

Note: For all activities in or near waterways, refer also to the requirements and restrictions under the Canterbury Flood Protection and Drainage Bylaw 2013

Prior to 31 December 2018, the repair of earthquake damaged land located within the area shown on area shown on Map 1, and located outside the High Soil Erosion Risk Areas, and which is carried out on an individual site used for residential activities, but excluding any residential property zoned "red" by the Canterbury Earthquake Recovery Authority), which involves any one or more of:

- (a) the use of land for:
 - i. the excavation of material over the unconfined, semi-confined or coastal confined aquifer system;
 - ii. the deposition of material into land or into groundwater, and any associated discharge into groundwater;
 - iii. vegetation clearance or earthworks within the riparian margin (defined for the purposes of this rule as any land within 10 metres of the bed of a river, lake or wetland boundary);
 - iv. the installation, maintenance, and use of a bore for geotechnical investigation or monitoring purposes;
 - v. the installation and construction of building foundations;
- (b) the discharge of sediment-laden water generated from earthworks into a surface waterbody, or onto or into land where it may enter a surface water body;
- (c) the taking of groundwater for the purposes of dewatering or land drainage, and the associated discharge of that water into a surface water body, or onto or into land where it may enter a surface water body.

is a permitted activity, provided the following conditions, as applicable, are met:

General Conditions

- (1) The extent and duration of any works is limited to only that necessary to repair the land or building foundations.
- (2) The works (excluding any discharges associated with the works listed above) do not occur in, the bed of any lake, river or natural wetland.

Earthworks, Excavation and Deposition of Material

- (3) Erosion and sediment control measures are implemented and maintained in accordance with Environment Canterbury's Erosion and Sediment Control Guidelines for Small Sites to minimise erosion and the discharge of sediment laden water to surface water.
- (4) Any material deposited into land consists only of uncontaminated fill (soil, rocks, gravels, sand, silt, clay), concrete, cement, grout, concrete, steel or timber foundation piles, or inert building materials.

- (5) *From the date this rule becomes operative, the use of land for the placement of treated timber foundation piles into confined groundwater within the Coastal Confined Aquifer System, and any discharge from those foundation piles, does not occur within a group or community drinking water supply protection area, as set out in Schedule 1 of this plan.*
- (6) *Any excavation over the coastal confined aquifer system maintains at least one metre of undisturbed material between the deepest part of the excavation and Aquifer 1.*
- (7) *No materials (other than those listed in condition (4)), vehicles or machinery (excluding clean uncontaminated equipment used for dewatering, and infrastructure installed for the purposes of land repair) are deposited into, or used within groundwater.*
- (8) *Compaction, or earthworks involving below ground soil disturbance (excluding filling), do not occur on any part of a site which is identified as a landfill.*
- (9) *There is no discharge of any cement, concrete, grout, or water containing cement, grout, or concrete, into any surface waterbody, or beyond the property boundary.*
- (10) *Where grout is deposited into land, or into groundwater, the following conditions also apply:*
- (a) *The volume of grout shall not exceed 80 cubic metres per site.*
 - (b) *The point of deposition into land is not within:*
 - i. *20 metres of any surface water body, or 20 metres of the Coastal Marine Area, where the material is deposited into groundwater; or*
 - ii. *5 metres of any surface waterbody, or 10 metres of the Coastal Marine Area, where a separation of one metre is maintained between groundwater and any deposited material.*
 - (c) *Where grout is deposited into land via in-situ mixing:*
 - i. *The grout shall be mixed evenly throughout the augured soil column; and*
 - ii. *The percentage of grout within the area of the augured soil column shall not exceed 20%,*
 - (d) *Where grout is deposited into land using methods other than in-situ mixing, the percentage of cement in the dry grout mixture shall not exceed 30%*
- (11) *To prevent erosion, bare ground is stabilised within 10 days of any vegetation clearance or earthworks.*
- (12) *For earthworks carried out within the riparian area, in addition to conditions (3) through (11), the following conditions apply:*

- i. *Vegetation used and maintained by the Canterbury Regional Council for flood or erosion control purposes is not removed.*
- ii. *Replanting is not of a species listed in the Biosecurity NZ Register of Unwanted Organisms or Canterbury Pest Management Strategy.*
- iii. *The activities do not reduce the available floodway.*
- iv. *The activities do not result in the destabilisation of the bank of any river, lake or natural wetland, or destabilise any existing lawfully established structures, or interfere with access to waterways for maintenance or inspection purposes.*

Geotechnical Investigations

- (13) *The bore is used only for the purposes of geotechnical investigations and is decommissioned by filling with clean material and compacted or sealed at the surface to prevent contaminants entering the bore.*
- (14) *Information on location (including bore logs and intended uses), and other relevant information is submitted to the CRC within 20 working days of drilling the bore.*

Dewatering, Sediment-laden Water, and Land Drainage

- (15) *Dewatering and land drainage discharges are not from, or discharged onto or into any potentially contaminated land.*
- (16) *The taking of groundwater for dewatering purposes does not lower the groundwater level more than 8 metres below the ground level of the site.*
- (17) *The taking and discharge of land drainage water and site dewatering water onto or into land or into surface water does not result in subsidence of the land surface, or river bed or river bank erosion.*
- (18) *The discharge of dewatering water onto or into land, or into surface water, does not result in any flooding of any neighbouring property, or result in ponding on the land surface for more than 48 hours.*
- (19) *The concentration of suspended solids in any dewatering water or sediment-laden water discharged to any surface water body does not exceed 100 grams per cubic metre.*

For the purposes of this rule the following definitions apply:

“Earthquake Damaged Land” means land damaged as a result of the Canterbury Earthquake Sequence that commenced on 4 September 2010.:

“Residential Activities” means land zoned residential in a district plan; or land used predominantly for residential occupation as at 4 September 2010”.

“Grout” means a material which consists of water and at least 20% cement, and which may also contain aggregate, inert additives or bentonite.

“Landfill” means any part of a site where solid or hazardous waste has been deposited (either lawfully or not), and which is identified as a landfill on Environment Canterbury’s Listed Land Use Register, or in the records of the relevant territorial authority.