

Limits

The discharge shall be only sediment-laden stormwater generated during construction of the [residential/commercial] subdivision of [legal description], located at [address], labelled as "Applicant's Site" on Plan CRC[]A, which form parts of this consent.

The discharge shall be only:

- (a) Sediment-laden stormwater; and
- (b) Residual chemicals from the treatment of sediment laden stormwater.

During site construction of a [] hectare residential subdivision of [legal description], located at [address], labelled as "Applicant's Site" on Plan CRC[]A, which form parts of this consent.

The discharge shall only take place during the site construction period at the above mentioned site.

During construction, all practicable measures shall be undertaken to minimise discharges of sediment-laden runoff.

Definitions

For the purposes of this consent, the following definitions shall apply to all conditions:

(a) Site construction: means all bulk earthworks and earthworks associated with the construction of the subdivision up until a Certificate under Section 224 of the RMA has been issued (including one issued in conjunction with a Section 220 consent notice) for each stage of development by the [City/District] Council.

(b) Earthworks: means the disturbance of land surfaces by blading, contouring, ripping, moving, removing, placing or replacing soil and earth, or by excavation, or by cutting or filling operations.

(c) Bulk earthworks: means major cut/fill/waste works.

(d) Stabilised: means an area inherently resistant to erosion such as rock (excluding sedimentary rocks), or rendered resistant to erosion by the application of aggregate, geotextile, vegetation or mulch. Where vegetation is to be used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised once 80 percent vegetation cover has been established.

(e) ESCG: means Environment Canterbury, "Erosion and Sediment Control Guidelines for the Canterbury Region" Report No. CRCR06/23, February 2007.

(f) Manager: means the Canterbury Regional Council, RMA Compliance and Enforcement Manager, or nominated CRC staff acting on the Manager's behalf.

Pre-Construction

The consent holder shall ensure that all personnel working on the site are made aware of and have access to the contents of this consent document and all associated erosion and sediment control plans and methodology.

At least [] working days prior to the commencement of bulk earthworks, the consent holder shall inform the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, in writing of the start date of the works.

Prior to commencement of works the consent holder or their agent shall arrange and conduct a pre-construction site meeting between the Canterbury Regional Council and all relevant parties, including the primary contractor. At a minimum, the following shall be covered at the meeting:

- (a) Scheduling and staging of the works;
- (b) Responsibilities of all relevant parties;
- (c) Contact details for all relevant parties;
- (d) Expectations regarding communication between all relevant parties;
- (e) Procedures for implementing any amendments;
- (f) Site inspection; and
- (g) Confirmation that all relevant parties have copies of the contents of this consent document and all associated erosion and sediment control plans and methodology.

The consent holder shall inform Environment Canterbury in writing, Attention: RMA Compliance and Enforcement Manager, at least ten days prior to the commencement of work on each new stage of development.

Erosion and Sediment Control

No disturbance, earthworks, vegetation removal or other activity capable of altering runoff shall occur within [] metres of [name].

Bulk earthworks shall not occur in the months [May] to [August] inclusive.

No cut vegetation, debris, or any other excavated material, shall be placed within [50] metres of any surface water body including ephemeral watercourses, or in a position such that it may move into a surface water body.

Appropriate measures, such as [ESC measure] or similar devices, shall be in place at all times to ensure that no runoff is able to flow onto or across disturbed or non-stabilised areas.

The discharge shall be via the erosion and sediment control measures outlined in the application and as detailed in the resource consent conditions below.

(a) During site construction, all practicable measures shall be undertaken to minimise exposed surfaces and discharges of sediment-laden stormwater.

(b) If stormwater is discharged off-site it shall be via a [list of measures].

During construction of the subdivision, the consent holder shall take all practicable measures to minimise the discharge of sediment-laden stormwater into the stormwater system and [name]. The measures shall include but not be limited to:

(a) Discharging stormwater via the [components]; and

(b) The installation of [list of proposed measures].

All stormwater originating from areas disturbed by earthworks should be directed to [infiltration ponds, or decanting earth bunds or sediment retention ponds] where practicable.

