

DISCHARGE PERMIT

Pursuant to Section 104B of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Queenstown Lakes District Council

Address: 10 Gorge Road, Queenstown

To discharge treated wastewater to land

For the purpose of operating the Queenstown Wastewater Treatment and Disposal System

For a term expiring 18 March 2044

Location of consent activity:

The Shotover River Delta, 1.25 kilometres south south-east of the intersection of State Highway 6 and Tuckers Beach Road, approximately 1.1 kilometres south east of the intersection of Glenda Drive and Margaret Place, Queenstown

Legal description of consent location:

~~Lot 4 DP 421841 and Lot 2 DP 422388~~

~~Sec 145 Blk 1 Shotover SD~~

~~Sec 144 Blk 1 Shotover SD~~

~~Sec 143 Blk 1 Shotover SD~~

~~Sec 142 Blk 1 Shotover SD~~

~~Pt Sec 141 Blk 1 Shotover SD~~

~~Pt Sec 152 Blk 1 Shotover SD~~

~~Lot 1 DP 306621~~

~~Lot 1 DP 15636~~

~~Crown Land Blk 1 Shotover SD~~

Map Reference: NZTM 2000 1266045E 5006801N 1265922E 5006626N

Conditions

Specific

1. Discharge Permits RM13.215.02, RM13.215.03, RM13.215.04 or any variations to those permits, and any other existing consents for the discharge of treated municipal wastewater to land or water held by the consent holder for discharges within the Shotover Delta shall be surrendered within 6 months of the first exercise of this consent. The consent holder shall notify the Consent Authority in writing of the date when this resource consent is first exercised.

2. The volume of wastewater discharged to the disposal field shall not exceed 45,000 cubic metres per calendar day, at a maximum discharge loading rate *averaged* over the land disposal area of ~~1,200~~ 1,330 millimetres per calendar day *based on the total area of the disposal field*.
3. From the commencement of this consent, treated wastewater discharged to the disposal field shall comply with the following criteria:

Parameter	Annual mean not to exceed	90th percentile not to exceed*
Five day biochemical oxygen demand (grams per cubic metre)	10	20
Total suspended solids (grams per cubic metre)	10	20
Total nitrogen (grams per cubic metre)	10	15
Total phosphorous (grams per cubic metre)	8	10
<i>E.coli</i> (colony forming units per 100 millilitre)	10 (geometric mean)	100 (95th percentile)*

* The 90th and 95th percentile applies to a rolling 12 calendar month period

4. Under Section 125 of the Resource Management Act 1991, this consent shall not lapse until December 2031.

Performance Monitoring

5. The consent holder shall install a flow meter on the outlet pipe from the treatment plant and continually measure and record the daily volume of effluent being discharged to the disposal field. The consent holder shall report the daily discharge volume for the previous calendar month in writing, or in electronic form, to the Consent Authority, within two weeks after the end of each calendar month.
6. Within three months of the commencement of this consent, the consent holder shall prepare and forward to the Consent Authority an Operations and Management Manual for the treatment and disposal system to ensure its effective and efficient operation at all times. The system shall be operated in accordance with this manual, which may be updated as appropriate. The manual shall be to the satisfaction of the Consent Authority and include, but not be limited to:
 - (a) a description of the entire treatment and disposal system, including a site map indicating the location of the various components of the treatment and disposal system, discharge locations and monitoring sites;
 - (b) specific management procedures for key components of the system;

