "mobile monitor") shall be operated on the quarry's site boundary and shall be located between the active quarrying/clean filling area and ~~each~~ one off-site sensitive location ~~that are~~ is less than 500 m away from the active quarrying/clean filling area. Depending on the location of the active quarrying/clean filling area more than one of these mobile monitors may be required. In ~~This mobile monitor~~ can be of a type that is suitable for dust management but does not need to meet the standard for NES compliance ~~monitoring~~.

Commented [BK7]: The amendments to condition 21 reflect the paragraph 32 of the rebuttal evidence of Mr Cudmore to Mr Kirkby's paragraph 25.10, and are intended to clarify that satisfying condition 21 may require more than one mobile monitor.

~~20)~~ 22) When quarrying and/or clean filling operations cause continuously recorded PM₁₀ concentrations at the site boundary, to reach or exceed the trigger levels listed below, then additional dust control measures shall be implemented:

- a) ~~Ten-minute rolling~~ Ten-minute rolling PM₁₀ concentration of 150 micrograms per cubic metre (1-hour average) ~~updated every 10 minutes~~

Commented [BK8]: The amendments to condition 22 reflect the rebuttal evidence of Mr Cudmore to Mr Kirkby's paragraph 25.12 to 25.14.

- b) ~~Ten minute rolling~~ TSP concentration of 200 micrograms per cubic metre (1-hour average) ~~updated every 10 minutes~~
- c) ~~One hour rolling~~ TSP concentration of 60 micrograms per cubic metre (24-hour average) ~~updated every hour~~

~~22)23)~~ All dust-generating activities (except dust mitigation measures) being undertaken within 250 m of sensitive receptor locations, shall cease when either of the following criteria are exceeded:

- a) Trigger concentrations listed in Condition ~~22)23)~~ are exceeded at the boundary location that is directly upwind from the sensitive locations and downwind of active quarrying/clean-filling areas;
- b) 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.

~~22)24)~~ Condition ~~23)24)~~ does not apply 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 else when the criteria listed in Condition ~~22)23)~~ are breached.

~~23)25)~~ 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 ~~23)24)~~ or any visible dusty plumes more than 30 m 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 CRCXXXXXX.

~~24)26)~~ 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, ~~and~~ water storage capacity on site (i.e. water tanks or similar vessels) ~~and~~ ~~and~~ ~~if deemed necessary,~~ chemical dust suppressants ~~can be used to minimise dust suppression water requirements to achieve compliance with limits specified in Condition 23) or else the confirmation of no visible dust impacts or related dust nuisance effects occurring at the downwind sensitive receptor locations.~~

~~25)27)~~ Should the ability to take water authorised under CRC182422 cease at any time in accordance with Condition ~~2(e)(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.

Planning of Activities

~~26)28)~~ The consent holder shall assess weather and ground conditions (~~dryness and 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.

~~27)29)~~ At any time, including outside normal operating hours, if visible dust is blowing beyond the site boundary or if targeted monitoring triggers are reached, and irrespective of it being a dry, windy day, the consent holder shall:

- a) Cease all dust generating activities;
- b) Continue all dust suppression activities;
- c) 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);

d) 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 22)24) are no longer being breached.

e) Notify the Canterbury Regional Council within one working day of the event, including the cause of the event and results of the investigation.

Reporting and Review

~~28)~~30) The consent holder shall keep a record of any complaints relating to dust, and shall include:

- a) The location where the dust was detected by the complainant;
- b) The date and time when the dust was detected;
- c) A description of the wind speed and wind direction when the dust was detected by the complainant;
- d) The most likely cause of the dust detected;
- e) Any corrective action undertaken by the consent holder to avoid, remedy or mitigate the dust detected by the complainant; and
- f) This record shall be provided to the Canterbury Regional Council upon request.

~~29) A notice is to be erected at the entrance advising the public how quarry management can be contacted. The consent holder shall ensure a 24-hour contact is available, with contact details posted in clear view at the site entrance.~~

~~30)~~31) 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.

~~31)~~32) The Canterbury Regional Council may, once per year, on any of the last five working days of May or ~~September~~ November serve notice of its intention to review the conditions of this consent for the purposes of:

- a) 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
- b) Dealing with dust suppression requirements;
- c) Altering the suspended particulate monitoring requirements of the relevant condition;
- d) Ensuring compliance with any relevant National Environmental Standards.

CRC192408 & CRC192409 Land use consent to excavate material and deposit cleanfill material over an unconfined/semi-confined aquifer
Use of Land for Mineral Extraction and Cleanfill Deposition

Description

1) The activities shall be only:

(a) Site preparation works including the excavation of topsoil and overburden material for the purpose of constructing bunds and storage of soil for site rehabilitation;

(b) Excavation of aggregate;

(c) Temporary stockpiling of excavated aggregate;

(d) Deposition of cleanfill; and

(e) Progressive remediation

At 107 Dawsons Road and 220 Jones Road, Templeton, The use of land for the construction works associated with development of the quarry, extraction of overburden and aggregate material, stockpiling of extracted aggregate, the deposition of cleanfill, and remediation of completed quarrying areas shall be at located on the land between Curraghs, Dawsons, Maddisons and Jones Road, 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, 5177132mNZMS 260 M26:6505-3830, 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, shown as the area inside the Site boundary in red on the Site Location Plan prepared by Golder Associates, dated November 2018, which forms part of this consent.

Preliminary Works

2) Site Management

(a) The perimeter of the quarry site shall be surrounded by secure fencing, with lockable access gates;

(b) The consent holder shall ensure that warning notices are erected and maintained at all entrances to the site;

(c) Warning notices shall be able to be read from a distance of five metres;

(d) The warning notices shall state:

(i) Name of the site; ___

(ii) Name of the owner of the site and a contact telephone number;

(iii) Groundwater is vulnerable to contamination;

(iv) Only clean soil may be deposited at this site; general refuse and hazardous waste shall not be dumped at this site.

- ~~2) Prior to works commencing, warning notices that can be read from a distance of 5 m shall be erected and maintained at all entrances to the quarry excavation site. These notices shall state:~~
- ~~a) The name of the site;~~
 - ~~b) The name of the quarry operator;~~
 - ~~c) No unauthorised material sourced from offsite shall be placed in the quarry excavation areas.~~
- ~~3) Access to the quarry excavation areas shall be secured by fencing and lockable gates.~~

Extraction Depth

- 3) 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:
- (a) Shall be undertaken by a registered surveyor;
 - (b) Results shall be to an accuracy of +/- 50 millimetres vertically;
 - (c) 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.
- 4) 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).
- ~~4) The consent holder shall survey the site prior to excavation, and annually thereafter, to determine the elevations of the site relative to the:~~
- ~~a) Mean Sea Level, including the depth of excavations;~~
 - ~~b) The survey shall be undertaken by a registered surveyor;~~
 - ~~c) The survey results shall be to an accuracy of +/- 50 millimetres vertically;~~
 - ~~d) The results of each survey shall be provided to the Canterbury Regional Council, attention: RMA Compliance and Enforcement Manager, in February of each year or on request;~~
 - ~~e) Natural ground levels of the site shall be recorded and reported in terms of metres above mean sea level;~~
 - ~~f) 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.~~
- 5) During at least the first five years after commencement of consent and until a different depth is certified in writing by the Canterbury Regional Council, the depth of quarrying shall not exceed

Commented [BK9]: The amendments to conditions 5 and 6 reflect paragraphs 28, 29 and 30(a)(i) of the Water Quality JWS.

a depth ~~of between 8.1 and 9.9 metres below natural ground level, across the site, as shown~~ in accordance with the contour plan included as Figure ~~CRCXXXXXX~~ [CRC192403A](#).

