

## Limits

The discharge shall be only stormwater generated from:

- (a) Roofs, roads, hardstand areas, and pervious areas; and
- (b) Exposed areas during construction (optional);

associated with the proposed [residential / rural-residential] subdivision of [legal descriptions], located at [address], labelled as "Applicant's Site" on Plan CRC[ ]A and shown on Plan CRC[ ]B, which form part of this consent.

The discharge shall include stormwater generated during the construction phase of the subdivision.

The discharge of roof stormwater shall not arise from galvanised building materials.

The discharges shall not arise from a site where any of the activities or industries listed in Schedule WQL3 or WQL3A of Chapter 4 of the Proposed Natural Resources Regional Plan, which form part of this consent, are conducted or operated.

## Stormwater System

Stormwater shall be discharged into [name or simply 'surface water'], at map reference NZMS 260 [ ], via the following stormwater system:

- (a) Stormwater from roofs shall be discharged via a sealed system that excludes all other stormwater;
- (b) Stormwater from roofs shall be collected in roof/storage, etc tanks;
- (c) Stormwater from hardstand areas shall be discharged via...;
- (d) Stormwater from the [right-of-way/roads/etc] shall be discharged via....
- (e) etc...

as shown on Plan CRC[ ]B, which forms part of this consent.

Stormwater from roofs and hardstand areas within individual lots shall be directed to a detention tank within that lot.

Stormwater from roofs shall be discharged into individual water storage tanks located on each lot before discharge into the [name] or [conveyance component].

Stormwater in excess of the capacity of the water storage tanks shall be discharged to into the [name] or [conveyance component].

When the capacity of the stormwater system [or components of the stormwater system] is exceeded, stormwater shall be [discharged/conveyed/directed/etc...].

## Design

All sumps shall be fitted with submerged or trapped outlets capable of trapping [ ] litres of hydrocarbons.

The [inlet(s)] shall be located as far as possible from the [outlet or overflow structure] of the [component(s)].

The inlet(s) to the [component] and outlet(s) from the [component] shall be designed and constructed with appropriate erosion protection to prevent erosion and scour.

The outlet(s) into [name] shall be designed and constructed to minimise scour and erosion.

The discharge shall not cause scour, erosion and/or instability to the bed or banks of [name].

The detention tanks shall:

- (a) Be installed in general accordance with the Christchurch City Council installation of detention tank guidelines dated 2004;
- (b) Have a minimum capacity of at least [ ] cubic metres.

The [list of components] shall have the combined capacity to contain at least [ ] cubic metres of stormwater without any stormwater overflow into the [name].

The average detention time of stormwater in the [component] shall be at least [24/48/72] hours.

The discharge rate from the [component(s)] shall not exceed [ ] litres per second for the 1 in [ ] year storm event of [ ]-hour duration. *There may be a list of different discharge rates to correspond with all the relevant storm events.*

Stormwater shall not be discharged from the [component] at a rate greater than [ ] litres per second, for all events up to and including a 1 in [20] year ([ ] percent Annual Exceedance Probability) storm event.

<p>The [component] shall be design and constructed to have:</p> <p>(a) A minimum capacity of [ ] cubic metres; and</p> <p>(b) A restricted flow outlet system such that stormwater, from at least the first [ ] millimetres of rainfall from a storm of [ ] duration, is detained for at least an average of [24/48] hours prior to entering [name].</p>
<p>The [component] shall be designed and constructed to collect, treat and dispose of stormwater from all storm events up to and including all 1 in [5/10/20/50] year storm events of [ ]-hour duration.</p>
<p>The stormwater system, including [list of components] shall be designed and constructed to collect and dispose of stormwater from all storm events up to and including all 1 in [ ] year storm events of [ ] duration.</p>
<p>The stormwater system, including [list of components] shall be designed and constructed to retain and infiltrate stormwater from storm events up to and including all [ ] percent Annual Exceedance Probability (AEP) events.</p>
<p>A splitter box shall be installed to divert all stormwater generated in excess of the first [15/20/25] millimetres from any storm event into [component or name].</p>
<p>The stormwater system, including [list of components], shall be designed and constructed to collect, treat, and dispose of the first [15/20/25] millimetres of stormwater generated from any storm event.</p>
<p>Stormwater shall not pond in the [component] for longer than [ ] hours/days after the cessation of any storm event.</p>
<p>Water shall not pond in the [component(s)] at any time.</p>
<p>The proprietary treatment device shall be designed and constructed:</p> <p>(a) Have the capacity to treat stormwater flows of at least [ ] millimetres per hour from the contributing [impervious] catchment before bypassing;</p> <p>(b) Have the capacity to treat stormwater flows of at least [ ] litres per second;</p> <p>(c) To remove at least 75 percent of total suspended solids on a long term average basis.</p> <p>(d) To remove at least [ ] percent of total suspended solids larger than [ ] micrometres.</p>
<p>The [component] shall be designed and constructed:</p> <p>(a) To have a minimum capacity of [ ] cubic metres;</p> <p>(b) With a layer of [topsoil, sandy loam, etc] at least [100/150/200] millimetres thick lining the base;</p> <p>(c) With subsurface or underdrains that discharge into [ ];</p> <p>(d) To have side batters that do not exceed one vertical to [three/four] horizontal; and</p> <p>(e) To be fully vegetated with grass and/or groundcover plants.</p> <p>(f) etc.</p> <p>as shown on Plan CRC[ ]C attached to this consent.</p>
<p>All existing natural flow paths shown on Plan CRC[ ] and all constructed secondary flow paths shall be kept free from all obstructions, including, but not limited to, buildings and solid fences.</p>
<p>All existing natural flow paths and constructed secondary flowpaths shall be designed and constructed to allow for flows of up to a one percent Annual Exceedance Probability (1% AEP) storm event in accordance with NZS 4404: Land development and subdivision engineering standard (2004) or any superseding document.</p>

