Our Reference: A766704 Consent No. RM13.215.03. V2

### **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 a term expiring: 31 December 2031

Location of consent activity:

Queenstown, approximately 1.25 kilometres south south-east of the intersection of State Highway 6 and Tuckers Beach Road, 1.2-kilometres-south-southeast-of-the-intersection-of Shotover Delta Road and Frankton-Ladies Mile Highway (State Highway 6)

Legal description of consent location: Lot 4 DP 421841 and Lot 2 DP 422388 Pt See 141-and Sees-142—145 & 152 Blk I Shotover SD, Lot 1 DP 306621, Lot 1 DP 15636, Crown Land Blk I Shotover SD

Map Reference: NZTM 2000 1266045E 5006801N E1265922 N5006626

### Conditions

#### Specific

- 1. Under Section 125 of the Resource Management Act 1991, this consent shall not lapse until 1 January 2023.
- 2. Discharge Permit RM13.215.04 shall be surrendered within 6 months of the full exercise of this consent (all treated wastewater being discharged to land). The consent holder shall notify the Consent Authority in writing of the date of the first exercise of this consent.
- 3. The volume of wastewater discharged to the disposal field shall not exceed:
  - (a) An annual average of 11,238 cubic metres per day; and
  - (b) A maximum discharge loading rate for averaged over the each disposal field area bed of 1,000 1,200 millimetres per calendar day based on the total area of the disposal field.
- 4. The recorded daily flow and total nitrogen concentration of the effluent as monitored in accordance with Conditions 7 and 8 of this consent shall be averaged over the previous 12 month rolling period and when the mass of nitrogen reaches:
  - (a) 73.2 tonnes per year, the consent holder shall implement the wastewater treatment plant upgrade process to meet the conditions of Consent 2008.238. V2 within two years; and
  - (b) 75.5 tonnes per year, the consent shall have commissioned the upgraded wastewater treatment plant to meet the conditions of Consent 2008.238. V2. This consent shall be surrendered within 6-months of this upgrade being commissioned.



- 5. The wastewater disposal field platform shall be raised above existing ground level such that there is a minimum unsaturated zone between the disposal manifold and permanent groundwater of no less than 600 millimetres.
- 6.5. No less than one month prior to construction of the wastewater disposal field, all detailed design drawings and calculations shall be provided to the Consent Authority.
- 7.6. Prior to the exercise of this consent, 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 year in writing, and in electronic form, to the Consent Authority, by I February each year.

### **Performance Monitoring**

- 8.7. 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 total biochemical oxygen demand;
  - (b) Total suspended solids;
  - (c) Total nitrogen;
  - (d) Ammoniacal nitrogen;
  - (e) Total phosphorous; and
  - (f) Escherichia coli.
- 9.8. Within the first week of each month for the first five years of the exercise of this consent, and within the first week of January and July each year thereafter, the consent holder shall, collect representative samples of groundwater from bores up gradient and down gradient of the wastewater disposal field, which are to be located in consultation with the Consent Authority. Each sample shall be analysed for:
  - (a) Total nitrogen;
  - (b) Ammoniacal nitrogen;
  - (c) Nitrate nitrogen;
  - (d) Total phosphorous; and
  - (e) Escherichia coli.

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

- 9. (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.
- 10. 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 8;
  - (ii) The Consent Authority shall be immediately notified of occurrences of mounding breakthrough that exceed 48 hours in writing.
  - (d) Records to be supplied to consent holder annually.
- 10.11. The results from the monitoring undertaken in accordance with Conditions 8 and 9 7, 8, 9 and 10 of this consent shall be reported in writing to the Consent Authority within—one monthly, together with a reading of the 24-hour wastewater discharge volume for the day of sampling.
- 11-12. The quality of the treated wastewater shall not exceed the following limits prior to discharge:

Parameter	95%ile	Annual Mean
$BOD_5(g/m^3)$	50	30
TSS (g/m³)	50	30
TN (g/m <sup>3</sup> )	35	23
E.Coli (cfu/100ml)	260 (90% ile)	260 geomean