- 6) The consent holder shall monitor water levels ~~for the first five years~~ 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 ~~may~~ shall submit a report to the Canterbury Regional Council by ~~30 November of every 5th year after the commencement date of this consent~~ an independently qualified person with expertise in groundwater monitoring that, having regard to the water level monitoring information, recommends a revised maximum depth of quarrying. 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 [14](#)).

- 7) No excavation shall occur below 1 m above the highest recorded groundwater level at the site, as at the date of this consent being granted.

[8](#)) 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. This requirement shall not apply to any areas which have already been rehabilitated.

[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.](#)

[9](#)) If groundwater levels rise within the 1 m separation ~~depth~~ distance, 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 8).

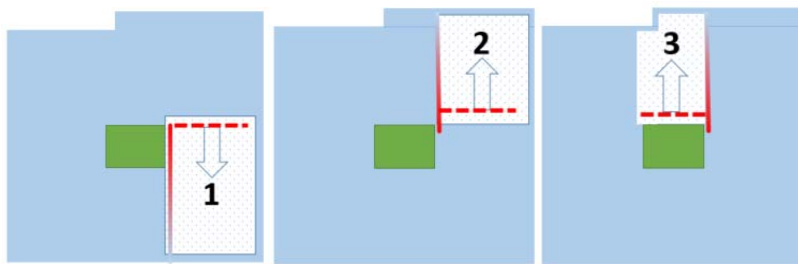
~~8~~[10](#)) [Should groundwater levels rise into the quarry floor during excavation or deposition of cleanfill, the consent holder shall notify the Canterbury Regional Council, Attention: Regional Leader – Monitoring and Compliance within 24 hours.](#)

9)11) 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.

~~40) The Consent Holder shall survey all excavated and filled areas of the site annually to determine the elevations of the site relative to datum established under Condition 4) including the depth of excavation. The survey shall be undertaken by a registered surveyor. The survey result shall be to an accuracy of +/- 50 millimetres vertically. The results of such survey shall be provided to the Manager, annually and otherwise on request.~~

Excavation of Aggregate

41)12) Excavation of aggregates shall commence with extraction in the centre of the site (adjacent to the central processing area shown in green) and shall occur in a progressive sequence (moving southward and then anticlockwise) generally in accordance with the three-part diagram in Figure 1 below the plan attached as CRC192408A. Full staging beyond Stage 3 shall be provided to the Manager at least one month prior to Stage 4 commencing. Excavation of aggregates shall occur from the quarry floor, once the pit is established.



~~Figure 1: Three-part diagram showing quarrying staging.~~

42)13) 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 the table below:

Table 1: Open area limits for active quarrying.

Purpose	Area (ha)
Central processing area, its fixed plant, stockpiles, mobile 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
Note: The above areas exclude the sealed access road(s) and any site buildings.	

~~14) The excavation of aggregates, deposition of cleanfill and stockpiling of aggregate and cleanfill material shall be setback 20 metres from the boundaries of the site. occur within 20 metres of the boundaries of the Site. This condition does not apply to earthworks involved in the rehabilitation of the Site.~~

15) Maintaining haul roads so that they are comprised of an aggregate base, with surfaces that are graded so they are and free of pot holes and sealing at least the first 100 m of the site access road;

~~14) Any roads within the central processing area shall be sealed as shall the access road(s) into the site.~~

Cleanfilling

15)16) 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:

- a) Only material defined as 'Cleanfill' as set out in the advice note attached to this condition;
- b) The material is not deposited into groundwater; and is at least one metre above the ~~seasonal high water~~ highest recorded groundwater table recorded at the site, subject to Condition 7);
- c) Material is deposited in accordance with a Cleanfill Management Plan (CMP) which has been prepared in accordance with Section 8.1 and Appendix B of "A Guide to the Management of Cleanfills", Ministry for the Environment, January 2002;
- d) Assessed against the fill acceptance criteria and inspected in accordance with the procedures contained in the draft Roydon Quarry Cleanfill Management Plan (submitted as Appendix F of the AEE and revised (V2) as at 12 March 2019); and rejected from the site if load description is contrary to actual content in truck;

Note: in any case the fill should meet the site's soil composition background levels, which could either be determined from sampling and testing of the site's soils, or by adopting the Canterbury regional background levels.

- e) Checked by the site manager or nominated person prior to deposition in the pit. If the material is not classified as Cleanfill, the consent holder shall immediately remove the material and arrange for the disposal of it at an appropriate location;
- f) And recorded by an electronic weighing system. The record shall include a detailed record of all materials deposited into the Cleanfill site and shall be provided to the Canterbury Regional Council upon request. This record shall include the following information:
 - i. The name of the company delivering the material;
 - ii. The date of deposition;
 - iii. The physical address of the land the material was sourced from;
 - iv. A description of the material;
 - v. Any laboratory reports;
 - vi. Any authorisation under which the material was removed from the source site (e.g., resource consent); and
 - vii. The weight or volume of the material deposited.

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

Advice note: 'Cleanfill' is defined as:

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

Commented [BK10]: The amendment in green is proposed in response to paragraphs 16 and 30(a)(iii) of the Water Quality JWS.

- 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.

~~9~~h) No cleanfill material shall be deposited at the site which has been 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.

17) All cleanfill stockpiles shall be inspected and pushed over the working face on a regular basis.

~~46~~18) 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.

19) 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.

~~17~~20) At least one month prior to the commencement of any cleanfilling activity authorised by this consent the consent holder shall submit a CMP to the Canterbury Regional Council, Attention: RMA Monitoring and Compliance Manager. The CMP shall include but not be limited to the following:

- a) Describing the content and purpose of the CMP;
- b) 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;
- c) 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;
- d) Identifying and providing contact details of the staff member responsible for each action;
- e) Discussing the steps to be undertaken to correct incidences of non-compliance;
- f) Identifying timeframes for site rehabilitation;
- g) The specific location of the cleanfill placement area;
- h) A description of operational procedures and monitoring that will be implemented to prevent unauthorised material from entering the site;
- i) How rejected material will be stored pending disposal to an authorised landfill;

- j) Where rejected material will be disposed of;
- k) The maximum length of time that rejected material will be stored on site pending removal;
- l) Construction procedures to ensure the long-term stability of cleanfill areas;
- m) Timetable of works and re-vegetation measures;
- n) Procedures for improving and/or reviewing the CMP;
- o) A list of all material accepted in the cleanfill; and
- p) 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.

21) Specific staff training as required under the CMP 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.

~~19)22)~~ 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.

~~19)23)~~ The CMP shall be:

- a) Reviewed and updated at least once every two years for the duration of the consent; and
- b) Retained on the site at all times.

Any updated versions of the CMP shall be forwarded to the Canterbury Regional Council, Attention: RMA Monitoring and Compliance Manager, within 30 days of completing a review.