The consent holder shall ensure that [the site exit points, silt fences, diversion channels, infiltration ponds, decanting earth bunds, and sediment retention ponds] are inspected every [day], as well as after each rainfall. Any accumulated sediment shall be removed as necessary to ensure effective functioning of these devices.

All exposed surfaces shall be stabilised once earthworks are complete or if the exposed area is not to be earthworked for a period of [14] days or more.

(a) All exposed surfaces shall be stabilised once earthworks are complete or if the exposed area is not to be earthworked for a period of [14] days or more.

(b) Stabilisation shall be achieved by:

(i) Conventional grassing for the period between October and April inclusive, and when slopes are less than 20 percent; or

(ii) Hydro-seeding or Mulching for the period between May and September inclusive, or on areas with slopes greater than 20 percent; and

(iii) Geo-synthetic erosion control systems in areas of short steep cuts or areas that are identified during earthworks as highly erosion prone.

(a) Construction shall be phased in stages each of which shall be stabilised prior to any commencement of bulk earthworks and earthworks associated with the next phase. The [two/three/four/etc] separate stages shall be:

(i) description of stage one

(ii) description of stage two

(iii) description of stage three

(iv) description of stage four

(v) etc.

(b) The order of the separate stages can depend on the contractor undertaking the works.

(c) These stages may include overlap in accordance with the Erosion and Sediment Control Plan.

Construction shall be staged so that the amount of exposed earthworks does not exceed [] [hectares/square metres] and that progressive stabilisation works can be carried out.

During the construction phase, when discharges are occurring, at any one time the combined area of earthworks resulting in exposed soils that are not stabilised shall be no more than [] hectare(s)/square metre(s).

Erosion and Sediment Control Plan

The discharge of stormwater during construction of the subdivision shall occur in accordance with the Erosion and Sediment Control Plan (ESCP).

(a) The ESCP shall detail the sediment control measures that will be taken to ensure compliance with Condition () of this consent.

(b) The ESCP shall be prepared in accordance with the Environment Canterbury, 2007 "Erosion and Sediment Control Guidelines for the Canterbury Region" Report No. CRC R06/23.

The ESCP shall include, but not be limited to:

(a) A map showing the location of all works;

(b) Detailed plans showing the location of sediment control measures, onsite catchment boundaries, and sources of runoff;

(c) Drawings and specifications of designated sediment control measures;

(d) A programme of works, which includes but is not limited to, a proposed timeframe for the works;

(e) Inspection and maintenance of the sediment control measures.

The ESCP shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, at least [one month] prior to construction of the subdivision commencing.

The Erosion and Sediment Control Plan may be amended at any time. Any amendments shall be:

(a) Only for the purpose of improving the efficacy of the erosion and sediment control measures and shall not result in reduced discharge quality; and

(b) Consistent with the conditions of this resource consent; and

(c) Submitted in writing to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, prior to any amendment being implemented.

The ESCP may be updated during construction. The updated ESCP shall be provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, prior to implementing any changes to sediment control measures.

Erosion and sediment control measures during the construction of the site shall consist of but not be limited to the following:

(a) Site exit points;

(b) Silt fences and hay bale barriers;

(c) Diversion channels;

(d) Decanting earth bunds;

(e) Sediment infiltration ponds and/or retention ponds;

(f) Directing sediment laden water to grassed areas;

(g) Grassed swales;

(h) Etc.

Erosion and sediment control measures shall be constructed and maintained in accordance with the ESCG and any amendments to this document.

Water treatment chemicals shall be applied in accordance with product specifications and the methods described in the [guidelines/application/management plan/etc] and any amendments to this document.

Prior to the use of any water treatment chemical, a Management Plan shall be provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager.

(a) Prior to bulk earthworks commencing for each construction phase, the consent holder shall submit to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, a certificate signed by an appropriately qualified and experienced engineer to certify that the appropriate erosion and sediment control measures have been constructed in accordance with the Erosion and Sediment Control Plan and conditions of this consent.