### Design Plans and Certification

<p>At least one month prior to the construction of the stormwater system the consent holder shall submit to the Canterbury Regional Council Attention: RMA Compliance and Enforcement Manager, design plans of the stormwater system to be installed.</p>
<p>Within [ ] working days of the installation of the stormwater system, a certificate signed by a Chartered Professional Engineer (CPEng) with stormwater system construction experience shall be submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, to certify that the stormwater system complies with Conditions ( ) to ( ) of this consent. This CPEng shall also sign a statement confirming that they are competent to certify the engineering work.</p>

### Inspections and Maintenance

- (a) The [list of components] shall be inspected at least once every [three/six] months.
- (b) Any visible hydrocarbons and debris or litter shall be removed within five working days of the inspection.
- (c) Any accumulated sediment in the [components] shall be removed within five working days of the inspection.
- (d) Any accumulated sediment in the sumps and [component] shall be removed when the sediment occupies more than one quarter of the depth below the invert of the outlet pipe.
- (e) Any scouring or erosion shall be repaired within five working days of the inspection.

The [component] shall be:

- (a) Maintained so that [vegetation or grass] is in a healthy and uniform state.
- (b) Replanted where erosion or die-off has resulted in bare or patchy soil cover.
- (c) Mowed regularly or maintained so that [vegetation or grass] is at a minimum length of [150] millimetres. Mown [vegetation or grass] shall be removed from the [component].

### Disposal of Material

Any material removed in accordance with Conditions ( ) to ( ) shall be disposed of at a facility authorised to receive such material.

### Water Quality Monitoring

The consent holder shall ensure that the discharges do not, at any time, result in:

- (a) The production of oil or grease films;
- (b) The production of floatable or suspended materials; or
- (c) A change in the visual clarity (a change shall be defined as a change greater than [ ] percent, as measured by black disc or equivalent method); within [name].

Samples of stormwater from the [one/two/three/etc] discharge outlet(s) shall be collected:

- (a) Where practicable during or following a significant rainfall event; and
- (b) At least [ ] times per year; and
- (c) With a period of at least [ ] month(s) between each sample.

(a) Within [ ] years following the commencement of this consent, water quality sampling shall be undertaken on at least [ ] occasions, during rainfall events that generate at least [ ] millimetres of rainfall, as measured at the closest rain gauge to the site.

(b) Representative samples shall be taken from the following:

- (i) Within [name], [ ] metres upstream of the outlet from the [component];
- (ii) The discharge of stormwater at the outlet from the [component];
- (iii) Within [name], [dependent on Zone of Non-Compliance] metres downstream of the outlet from the [component];
- (iv) etc.

(c) Samples shall be collected using [grab sampling] by a person who has at least one years work experience in water sampling.

(d) Samples shall be analysed for the following contaminants:

*List of contaminants as required*

(e) All water samples shall be analysed by a laboratory accredited for that method of analysis by International Accreditation New Zealand or an equivalent authority.

(f) Results of the sampling shall be compared with the following trigger levels: (Note: taken from the plans or relevant national guidelines.)

*List of contaminants and trigger levels as required*

(g) Should any of the trigger levels be exceeded, the consent holder shall undertake the following:

- (i) Determine if the exceedances are a result of the discharges of stormwater from the site;
- (ii) Identify the risk to the environment from the exceedances;
- (iii) Identify and undertake mitigation and actions to prevent further exceedances; and
- (iii) Provide a report within [ ] month(s) to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, that includes, but is not limited to, the following:
  - Identification of the source of contaminants.

- The mitigation implemented and actions undertaken.
- An assessment of any potential effects of the discharges.
- Measures undertaken to prevent reoccurrence.