Groundwater quality monitoring

~~20)24)~~ The following groundwater sampling regime is proposed:

a) Two additional monitoring wells are to be installed on the site at the boundary at the same depth as the existing four monitoring wells. These should be installed downgradient in respect to the groundwater flow and assist in identifying groundwater quality changes caused by quarry activities.

~~a)b)~~ Representative samples of groundwater shall be taken from bores XXXX, including onsite bore M36/2743, at ~~three~~six-monthly intervals, for a period of ~~five~~two years after quarrying activities commence, and thereafter at a ~~six~~12-monthly interval, from the two upgradient and two downgradient bores;

~~b)c)~~ 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

~~c)d)~~ 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;

~~d)e)~~ 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.

Commented [BK11]: The amendments to condition 24 reflect the changes sought in the evidence of Mr Murray England on behalf of SDC.

Responses to Monitoring

~~24)25)~~ 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:

- a) The tested result is in excess of the trigger values for a contaminant given in Table 1 if the same contaminant upgradient concentration is less than the Table 1 trigger levels; or
- b) Any contaminant concentration in the upgradient bore exceeds the Table 1 trigger values for that contaminant and if the downgradient bore exceeds the upgradient bore contaminant concentration by more than 10 percent of the respective Table 1 contaminant trigger value.

~~22)26)~~ If there is an exceedance in a downgradient bore as determined by Condition ~~25)22)~~, the consent holder shall shall within one month of receiving the results:

- a) Obtain a second sample of groundwater from the bore sampled in accordance with Condition ~~24)22)~~; and
- b) Obtain a sample of groundwater from the upgradient bore specified in Condition ~~24)22)~~; and
- c) Analyse these samples in accordance with Condition ~~24)22)~~.

~~23)27)~~ If the results of analysis of groundwater samples carried out in accordance with Condition ~~24)22)~~ 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)22)~~.

~~24)28)~~ If the results of analysis of groundwater in down-gradient bores sampled in accordance with Condition ~~24)22)~~, for any contaminant analysed show an exceedance, as determined by Conditions above (~~24)22)~~, the consent holder shall :

- a) Notify the Manager; and
- b) Notify the residential occupiers with water supply bores of all adjoining properties to the south and south-east of the cleanfill site; and

~~e)~~ Sample all domestic wells within 500 metres downgradient of the affected monitoring wells in which 50% of MAV trigger level has been exceeded (subject to well owner approval)

~~d)c)~~ Implement necessary measures to reduce the concentration of the contaminant in groundwater. Such measures may include:

- i. cessation of activities that may have caused the excessive concentrations;
- ii. removal of the contaminant source(s);
- iii. stabilisation or capping of the contaminant source(s); and
- iv. revision of cleanfill management procedures.

~~e)d)~~ Undertake additional monitoring beyond the routine sampling.

Any material removed in accordance with Condition ~~24~~22)a) 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.

Rehabilitation

~~25) Rehabilitation of the site shall be undertaken generally in accordance with the Quarry Rehabilitation Plan (QRP), as certified by Selwyn District Council under RMAXXXXXX.~~

~~26~~29) Following completion of quarrying and ~~within XXXX 12 months of the conclusion 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.

~~27~~30) 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:

- a) Reshaping the relevant areas;
- b) Spreading of topsoil;
- c) Re-vegetating; and
- d) 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 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.

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.

~~28~~31) 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

32) 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:

(a) Refuelling or maintenance of vehicles or machinery maintenance shall not occur on the quarry pit floor with the exception of generators for mobile plant;

(b) Appropriate servicing and maintenance of vehicles and machinery such that they do not result in leaks or spills;

(c) Only undertaking refuelling or maintenance on vehicles or machinery on hardstand surfaces that are roofed;

(d) 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

33) The consent holder shall prepare and implement a Spill Management Plan for the site. The Spill Management Plan shall:

(a) Document the measures to prevent leaks and avoid spills of fuel or any other hazardous substance (including fuel reconciliations);

(b) Set out the procedure to be undertaken in the event of a spill of fuel of any hazardous substance, in accordance with condition (x);

(c) Set out staff training requirements for responding to spills; and

(d) Be provided to Canterbury Regional Council on request.

~~(a) All reasonably practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles and machinery.~~

~~29) A spill kit, that is capable of absorbing the quantity of oil and petroleum products that may leak or be spilled shall be kept on site at all times.~~

34) In the event of a spill of fuel or any other hazardous substances:

(a) The spill shall be cleaned up as soon as practicable, and measures taken to prevent a recurrence;

(b) 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:

(i) The date, time, location and estimated volume of the spill;

(ii) The cause of the spill;

(iii) The type of hazardous substance(s) spilled;

(iv) Clean up procedures undertaken;

(v) Details of the steps taken to control and remediate the effects of the spill on the receiving environment;

(vi) An assessment of any potential effects of the spill;

(vii) Measures to be undertaken to prevent a recurrence

~~30) The consent holder shall inform the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, within 24 hours of any leak or spill greater than 4 litres and shall provide the following information:~~

~~a) The date, time, location and estimated volume of the spill;~~

~~b) The cause of the spill;~~

~~c) The type of contaminant(s) spilled;~~

~~d) Clean up procedures undertaken;~~

~~e) Details of the steps taken to control and remediate the effects of the spill on the receiving environment;~~

~~f) An assessment of any potential effects of the spill; and~~

~~Measures to be undertaken to prevent a recurrence.~~

Accidental Discovery

~~34~~35 Immediately following the discovery of material suspected to be a taonga, kōiwi or Māori archaeological site, the following steps shall be taken:

- a) All work in the vicinity of the discovery will cease;
- b) Immediate steps will be taken to secure the site to ensure the archaeological material is not further disturbed:
 - i. Notify the Kaitiaki Rūnanga and the Area Archaeologist of the New Zealand Historic Places Trust (NZHPT). In the case of kōiwi (human remains), the New Zealand Police must be notified. The Kaitiaki Rūnanga and NZHPT will jointly appoint / advise a qualified archaeologist who will confirm the nature of the accidentally discovered material;
 - ii. 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 NZHPT before work resumes (as per the Historic Places Act 1993);
 - iii. 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;
 - iv. 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;
 - v. Works in the site area shall not recommence until authorised by the Kaitiaki Rūnanga, the NZHPT (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;
 - vi. 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 Historic Places Act 1993 if necessary. Appropriate management may include recording or removal of archaeological material;
 - vii. 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

~~32~~36 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.

~~33~~37 The Canterbury Regional Council may, once per year, on any of the last five working days of May or ~~November~~September serve notice of its intention to review the conditions of this consent for the purposes of:

- a) 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
- b) Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

38) 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.

39) A copy of this consent shall be provided to all persons operating or carrying out the activities as authorised by the consent holder.

40) 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.

41) 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:

(i) Scheduling and staging of the works, including the proposed start date;

(ii) Responsibilities of all relevant parties;

(iii) Contact details for all relevant parties;

(iv) Expectations regarding communication between all relevant parties;

(v) Procedures for implementing any amendments;

(vi) Site inspection; and

(vii) 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

(viii) Methods for resolution of non-compliance with the conditions of this consent.

Table 2: 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

*Note: at low salinity concentrations in mg/L and g/m³ are generally interchangeable, but I have made them all g/m³ for consistency.