- (c) procedures to be utilised to monitor the operation and performance of the system;
 - (d) identification of potential equipment malfunctions and environmental situations that may lead to treatment system failure;
 - (e) monitoring and reporting procedures, including, but not limited to:
 - (i) contingency plans including methods for monitoring and detecting out of specification influents/effluents, contingency procedures for managing the same, contingency procedures to manage system component malfunctions and breakdowns for both the treatment and disposal system;
 - (ii) contingency plans for ensuring consistent effluent quality during periods of peak flows including proactive maintenance prior to peak flow seasons to achieve the same.
 - (iii) *Monitoring plans for monitoring groundwater mounding and quality.*
 - (f) population numbers that the system is designed to accommodate for;
 - (g) reporting population growth and influent volumes and their consistency with the forecasts supplied at the time of granting
 - (h) a complaints recording system and malfunction recording system including actions and responses undertaken to rectify any system malfunction;
 - (i) details of the measures to be taken to ensure the attainment of the effluent quality requirements set out in Condition 3; and
 - (j) procedures for continuous reviewing and improving of the manual.
7. The consent holder shall submit the record of complaints and malfunctions to the Consent Authority within two weeks after any complaint or malfunction occurring, together with the details of the remedial measures taken. At all times, the consent holder shall ensure that the Consent Authority has a copy of the up to date Operations and Management Manual.
8. The analytical sampling results for each sample collected under Conditions 11 and 12 shall be reported in writing to the Consent Authority, within two weeks of the consent holder receiving the results, together with a reading of the 24-hour wastewater discharge volume for the day of sampling.
9. The Consent Holder shall, at five yearly intervals from the exercise of this consent engage a suitably qualified freshwater biologist to design and implement a survey of the true left bank of the Kawarau River. The purpose of the study shall be to determine if the wastewater discharge from the plant is affecting the biology and conservation values of the Kawarau River. The design and implementation of the monitoring program shall be approved by the Consent Authority and take into account, seasonality, the current flows to plant, the current footprint of the low pressure effluent dosing system field and the results of groundwater modelling and testing at hand. The results of the survey shall be reported to the Consent Authority within three months of the survey.
10. The consent holder shall by ~~1 February~~ ~~30 September~~ each year after the commissioning of the treatment system forward an annual report in writing to the Consent Authority. The annual report shall cover the period ~~1 January to 30 December~~ ~~1 July to 30 June~~ in the previous 12-month period and shall report on compliance with this discharge permit, including, but not limited to:
- (a) Copies of the laboratory analytical results of all monitoring undertaken;

- (b) Summary of the year's monitoring results, in context of previous year's results;
- (c) Summary of volumes of treated wastewater discharged to land;
- (d) Summary of quality of treated wastewater discharged to land;
- (e) Summary of all analytical results from the monitoring bores for the previous year, and an interpretation of the groundwater quality results, particularly with regard to the discharge of treated wastewater to land;
- (f) *Summary of trends in groundwater mounding, any areas of mounding concern and outlining any changes to the system or operation to mitigate concerns.*
- ~~(f)~~ (g) Comments on compliance with the conditions of this discharge permit;
- ~~(g)~~ (h) Summary of any complaints received, the validity of each complaint and the corrective action taken; and
- ~~(h)~~ (i) Any other issues considered relevant by the consent holder.

General

~~11~~ 11. The discharge shall only be treated wastewater, originated from the Queenstown Lakes District.

11. ~~12~~. From the commencement of this consent, and within the first week of each calendar month, the consent holder shall collect a representative sample of the treated wastewater, immediately prior to discharge to the disposal field. Each sample collected shall be analysed for:

- (a) Five day biochemical oxygen demand (BOD5)
- (b) Total suspended solids
- (c) Total nitrogen
- (d) Total ammoniacal nitrogen
- (e) Total phosphorous
- (f) Dissolved reactive phosphorous
- (g) Faecal coliforms

12. ~~13~~. Groundwater samples shall be collected from monitoring bores up gradient and down gradient of the disposal area. These bores shall be located in consultation with the Consent Authority. The groundwater samples shall be collected:

- (a) The first week of each January and each July for the duration of the consent.

Each sample shall be analysed for:

- (b) Total nitrogen
- (c) Total ammoniacal nitrogen
- (d) Nitrate nitrogen
- (e) Total phosphorous
- (f) Dissolved reactive phosphorous
- (g) Faecal coliforms

13. ~~14~~. Groundwater sampling procedures shall be generally in accordance with "The New Zealand Guidelines for the Collection of Groundwater Samples for Chemical and Isotopic Analysis" science report 99/9, dated April 1999 and published by the Institute of Geological and Nuclear Sciences