(b) Certified controls shall include [diversion channels, sediment fences, decanting earth bunds, the sediment retention pond and site exit points].

(c) The certification for these measures for each construction phase shall be supplied to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager immediately upon construction of those measures.

Performance Standards and Monitoring

Any stormwater discharged from the site via a [device] shall contain no more than [] milligrams per litre of total suspended solids.

Any [device(s)] that discharge stormwater off-site shall remove at least 75 percent of the total suspended solids on a long-term basis.

(a) If any storm events of greater intensity than [5/10] millimetres per hour occur during the construction phase, the consent holder shall, within [4/6/8/10/12] hours of the event, visually inspect the discharge from the [device(s)] to determine if:

(i) Sediment is being deposited at the outlet from the [device(s)]; and/or

(ii) Sediment is being deposited on the [location] adjacent to the [name]; and/or

(iii) There is a conspicuous change in the colour or clarity of [name] more than [] metres beyond the point of discharge to [name] that is attributable to the discharge from the [device(s)].

(b) During each inspection in accordance with (a) above, photographs shall be taken showing the point of discharge and the area beyond including [location] and the [name]. The photographs shall be retained and made available upon request by the Canterbury Regional Council.

(c) Within [] working days of any visual inspection that indicated deposition of sediment or conspicuous discoloration of [receiving water], the consent holder shall prepare and implement a Water Treatment Management Plan (WTMP), which clearly sets out the control measures to be undertaken to comply with Conditions () to () of this consent.

(d) The WTMP and any subsequent revision of the plan shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, within five working days of its completion.

(a) The consent holder shall monitor the discharge entering and exiting from any:

(i) Sediment retention pond;

(ii) Decanting earth bund; or

(iii) Clean water diversion channel

(iv) etc...

where the discharges may enter surface water.

(b) Monitoring of the discharge to ensure compliance with the performance standard described in Conditions () and () shall occur:

(i) at least once after their construction; or

(ii) at the request of an Environmental Protection or Enforcement Officer during or immediately after a rainfall event when a discharge off-site is occurring.

Once construction of the site has ceased, the stormwater system and any sediment control measures shall be inspected and any visible debris or litter, accumulated sediment, and hydrocarbons shall be removed immediately.

(a) The consent holder shall ensure that all erosion and sediment control measures are inspected each working day while any earth remains disturbed or otherwise unstabilised, and during each storm event that generates at least [five/ten/etc] millimetres of rainfall, as measured at the rain gauge located at [].

(b) Records of any inspections shall be kept and provided to the Canterbury Regional Council upon request.

The consent holder shall undertake visual monitoring to ensure the effectiveness of the erosion and sediment control measures. The visual monitoring shall include:

(a) Photographs and observations of sediment deposition undertaken at the waterways at the following locations:

- (i) Location 1
- (ii) Location 2
- (iii) Location 3
- (iv) Etc

(b) Observations and measurements, within [name] of:

- (i) Water colour (appropriate method to be determined on a site-by-site basis); and
- (ii) Water clarity (appropriate method to be determined on a site-by-site basis).

Visual monitoring shall be undertaken prior to earthworks or vegetation clearance commencing, and weekly while any earth remains disturbed or otherwise unstabilised.

Written records of all visual monitoring shall be kept, along with copies of all photographs taken. All records and photographs shall be provided to the Canterbury Regional Council upon request.

Should a rainfall event of greater than [5/10] millimetres in any [] hour period occur at the site during the construction phase, the consent holder shall, as soon as practicable, take water samples upstream and downstream of works at the sites identified in Condition (). The samples shall be analysed for suspended sediment concentrations by an appropriately qualified laboratory.

Should either visual records undertaken in accordance with Conditions () and (), or sampling in accordance with Condition () show a significant change in water quality, which shall be defined as [an increase in suspended sediment concentrations of [] milligrams per litre or greater between the upstream and downstream samples], the consent holder shall:

- (a) Identify the cause of the elevated suspended sediment concentrations;
- (b) Identify and undertake mitigation and actions to prevent further exceedances;
- (c) Review the ESCP within [] working days.
- (d) Provide a report within [] working days to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager that includes, but is not limited to, the following:
 - (i) Identification of the source of sediment;
 - (ii) The mitigation implemented and actions undertaken;
 - (iii) An assessment of any potential effects of the sediment discharges;
 - (iv) Measures undertaken to prevent recurrence, including any changes to the ESCP.