CRC~~192414~~182422A – 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~~ 274,642 cubic metres between 1 July and the following 30 June.

Water shall only be used for quarrying activities including

2) :

- (a) dust suppression;
- (b) truck washing;
- (c) staff amenities; and
- (d) 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.

~~Water used under this permit shall be used for dust suppression, quarrying operations and ancillary activities and irrigation of rehabilitation areas; and shall only be applied to the area of land between Curraghs, Dawsons, Maddisons and Jones Road, 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 NZMS 260 M26:6505-3830, shown as the area inside the site boundary in red on the Site Location Plan prepared by Golder Associates, dated November 2018, which is attached to these conditions.~~

3) 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.

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 the consent for the purpose of:

- a) 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
- a)b) Requiring the adopting of the best practicable option to remove or reduce any adverse effect on the environment.

CRC192411 and CRC192412 - Discharge permit to discharge of stormwater to land where contaminants may enter groundwater and; ~~Discharge of~~ 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, discharge of contaminants and of stormwater shall only be from quarrying activities located on the land between Curraghs, Dawsons, Maddisons and Jones Road, 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. NZMS 260 M26:6505-3830, shown as the area inside the site boundary in red on the Site Location Plan prepared by Golder Associates, dated November 2018, which is attached to these conditions.

Stormwater

- 2) Stormwater that falls on unsealed surfaces will infiltrate to ground. Stormwater runoff from road surfaces shall infiltrate to ground along the road edges. Stormwater runoff from roofs and other hardstand surfaces areas shall be discharged into land via ~~conveyed to~~ stormwater detention basins.
- 3) All stormwater detention basin treatment systems to be installed at for the site shall be designed and installed in accordance with a Stormwater Management Plan (SMP) to be developed and submitted to the Canterbury Regional Council for review and technical certification. All stormwater detention basins shall be ~~are~~ 'dry ponds' in which stormwater will infiltrate and no ponding occurs for more than 48 hours, in accordance with the approved SMP.

4) Stormwater detention ponds ~~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).

- (a) 90% removal of Total Suspended Solids
- (b) 90% removal of Biochemical Oxygen Demand (BOD)
- (c) 75% removal of hydrocarbons, and
- (d) 85% removal of heavy metals (zinc, copper, lead)

Soils referred to in condition (4) 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:

- (a) has significant adverse effects on the environment; or
- (b) 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.

Commented [BK12]: This amendment reflects the JWS for water quality at paragraph 30(b)(i)(1).

Commented [BK13]: This amendment reflects the JWS for water quality at paragraph 30(b)(i)(1).

Commented [BK14]: This amendment reflects the JWS for water quality at paragraph 30(b)(iii).

Commented [BK15]: This amendment reflects paragraph 30(b)(vi) of the Water Quality JWS.

Hazardous Activities

~~4)5) A Truck washing shall be undertaken on a roofed wash pad formed of hardstand. Truck wash water shall be collected in holding tanks and transported offsite to be discharged as trade waste. concrete and bunded truck wash pad shall be located close to the site workshop and shall be designed and constructed so that any contaminated water from the wash down process is collected in an appropriately sized holding tank with a water-oil separator. Both the oil and separated water shall be discharged as trade waste, and shall be collected in holding tanks and trucked offsite, to be appropriately disposed in accordance with the relevant environmental guidelines. The truck wash pad will be roofed and stormwater runoff from the roof will be conveyed to stormwater detention ponds.~~

~~5)6) All sediment collected from the sump of the 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 SMP~~

~~7) No concrete barrels shall be washed out on site.~~

Advice note:

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

- (a) The discharge of wastewater from staff amenity blocks; or
- (b) The discharge of concrete washwater; or
- (c) The discharge of truck washdown water.

~~8) When any mobile tankers are used on site, refuelling with such tankers shall take place well above the bottom of the quarry pit floor, and 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.~~

~~6) The management and inspection of all fuel tanks shall be undertaken in accordance with the Spill Management Plan developed for the site, as required under Condition 11).~~

Spills

~~9) 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:~~

~~(a) The spill shall be cleaned up as soon as practicable, and measures taken to prevent a recurrence;~~

~~(b) 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:~~

- ~~(i) The date, time, location and estimated volume of the spill;~~
- ~~(ii) The cause of the spill;~~
- ~~(iii) The type of hazardous substance(s) spilled;~~
- ~~(iv) Clean up procedures undertaken;~~
- ~~(v) Details of the steps taken to control and remediate the effects of the spill on the receiving environment;~~

Commented [BK16]: This amendment reflects the JWS for water quality at paragraph 30(b)(iv).

Commented [BK17]: The amendment is proposed in response to paragraph 30(b)(v) of the Water Quality JWS.

- (vi) An assessment of any potential effects of the spill;
- (vii) Measures to be undertaken to prevent a recurrence

- ~~(a) A Spill Management Plan shall be developed for the site, which is to incorporate the management and inspection of fuel tanks, including fuel reconciliation, spill management and containment, and visual inspection of the tank.~~
- ~~(b) The Spill Management Plan shall detail appropriate contingency measures in the form of operational practices, spill kits and staff training that will be in place to manage any hydraulic oil or fuel leaks.~~
- ~~(c) The spillage of any hazardous substances shall be dealt with in accordance with the Spill Management Plan for the site.~~

Reporting and Review

- 10) 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.
- 11) The Canterbury Regional Council may, once per year, on any of the last five working days of May or ~~November~~ September, serve notice of its intention to review the conditions of this consent for the purposes of:
 - a) 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
 - b) Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
- 13) 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.

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

- ~~1) The activity 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. discharge of contaminants shall only be from quarrying activities located on the land between Curraghs, Dawsons, Maddisons and Jones Road, 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. NZMS-260-M26-6505-3830, shown as the area inside the site boundary in red on the Site Location Plan prepared by Golder Associates, dated November 2018, which is attached to these conditions.~~
- ~~4)2) The deposition of cleanfill shall be undertaken in accordance with CRC19240913.~~
- ~~2) 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:~~
- ~~a) Only material defined as 'Cleanfill' as set out in the advice note attached to this condition;~~
 - ~~b) The material is not deposited into groundwater; and is at least one metre above the seasonal high water table recorded at the site, subject to Condition 5);~~
 - ~~c) Material is deposited in accordance with a Cleanfill Management Plan (CMP) which has been prepared in accordance with Section 8.1 and Appendix B of "A Guide to the Management of Cleanfills", Ministry for the Environment, January 2002;~~
 - ~~d) Strictly assessed against the fill acceptance criteria and inspected in accordance with the procedures contained in the draft Roydon Quarry Cleanfill Management Plan (submitted as Appendix F of the AEE and revised (V2) as at 12 March 2019); and rejected from the site if load description is contrary to actual content in truck.~~
 - ~~e) Checked by the site manager or nominated person prior to deposition in the pit. If the material is not classified as Cleanfill, the consent holder shall immediately remove the material and arrange for the disposal of it at an appropriate location;~~
 - ~~f) And recorded by an electronic weighing system. The record shall include a detailed record of all materials deposited into the Cleanfill site and shall be provided to the Canterbury Regional Council upon request. This record shall include the following information:
 - ~~i. The name of the company delivering the material;~~
 - ~~ii. The date of deposition;~~
 - ~~iii. The physical address of the land the material was sourced from;~~
 - ~~iv. A description of the material;~~
 - ~~v. Any laboratory reports;~~
 - ~~vi. Any authorisation under which the material was removed from the source site (e.g., resource consent); and~~
 - ~~vii. The weight or volume of the material deposited.~~~~

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

Advice note: 'Cleanfill' is defined as:

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.*

3) No cleanfill material shall be deposited at the site which has been 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.