(a) Water samples of the stormwater discharge shall be collected from the discharge points labelled [ ] as shown on Plan CRC[ ], which forms part of this consent

(b) Samples shall be collected during at least two rainfall events in every 12 month period between 1 July to 31 June and with a period of at least one month between each sampling event.

(c) Samples shall be collected:

- (i) During rainfall events that generate at least [five/ten/fifteen] millimetres of rainfall; and
- (ii) As soon as practical after the commencement of the discharge to obtain a representative sample of first flush concentrations.

(d) At least three samples shall be collected from the discharge for each rainfall event at each discharge point. Each sample shall be collected at least 15 minutes after the previous sample.

The stormwater discharge samples collected under Condition ( ) shall be analysed for the following contaminants:  
*List of contaminants as required*

Stormwater shall be considered to have exceeded a 'Trigger Value' if the annual median concentration of a parameter analysed under Condition ( ) exceeds the following values [ ] fold dilution of ANZECC 2000\*, 99% species protection, Ministry for the Environment Microbiological Guidelines,\*\*]: New Zealand Drinking Water Standards  
*List of contaminants and trigger levels as required*

### **Sediment Monitoring**

Composite sediment samples, made up of [five] samples within a [five] square metre area, shall be collected:

- (a) From within [name] at a point [ ] metres upstream of the discharge point;
- (b) From within [name] at a point [ ] metres downstream of the discharge point;
- (c) From a depth of between 0 and 20 millimetres below the bed surface; and
- (d) By a person who has at least one years work experience in sediment sampling.

Sediment samples collected under Condition ( ) shall be analysed for the following contaminants:  
*List of contaminants as required*

All sediment samples shall be analysed by a laboratory accredited for that method of analysis by International Accreditation New Zealand or an equivalent authority.

Results of the sampling shall be compared with the following trigger levels: (Note: taken from the PNRRP or relevant national guidelines, ie, ANZECC, NZDWS)  
*List of contaminants and trigger levels as required*

Should any of the trigger levels as described in Condition ( ) be exceeded, the consent holder shall undertake the following:

- (a) Determine if the exceedances are a result of the discharges of stormwater from the site;
- (b) Identify the risk to the environment from the exceedances;

- (c) Identify and undertake mitigation and actions to prevent further exceedances; and
- (d) Provide a report within [ ] month(s) 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 contaminants.
  - (ii) The mitigation implemented and actions undertaken.
  - (iii) An assessment of any potential effects of the discharges.
  - (iv) Measures undertaken to prevent reoccurrence.

## Recording and Reporting

By the [ ] each year the consent holder shall provide the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, with a monitoring report for the preceding 12 month period. This report shall include:

- (a) All monitoring results required by the conditions of this consent.
- (b) An analysis of all monitoring results against relevant guidelines and the determination of any trends in the results.
- (c) An assessment of any adverse effects from the discharge and the actions taken to remedy or mitigate these effects.
- (d) Recommended changes to the monitoring programme, if applicable.

Details of sampling and results of the analyses undertaken in accordance with the conditions of this consent, including:

- (a) The name of the person who collected the samples, the date and time the samples were collected;
- (b) Details of the rainfall event sampled including rainfall depth, duration, and a plot or table of hourly rainfall from the rainfall gauge located nearest the site.
- (c) The method of analysis and laboratory used; and
- (d) The results of analyses; shall be provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, within 10 working days of receipt of the results by the consent holder.

The results of the analyses undertaken in accordance with Conditions ( ) and ( ) shall be provided to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, within ten workings days of receipt of the results by the consent holder.

Records of the inspection and maintenance of the stormwater system shall be kept. The records shall include, but not be limited to, information that demonstrates compliance with Conditions ( ) to ( ) of this consent. Copies of these records shall be provided to the Canterbury Regional Council on request.

## Spills

- (a) The consent holder shall take all practicable measures to avoid spills of fuel or any other contaminant within the site.
- (b) 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.
- (c) The consent holder shall inform the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager 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.

## Management Plans

- (a) A management plan shall be prepared and submitted to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, within [ ] month(s) of issue of this consent, setting out how Conditions ( ) to ( ) shall be complied with.
- (b) The management plan shall include, but not be limited to, the following:
- (i) Details of the locations of all sampling sites;
  - (ii) Measures to prevent exceedance of the trigger values;
  - (iii) Response measures to exceedance of the trigger values;
  - (iv) Reporting procedures; and
- (c) A copy of the management plan shall also be held by the consent holder along with a copy of this consent.

### **Administration**

The lapsing date for the purposes of section 125 of the Resource Management Act 1991 shall be [e.g. 31 December 2014].

The Canterbury Regional Council may, on any of the last five days of [April or October] each year, 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; or
- (d) Complying with the requirements of a relevant rule in an operative regional plan; or
- (e) Reviewing the trigger values established for parameters specified in conditions of this consent.