Water Treatment using Chemicals

Prior to the commissioning of chemical treatment, the consent holder shall provide the Manager with a Chemical Treatment Plan (CTP). The CTP shall include, but not be limited to, the following information:

- (a) Specific design details of the flocculation system;
- (b) Monitoring, maintenance (including post-storm) and contingency programme (including a Record Sheet);
- (c) Details of optimum dosage (including assumptions);
- (d) Results of the initial flocculation trial;
- (e) A spill contingency plan;
- (f) Details of the person or bodies who will hold responsibility for long-term maintenance of the flocculation treatment system and the organisational structure which will support this structure. Any amendments to the CTP shall be provided to the Manager, in writing, prior to implementation.

Water treatment chemicals shall be applied in accordance with product specifications and the methods described in the [guidelines/application/management plan/etc] and any amendments to this document.

Prior to the use of any water treatment chemical, a Management Plan shall be provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager.

Water treatment chemicals shall be applied in accordance with product specifications and the methods described in the Auckland Regional Council, Technical Publication #227 Flocculation Guideline.

Abandonment

All exposed surfaces shall be stabilised once earthworks are complete or if the exposed area is not to be earthworked for a period of [14] days or more.

If the consent holder abandons work on-site, they shall first take adequate preventative and remedial measures to control sediment discharges, and shall thereafter maintain those measures for so long as necessary to prevent sediment discharges from the site.

Decommissioning

Erosion and sediment control measures shall not be decommissioned until the site is stabilised and the stormwater system for the developed site is functioning, in accordance with Conditions () to () [or consent CRC[]].

Once construction of the subdivision has ceased, decommissioning of sediment and erosion control measures shall be undertaken.

Decommissioning shall be only undertaken when dry weather is forecast for a period suitable to allow decommissioning to be carried out without rainfall occurring.

The following decommissioning measures shall be undertaken in the following order:

- (a) All disturbed areas shall be stabilised and/or re-vegetated as soon as practicable following completion of the works;
- (b) Any visible debris, litter, sediment and hydrocarbons shall be removed from the erosion and sediment control measures;
- (c) Any visible debris, litter, sediment and hydrocarbons shall be removed from all sediment control measures; and
- (d) Erosion and sediment control measures in accordance with Condition () shall be removed.

Spills

During construction of the subdivision, the consent holder shall take all practicable measures to prevent spills of contaminants being discharged into [name]. The measures shall include, but not be limited to, removing contaminants from the stormwater system as soon as practicable following any spills.

During construction of the subdivision, the consent holder shall:

- (a) Provide and maintain spill kits within the applicant's site, in an accessible location.
- (b) In the event of a spill of fuel or another contaminant, use the spill kits to clean up the spill as soon as possible.

The consent holder shall take all practicable measures to avoid spills of fuel or any other contaminant within the site.

- (a) In the event of a spill of fuel or any other contaminant, the consent holder shall clean up the spill as soon as practicable, inspect and clean the stormwater system and take measures to prevent a recurrence.
- (b) The consent holder shall inform the Canterbury Regional Council within 24 hours of a spill event, and shall provide the following information:
 - (i) The date, time, location and estimated volume of the spill;
 - (ii) The cause of the spill;
 - (iii) The type of contaminant(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; and
 - (vii) Measures to be undertaken to prevent a recurrence.

Administration

The lapsing date for the purposes of section 125 of the Resource Management Act 1991 shall be [e.g. 31 September 2014]. (Note this condition may be optional if the construction phase is anticipated to take less than 5 years to complete).

The Canterbury Regional Council may, once per year, on any of the last five days of April or October, 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) Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment; or
- (c) Requiring the consent holder to carry out monitoring and reporting instead of, or in addition to, that required by the consent.