4) 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.

5) All cleanfill stockpiles shall be inspected and pushed over the working face on a regular basis.

6) 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.

7) At least one month prior to the commencement of any cleanfilling activity authorised by this consent the consent holder shall submit a CMP to the Canterbury Regional Council, Attention: RMA Monitoring and Compliance Manager. The CMP shall include but not be limited to the following:

- a) Describing the content and purpose of the CMP;
- b) 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;
- c) 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;

- d) ~~Identifying and providing contact details of the staff member responsible for each action;~~
- e) ~~Discussing the steps to be undertaken to correct incidences of non-compliance;~~
- f) ~~Identifying timeframes for site rehabilitation;~~
- g) ~~The specific location of the cleanfill placement area;~~
- h) ~~A description of operational procedures and monitoring that will be implemented to prevent unauthorised material from entering the site;~~
- i) ~~How rejected material will be stored pending disposal to an authorised landfill;~~
- j) ~~Where rejected material will be disposed of;~~
- k) ~~The maximum length of time that rejected material will be stored on site pending removal;~~
- l) ~~Construction procedures to ensure the long-term stability of cleanfill areas;~~
- m) ~~Timetable of works and re-vegetation measures;~~
- n) ~~Procedures for improving and/or reviewing the CMP;~~
- o) ~~A list of all material accepted in the cleanfill; and~~
- p) ~~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~~

8) ~~The CMP shall be:~~

- a) ~~Reviewed and updated at least once every two years for the duration of the consent; and~~
- b) ~~Retained on the site at all times.~~

~~Any updated versions of the CMP shall be forwarded to the Canterbury Regional Council, Attention: RMA Monitoring and Compliance Manager, within 30 days of completing a review.~~

9) ~~Specific staff training as required under the CMP 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.~~

10) ~~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.~~

11) ~~3) The Canterbury Regional Council may, once per year, on any of the last five working days of May or ~~November~~September serve notice of its intention to review the conditions of this consent for the purposes of:~~

- a) ~~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~~
- b) ~~Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.~~

~~42~~4 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.

OFFICER SET OF CONDITIONS – LAND USE CONSENT RC185627

These conditions have been amended post the Officer's report. Where the applicant has agreed to the Officer recommendations, these have been accepted into the text of the conditions. Tracked changes and comments identify where there is disagreement between the applicant and the Officer over the conditions.

Amendments made prior to the hearing are shown in green highlight

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 XXXX. Where there is any conflict between the application and the conditions, the conditions of consent shall prevail.

Location of Quarry

2) The area to be excavated shall be in accordance with the area shown on the attached XXX plan dated XXX. This is the quarry area within the quarry site.

Lapse and Expiry

3) 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.

4) Pursuant to section 125 of the Act 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 section 125(1)(b) of the Act. Once the consent has been given effect to, or work shall be completed within 40 years.

Management Plans and Works to be completed prior to commencement of quarry operations

Certification

5) 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'

- (a) the consent holder shall provide the plan to the Council in accordance with the timeframe specified in the applicable condition;
- (b) the consent holder may commence the activities for 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 in the Council provides reasons why that view is held;
- (c) 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;

Commented [BK1]: The reference to '40 years' as included by the officer in this condition is opposed, as it is not required to manage an effect and rehabilitation of the site will be progressive.

(d) 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 (a) to (c) above. The activities subject to the variation shall not commence until the variation has been certified by the Council.

5)6) This resource consent and a copy of the Council certified versions of all the 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

6)7) 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.

7)8) All quarrying works shall be overseen by a suitably qualified and experienced quarrying practitioner.

8)9) Should any persons change during the term of this resource consent, the Consent holder shall ~~immediately~~ 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

9)10) Establishment of landscape works (predominantly bunding and planting) shall not occur until Selwyn District Council has certified a final LMP in general accordance with the Landscape Management Plan, Project No. 2017_031|B prepared by DCM Urban. The purpose of the Landscape Management Plan (LMP) is to ensure the successful establishment and long-term success of the proposed on-site landscape works.

10)11) The consent holder shall ensure that all quarry activities are undertaken in a general accordance with the certified landscape management plan.

11)12) The commencement of Stage 1 of quarrying operations shall not begin until landscape works defined in the approved LMP are established on-site

12)13) Prior to quarrying operations commencing on the site, site bunding and landscaping shall be established in accordance with the ~~Landscape Management Plan LMP approved-certified~~ in Condition 4 and 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. This shall include:

Bunding

- a. 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.
- b. 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

Commented [BK2]: 'Immediately' is not required, as the inclusion of the wording 'as soon as practicable' is considered more appropriate.

Commented [AH3]: Note that conditions should be reordered generally in the following sequence:

- General
- Certification
- Management Plans
- Works to be completed prior to the commencement of quarrying
- Operation Conditions
- Review, monitoring and rehabilitation conditions.
-

Commented [BK4R3]: This is accepted although it is considered that such an approach is best dealt with at the final stage of condition drafting if consent is to be granted.

Commented [BK5]: The wording used by the officer above is 'certification'.

Commented [AH6]: Plans require amending to show all plantings and walkways within Council road reserves being removed.

Commented [BK7R6]: In accordance with the evidence of David Compton-Moen, it is considered that this is not required as these measures help with CPTED. If Council does not wish to provide for the walkway at the applicant's expense, the applicant can remove it.

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).

- c. 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.
- d. 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.
- e. The grassed bunds shall be mown regularly or grazed to give a tidy appearance.
- f. 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**
- g. 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.

Commented [BK8]: The amendment is proposed to address paragraph 7.1(ii) of the Landscape JWS.

Planting

- h. 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.
- i. An additional row of plantings shall be established behind these existing shelter belts as shown on the Edge Treatments **A4** and **C3** (pages 19 and 21) of the LVIA prepared by DCM Urban, Project No. 2017_31, dated 12 August 2019. This row of plantings **may** **shall** be established **at the base of the bunds**, **within the first planting season following the establishment of the bunds commencement of consent**.
- j. Along the site boundaries where there is no planting, **three four** rows of plantings shall be established in accordance with the Edge Treatments **B2** and **D4** (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 establishment of the bunds commencement of consent**.
- k. All planting required for this consent under this condition (Condition **-13 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.
- l. All planting will be established on the outer side of the bunds.

Commented [AH9]: I consider this condition needs to be time bound.

Commented [BK10R9]: Amendment proposed to reflect first planting season.

Formatted: Highlight

Commented [BK11]: This amendment is in accordance with paragraph 7.2 of the Landscape JWS.

Commented [AH12]: As above

Commented [BK13R12]: Amendment proposed to reflect first planting season.

Commented [BK14]: The amendments in green reflect paragraph 43 of my first statement of rebuttal evidence in response to Ms Conlon's comments on the Landscape Management Plan.