14. ~~15~~—All sampling techniques employed in respect of Condition 13 of this consent shall be acceptable to the Consent Authority. All analysis carried out in connection with this consent shall be performed by a laboratory that meets ISO 17025 standards, or otherwise as specifically approved by the Consent Authority.
15. (a) *Prior to commencement of this consent the Consent Holder shall install at least 7 piezometers which are to be located, in consultation with the consent authority, within and outside the disposal area for the purpose of providing representative sampling of groundwater levels around and within the disposal area.*
- (b) *Groundwater levels in the piezometers shall be recorded to a datalogger with at least 24 months data storage, to record the date, time and groundwater level.*
- (c) *The piezometer shall be installed according to the manufacturer's specifications and instructions.*
- (d) *The consent holder shall ensure the full operation of the piezometer and datalogger at all times during the exercise of this consent. All malfunctions of the piezometer and/or datalogger during the exercise of this consent shall be reported to the Consent Authority within 5 working days of observation and appropriate repairs shall be performed within 5 working days. Once the malfunction has been remedied, the consent holder shall provide a report from an appropriately qualified professional certifying the operation of the piezometer and/ or datalogger has been verified as accurate complete with photographic evidence to the Consent Authority within 5 working days of the completion of repairs.*
- (e) *The installation of the piezometer and datalogger shall be completed to full and accurate operation prior to the exercise of the consent. The consent holder shall forward a copy of the installation certificate to the Consent Authority within one month of installing the piezometer and datalogger.*
16. *The consent holder shall monitor and maintain records of any groundwater mounding above the ground surface within the operational disposal area that remains for over 48 hours.*
- (i) *Records should include but not be limited to:*
- (a) *Photographic record;*
- (b) *Sampling of mounded water to determine presence of treated effluent as outlined in Condition 12;*
- (ii) *The Consent Authority shall be immediately notified of occurrences of mounding breakthrough that exceed 48 hours in writing.*

~~16.17.~~—The consent holder shall, at three monthly intervals, undertake a visual inspection of the land disposal field, to determine there is no slumping, as a result of the discharge of treated wastewater to land.

General

~~11.18.~~The discharge shall only be treated wastewater, originated from the Queenstown Lakes District.

19. *The Consent Holder shall advise the consent authority of any changes to the extent of the operational disposal area within 3-months.*

~~17-20.~~ No ponding or surface run-off of treated wastewater shall occur as a result of the exercise of this consent.

21. *Mounding of groundwater:*

- (i) *above the ground surface shall not occur in cumulative area greater than 100 m² over the entire disposal area for more than 48-hours in any one event.*
- (ii) *as a result of the exercise of this consent shall not result in surface breakthrough after the initial 5 year mounding trial period following the commencement of this consent.*

22. *In accordance with Sections 128 and 129 of the Resource Management Act 1991 Condition 20 and 21 shall be reviewed after a 5-year trial period for the purposes of dealing with any mounding issues, such as reassessing the area of acceptable mounding, testing the quality of mounded water to determine risk, or assessing the need for fencing and/or signage.*

~~18~~23. There shall be no vehicle access over or through the land disposal area, such that it adversely affects the performance of the disposal area.

~~19~~24. This permit does not authorise the discharge of sludge to land or water.

~~20~~25. The consent holder shall erect and maintain signs at suitable locations about the discharge area indicating the presence of a treated wastewater discharge.

~~21~~26. The Consent Authority may, in accordance with sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent within three months of each anniversary of the commencement of this consent, for the purpose of:

- (a) Determining whether the conditions of this consent are adequate to deal 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 which become evident after the date of commencement of the consent; or
- (b) Ensuring the conditions of this consent are consistent with any National Environmental Standards; or
- (c) Requiring the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment arising as a result of the exercise of this consent.

Issued at Dunedin this 13th day of May 2010

Reissued at Dunedin this 5th day of June 2015 for the purpose of amending the map reference and varying Conditions 1, 3, 4 and 12.

Reissued at Dunedin this 9th Day of March 2017 for the purpose of amending the legal description and map reference and varying Conditions 2, 6, 10 and 11 and the addition of new conditions 15, 16, 19, 21, 22.

Reissued at Dunedin this 24th day of December 2024 after a correction to the consent document variation number pursuant to section 46 of the Legislation Act 2019.



Jenny Ross
Team Leader Consents
24 December 2024