- m. 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.

Site Access

- ~~13)~~14) Vehicle access shall be provided on Jones Road, between Curraghs and Dawsons Road, for light and heavy vehicles. This may involve a separate access point exclusively for light vehicles. These access points shall be designed and constructed/ upgraded in accordance with the recommendations of the Stantec ITA (Appendix C of the AEE). The heavy vehicle access shall be located at least 250 metres from the dwelling at 1090 Main South Road.
- 15) Roading upgrades shall be undertaken in 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.
- ~~14)~~16) The roading improvement schemes specified in Conditions 14 and 15 above shall be constructed and fully operational prior to any movement of materials to or from the site.
- ~~15)~~17) Prior to the commencement of the works required in Conditions 14 and 15, the consent holder shall provide detailed designs to the Council's Transportation Asset Manager for technical review and certification approval.
- ~~16)~~18) 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.

Commented [AH15]: Standard clause in most consents, as the infrastructure will be vested. I consider a timeframe should be specified to give SDC time to undertake the review.

Commented [BK16R15]: 'Approval' should be replaced by 'technical review and certification'. The timeframe under condition 5 would therefore apply.

Operational

General

- ~~17)~~19) 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 <u>and truck movements</u> , site pre-start up including operational warm up of conveyors and machinery. Clean fill 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 <u>except mobile plant processing and working of cleanfill with the exception of processing using mobile plant and backfilling</u> .
8.00 pm to 6.00 am.	Monday to Saturday on 150 up <u>to 60</u> nights per annum	Load out of trucks and truck movements, and ancillary activities such as operation of weighbridge and site offices and clean-fill deposition.

Commented [AH17]: Only defined and unambiguous terms should be used. I.e. are "load out of trucks", "load out of aggregate" and load out of trucks and truck movements" distinct things? What is "operational warm-up" and are "back-filling" and clean fill deposition" different things?

Commented [BK18R17]: Amendments are proposed to the table as shown. Night time movements are reinstated by the applicant's change, but the number of nights proposed is reduced to 60. Wording has been amended to reduce uncertainty as suggested.

Hours	Duration	Range of activities
Sunday and public holidays	For up to 15 days per year	Load out of trucks and truck movements— load out of aggregate and clean-fill 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.		

~~18)~~20) No aggregate processing or transportation from the site shall take place prior to the opening of the Christchurch Southern Motorway Stage 2 (CSM2).

21) 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.~~

22) 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:

a. Jones Road west of access (between the access and Curraghs Road)

b. Dawsons Road north of Jones Road (between Jones Road and Maddisons Road)

c. Jones Road east of Dawsons Road (between Dawsons Road and Railway Terrace)

Advice note: The above conditions will also avoid travel down Curraghs Road.

Excavation

~~19)~~23) No excavation shall occur below 1 m above the highest recorded groundwater level at the site, as at the date of this consent being granted.

~~20)~~24) 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.

~~24)~~25) 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.

~~22)~~26) Access to the quarry excavation areas shall be secured by fencing and lockable gates.

~~23)~~27) After the establishment of the quarry pit, no processed aggregate stockpiles shall be above the height of natural ground level.

~~24)~~28) All processed aggregate products shall be stockpiled by grade within the quarry floor area. 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, following the establishment of the central processing area.

Commented [BK19]: The applicant proposes this condition be reinstated. The Officer had proposed deletion of this condition.

Commented [BK20]: The green text is inserted in accordance with para 46 of my first rebuttal evidence in response to Ms Conlon's evidence. I note the 6 am start had been inadvertently noted as 7 am and this has also been corrected to be consistent with evidence.

Commented [BK21]: New condition proposed by the applicant.

~~25)~~29) 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 the table 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.	

~~26)~~30) Any roads within the central processing area shall be sealed as shall the access road(s) into the site.

Setbacks

~~27)~~31) Any fixed processing plant and associated stockpiling shall be set back at least 500 m from the site boundaries and any mobile processing plant and associated stockpiling shall be set back at least ~~500 m from the eastern site boundary and at least~~ 250 m from ~~all other~~ site boundaries.

32) No extraction shall occur within 100 m of any dwelling existing at [the date of consent being granted] being 151 Curraghs Road and 319 Maddisons Road, without the prior written consent of the owners and occupiers of these dwellings.

Keeping of Records

~~28)~~33) 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.

Cleanfilling

~~29)~~34) Where additional fill is required to be brought into the site for rehabilitation purposes, the consent holder shall ensure that all material deposited in the excavated area is:

- a. Only material defined as 'Cleanfill' as set out in the advice note attached to this condition;
- b. The material is not deposited into groundwater; and is at least 1 m above the highest recorded groundwater level, subject to Condition 23);

Commented [BK22]: This amendment and that to 18 i) are reflect Mr Cudmore's supplementary rebuttal evidence to Ms Wickham's evidence paragraphs 61-62.

Commented [AH23]: From a compliance perspective, maybe report to council if this is to occur, this would circumvent any possible complaint

Commented [BK24R23]: While the applicant does not oppose the Officer's comment, it is also not considered to be required if this resource consent is authorising this activity.

- c. Material is deposited in accordance with a Cleanfill Management Plan which has been prepared in accordance with Section 8.1 and Appendix B of "A Guide to the Management of Cleanfills", Ministry for the Environment, January 2002;
- d. Checked by the site manager prior to deposition in the pit. If the material is not classified as Cleanfill, the consent holder shall immediately remove the material and arrange for the disposal of it at an appropriate location; and
- e. Recorded by an electronic weighing system. The record shall include a detailed record of all materials deposited into the Cleanfill site and shall be provided to the Selwyn District Council annually. This record shall include the following information:
 - i. The name of the company delivering the material;
 - ii. The date of deposition;
 - iii. The physical address of the land the material was sourced from;
 - iv. A description of the material;
 - v. The approximate quantity of material; and
 - vi. The weight or volume of the material deposited; and
 - vii. The approximate location of the load within the site following deposition.
- f. Copies of this documentation shall be provided to the Council on an annual basis request and otherwise shall be available on request.

Advice note: 'Cleanfill' is defined as:

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*
- *liquid waste.*

~~30)~~35) 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 provided to the Council on an annual basis request and otherwise shall be available on request.

Traffic

~~34)~~36) 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.

~~32)~~37) 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.

~~33)~~38) A Transportation Management and Routing Plan shall be prepared by the consent-holder. This will include, as a minimum, that:

- a. Fulton Hogan controlled trucks will only travel into or through Templeton ~~or on Curraghs Road~~ if a delivery is in the immediate vicinity.
- b. Fulton Hogan will require any non FH-controlled truck drivers accessing the site to sign on to a code of practice committing to ~~the same (a) and to avoid using engine brakes when onsite and while on Jones Road approaching or leaving the site.~~
- ~~b.c.~~ A prominent sign will be established inside the quarry gate reminding drivers not to travel through Templeton ~~or on Curraghs Road~~ unless a delivery is in the immediate vicinity.
- d. Arrangements for site induction shall include a section on truck route options to and from the site, ~~safe travel procedures across the Dawson's Road railway level crossing and shall specifically address point (b) above.~~

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

~~39)~~ . The surveys and assessments ~~specified in Condition 38 above shall be repeated at least one each year that the quarry is operational~~

~~34)~~40) The heavy vehicle internal access road from the Jones Road boundary into the site shall be sealed over a distance of at least 100m to prevent debris being carried out onto the public road. The internal site access road will be sealed for its entire length and used in conjunction with a rumble strip to assist in removing muddy material from vehicle wheels before entering and exiting the site. Any light vehicle access road into the site from the Jones Road boundary will also be sealed for its full length.

~~35)~~41) 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:

- a. 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;
- b. 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.
- c. 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;

Commented [BK25]: This amendment is opposed as per the evidence of Mr Jon Farren.

Commented [BK26]: This amendment is proposed as per paragraph 17 of Mr Farren's rebuttal evidence and paragraph 20 of the JWS Noise Effects.

Commented [BK27]: This amendment is opposed as per the evidence of Mr Jon Farren.

Commented [BK28]: This amendment is proposed as per paragraph 25 of the JWS Traffic Effects.

Commented [BK29]: It is understood this condition relates to a recommendation from Mr Carr. However, the relevant condition has not been circulated with the s42A reports.

I understand the applicant is happy to further discuss the recommendation and the need for this condition with the Council through conferencing.

Commented [BK30]: This amendment is proposed to be consistent with revised Condition 18(x) of CRC192410.

d. 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.

42) 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.

NEW CONDITIONS

42A. 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.

42B. The QMP required by condition 42A 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).

42C. 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.

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 42A.

42D. The QMP shall include details relating to:

a. 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:

i. baseline traffic monitoring (required to be undertaken prior to the quarry becoming operational);

ii. monitoring post the quarry becoming operational; and

iii. where required, repeat monitoring for an established and operational quarry.

b. 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.

c. The procedures and timeframes for the installation of the mitigation measures (if any).

d. How any required mitigation will be monitored for effectiveness and any ongoing review requirements for the QMP; and

e. Reporting requirements.

42E. 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 and

Commented [BK31]: This new condition is proposed in accordance with paragraphs 23 and 24 of the JWS Traffic Effects.

KiwiRail with the opportunity to participate in a collaborative workshop with the Consent Holder to discuss a draft of the QMP (Draft QMP).

42F. If New Zealand Transport Agency and / or KiwiRail agree to participate in a workshop:

a. The Consent Holder shall provide a copy of the Draft QMP to one or both (depending on which attends) of the organisations at least 10 days before the workshop.

b. 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.

c. 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.

d. If no feedback is received by that deadline the Consent Holder can proceed to finalise the QMP.

42G. If New Zealand Transport Agency and/or Kiwi Rail 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.

42H. At the completion of the process set out in conditions 42E, 42F and/or 42G, 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 42C. The Consent Holder shall ensure that all written feedback received from the New Zealand Transport Agency or KiwiRail on the Draft Plan in accordance with conditions 42F or 42G 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.

42I. The Consent Holder shall ensure that a copy of the certified QMP is provided to the Community Liaison Group at the nearest scheduled meeting.

42J. Once certified, the Consent Holder shall implement the QMP.

42K. Once the QMP is certified, the Consent Holder shall report to the New Zealand Transport Agency, KiwiRail, Community Liaison Group and the Consent Authority at the following times:

a. At the completion of baseline monitoring and prior to the quarry commencing operation.

b. Six months after the quarry commences operation, and

c. 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 42C, whichever is earlier.

Each report shall contain the following details:

a. A description of the monitoring undertaken during the reporting period and analysis of the results.

b. A description of any mitigation measures implemented during the reporting period, or planned for the following reporting period, and

c. Any amendments identified as being necessary to the QMP for the following reporting period.

42) The OMP 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 OMP shall be consistent with achieving the objective set out within condition 42C. Any updated provisions shall only apply once the updated OMP has been re-certified by the Consent Authority.

Noise

36)43) 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:

- a. Daytime 0700 to 1800 hrs 55 dB LAeq
- b. Evening 1800 to 2000 hrs 50 dB LAeq
- c. Night 2000 to 0700 hrs 45 dB LAeq and 70 dB LAmax

37)44) 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.

38)45) 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.

39)46)

40) Should audible vehicle reversing alarms be required, only broadband noise alarms are to be used on quarry-based equipment including trucks. Tonal reversing alarms are not permitted. Fulton Hogan Ltd shall require any non-FH controlled drivers accessing the site to sign on to a code of practice committing to the same.

NEW CONDITION

Between the hours of 8 pm and 6 am, Fulton Hogan shall not allow trucks and machinery 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.

41)47) Prior to the commencement of the activity, the consent holder shall submit to the Team Leader – Compliance Environmental Services, Selwyn District Council (compliance@selwyn.govt.nz), a Noise Management Plan relating to the proposed operation. The Plan shall describe in detail the proposed managerial measures to be used to control noise generated by the operator. The Plan shall describe 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. The Plan shall also specify procedures should any complaint in relation to noise be received.

Noise emissions from the site shall be measured and assessed in accordance with Condition 43) above, by a suitably qualified and experienced acoustic consultant at the following stages:

- Once wWithin the first 12 months following the commencement of gravel extraction activities,
- Once wWhen excavation advances to within 400 metres of the dwellings at 319 Maddisons and 1531 Curraghs Road

Commented [BK32]: The inclusion of 'including trucks' is considered to be inappropriate as it is not possible to require all non-FH trucks to not have tonal beepers. However, the circulation within the site will limit reversing. This condition was not intended to capture road trucks.

Commented [BK33]: This condition is proposed per paragraph 19 of my first statement of rebuttal evidence.

- ~~Each time a different mobile crushing plant is undertaken~~ operated within 400 metres of the dwellings at 319 Maddisons ~~and 1531~~ Curraghs Road
- ~~Once W~~ when rehabilitation activities are undertaken within 400 metres 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) within 20 working days of completion of the survey.

Lighting and Glare

42)48) 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.

43)49) 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

44)50) 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).

45)51) 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.

46)52) 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.

47)53) Solid waste shall be disposed of to an approved solid waste facility by an appropriately-licensed 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.

48)54) 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~~

Commented [BK34]: A number of amendments are made to reflect that the requirement is once for each item. The property at R S 9218 37930 BLK XVI ROLLESTON appears to contain 2 dwellings. The valuation address appears to be 151 Curraghs Road and it is therefore considered appropriate that this address is used for the applicable conditions. The conditions are written so they capture both dwellings on the site.

Field Code Changed

Commented [BK35]: The amendment in green is proposed in accordance with paragraph 80 of my first statement of rebuttal evidence.

Hazardous Substances

~~49~~55 The consent holder will take all practicable step to mitigate fuel spills or contaminants. In the event of a spill of fuel or any other contaminant, the consent holder shall clean up the spill as soon as practicable and take measures to prevent a recurrence.

~~50~~56 The consent holder shall inform the Team Leader - Compliance Environmental Services, Selwyn District Council (compliance@selwyn.govt.nz) within 24 hours of any spill event greater than 4 litres and shall provide the following information:

- The date, time, location and estimated volume of the spill;
- The cause of the spill;
- The type of contaminant(s) spilled;
- Clean up procedures undertaken;
- Details of the steps taken to control and remediate the effects of the spill on the receiving environment;
- As assessment of any potential effects of the spill and measures to be taken to prevent a recurrence.

~~54~~57 The only hazardous substances to be stored on site shall be fuel and lubricants for quarry plant and machinery.

~~52~~58 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

~~53~~59 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.

~~54~~60 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).

Remediation of Contaminated Material

~~55~~61 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) and [the Canterbury Regional Council](#) prior to the remediation works commencing.

Field Code Changed

Field Code Changed

Field Code Changed

Commented [BK36]: To address the CRC officer recommendation for the RAP to be provided to CRC.

~~56)~~62) The material identified in Condition 61) 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 61).

~~57)~~63) The excavation of the material identified in Conditions ~~45)~~62) and 61) 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).

Field Code Changed

~~58)~~64) Prior to undertaking any works in areas of contaminated land, Fulton Hogan shall remove any contaminated soils from the site, in order to remove the risk for any ongoing contamination from such land. Following the removal of any waste material and soil containing heavy end hydrocarbons from the site, validation sampling of the underlying soils shall be completed, to determine the land can be suitably reinstated for rural residential or recreation end use, upon the completion of quarrying.

~~59)~~65) 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.

~~60)~~66) 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

~~61)~~67) 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) for technical review and certification (or their nominee).

Field Code Changed

~~62)~~68) The QRP shall be based on the draft QRP submitted to the Selwyn District Council in November 2018 and developed in accordance with Rule 17.8.3.14 of the Christchurch District Plan (as at 5 March 2019).

~~63)~~69) If the Selwyn District Council confirms receipt of the QRP but then fails to provide any further response to the consent holder within a period of two months then the QRP shall be deemed to be certified.

~~64)~~70) Rehabilitation of the site shall be undertaken in accordance with the certified QRP and implemented at the completion of each stage of extraction.

~~65)~~71) Rehabilitation work shall only be undertaken during the relevant consented hours.

72) The QRP shall be reviewed annually to assess the need for it to be updated, by an expert nominated by Council and all fees associated with a review shall be paid for by the Consent holder. A scheduled review of the QRP shall consider the following matters, in terms of suitability of existing content and any requirement for new information:

- a) Outlining rehabilitation activities undertaken during the reporting period.

Commented [BK37]: The Officer's amendment to require an expert nominated by Council to review this annually is not considered appropriate. It is understood that most Councils do not have an expert in quarry rehabilitation. From experience, it has taken CCC months to complete a review of these documents and an annual review would result in the document therefore becoming relevant for only months at a time and in many cases there may be no change from one year to the next/

The applicant considers this would be an expensive exercise and over time, in many years, there may no longer be a need for the QRP to be updated. A 10 yearly independent review timeframe would be more appropriate.

- b) Areas of the site to be quarried (extraction) over the next 12 months.
- c) Plans for earthworks, including overburden stripping and disposal, over the next 12 months.
- d) Areas of vegetation removed and areas planted during the reporting period.

~~66)~~73) An unscheduled update (out of annual review timeframe) of the QRP shall be triggered, should any of the following circumstances occur:

- a) When there is a fundamental shift in operational activities (e.g. unscheduled move to a new area).
- b) Following significant environmental incidents (e.g. flooding on the site, causing damage to assets).

~~67)~~74) 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.

~~68)~~75) 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 Team Leader - Compliance Environmental Services, Selwyn District Council (compliance@selwyn.govt.nz) planted with another suitable vegetation.

Commented [BK38]: Amendment to align with amendments made to the CRC condition.

Field Code Changed

~~69)~~76) 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.

77) All finished surfaces to be designed and constructed to be free draining.

Management Plans

~~79)~~78) A number of management plans are proposed for the quarry to ensure that the conditions of this consent are complied with. The management plans are intended to describe how conditions will be met and address how potential adverse effects are to be monitored and managed. The management plans may change and evolve over time in order to remain responsive to current operations and environmental conditions. The site shall operate in accordance with the following management plans:

- a. Rehabilitation Management Plan (Appendix G of the AEE).
- b. Dust Management Plan (Appendix D of the AEE).
- c. Cleanfill Management Plan (Appendix F of the AEE).

d. Spill Management Plan.

e. [Transportation Management and Routing Plan.](#)

~~d.~~f. [Noise Management Plan.](#)

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

Consultation

74)79) The consent holder shall establish a Community Liaison Group (CLG) in accordance with the following requirements:

- a. The purpose of the CLG shall include, but not be limited to, the following:
 - i. 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.
 - ii. 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
 - iii. to discuss the results of monitoring and any matters that may arise as a result of the monitoring.
- b. 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 the 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.

- c. The consent holder shall ensure that members of the CLG are provided with the opportunity and facilities to meet:
 - i. At least 30 working days prior to the start of any construction activities on the site;
 - ii. 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;
- d. 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.
- e. 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.
- f. Minutes of the CLG meetings shall be made publicly available.

NEW CONDITIONS

The consent holder shall engage an independent chairperson to oversee the CLG meetings, with meeting minutes taken and distributed to members of the CLG.

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.

Commented [BK39]: The amendment in green is proposed in response to the request made in the evidence of Gareth Mitchell (Southern Woods).

Commented [AH40]: I consider the should condition also state that the Consent holder is responsible for costs of the CLG, and that in terms of Council representation, should be expanded to also include Compliance and Monitoring personnel.

Commented [BK41R40]: This is not agreeable to the applicant. Costs should lie where they fall in terms of the participants. The applicant will cover the costs of the venue and costs of the meeting itself but attendance is ultimately voluntary and at the interest of the participants. The applicant not aware of other situations where a condition has been inserted requiring costs to be explicitly borne by the consent holder for a CLG.

Commented [BK42]: The two new conditions are proposed in accordance with paragraph 54 of my first statement of rebuttal evidence in response to Ms Conlon's evidence.

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

72)80) Immediately following the discovery of material suspected to be a taonga, kōiwi or Māori archaeological site, the following steps shall be taken:

- a. All work in the vicinity of the discovery will cease and the Council advised.
- b. Immediate steps will be taken to secure the site to ensure the archaeological material is not further disturbed.
 - i. 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).
 - ii. 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.
 - iii. 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.
 - iv. 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.
 - v. 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.
 - vi. 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

73)81) 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) annually, and otherwise shall be available on request.

Field Code Changed

74)82) Records of all staff training shall be retained on site and provided to the Council immediately on request.

75)83) The Selwyn District Council may, during the month of ~~xx~~ 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 al or any of the following purposes:

Commented [BK43]: To align with CRC.

- a. 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
- b. To require the consent holder to adopt the best practical option to remove, remediate or reduce and adverse effects on the environment resulting from the activity; and/or to review the noise limits and traffic effects; and/or
- c. To review the methodology of the operation should noise, dust and nuisance effects become an issue; and/or
- d. 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

- a) 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

- b) In accordance with section 36 of the Resource Management Act 1991, the Council's specialised monitoring fee will be charged.
- c) 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.
- d) 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).
- e) 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.

Field Code Changed

Vehicle Crossings

- f) 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. 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>

Field Code Changed

Field Code Changed

Building Act

- g) 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

- h) 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

- i) 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

- j) Access by the Council's Officers or its agents to the property is reserved pursuant to Section 332 of the Resource management Act 1991.