- \* Means and percentiles apply to a rolling 12 calendar month period.
- 4213. All sampling techniques employed in respect of the conditions 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 or IANZ standards, or otherwise as specifically approved by the Consent Authority.
- 13.14. No less than three months before the commencement of the exercise 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 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) Monitoring and reporting procedures, including, but not limited to:
  - (i) Contingency plans for system malfunction and breakdowns for each part of the treatment and disposal system; and
  - (ii) Contingency plans for maintaining effluent quality during periods of peak flows.
  - (iii) Monitoring plans for monitoring groundwater mounding and quality.
- (e) Population numbers that the system is designed to accommodate,
- (f) A complaints and system malfunctions recording system;
- (g) Details of the measures to be taken to meet the quality of discharge set out in Condition 12 of this consent; and
- (h) Procedures for continuous reviewing and improving of the manual.

The consent holder shall ensure that the Consent Authority has a copy of the current Operations and Management Manual at all times.

- 14.15. The consent holder shall submit a 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 or proposed to be undertaken.
- 15.16. The consent holder shall, at three monthly intervals, undertake a visual inspection of the disposal field, to determine there is no vegetation die-off, or slumping, as a result of the discharge of treated wastewater to land.
- 16.17. By 1 February 30 September each year, the consent holder shall 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 years' 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 to date, 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.
  - (g) (f) (g) Comments on compliance with the conditions of this discharge permit;
  - (h) (g) (h) Summary of any complaints received, the validity of each complaint and the corrective action taken; and
  - (i) (h) (i) Any other issues considered relevant by the consent holder.
- 17.18. (a) Within three months of the first exercise of this consent, the consent holder shall invite iwi representatives (Kāi Tahu ki Otago and Ngāi Tahu ki Murihiku) and stakeholder representatives, including Public Health South and Remarkables Park Limited, to form a Reference Group. The purpose of the Reference Group shall be to facilitate consultation between the consent holder, stakeholder representatives and iwi



representatives (Kāi Tahu ki Otago and Ngāi Tahu ki Murihiku) during the upgrading of the wastewater treatment plant.

- (b) The Reference Group shall have the following functions:
- To receive and review the monitoring data and reports from the physical and biological monitoring. If necessary, a reasonable level of technical expertise shall be made available by the consent holder to interpret the monitoring data.
- To receive and review the annual monitoring report.
- To receive and review the implementation plan for the upgrade of the treatment and disposal system.
- To make recommendations to the consent holder on management actions to avoid, remedy or mitigate any adverse effects of the treatment and disposal system.
- (c) The consent holder shall, at least once every six months, invite the Reference Group to a meeting to discuss any matter relating to the exercise and monitoring of this consent. The consent holder shall meet reasonable costs of attending meetings of the Reference Group. The consent holder shall keep minutes of any meeting of the Reference Group and provide Consent authority with copies of the minutes.
- 18-19. (a) Within three months of the first exercise of this consent, the consent holder shall provide the Consent Authority and the Reference Group with an Implementation Plan for the staged upgrade of the wastewater treatment plant.
  - (b) The Implementation Plan shall describe the program of work required to ensure that:
  - By no later than 31 December 2017, flows of up to 9,000 cubic metres per day of treated wastewater are discharged to land.
  - By no later than 31 December 2022, the discharge of treated wastewater to the Shotover River shall cease.
  - By no later than 31 December 2031, Stage 3 (a full upgrade of the treatment and disposal system to achieve mean 10:10:10:10 (BOD:TSS:TN:E.Coli) effluent quality as required by Discharge Permit 2008.238.V1) is operational.
  - (c) By no later than 31 January each year, the consent holder shall provide an annual report to the Consent Authority and the Reference Group detailing progress made with the program of work outlined in the Implementation Plan.

### General

- 19.20. 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 m<sup>2</sup> 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.



- 23. The Consent Holder shall advise the consent authority of any changes to the extent of the operational disposal area within 3-months.
- 20.24. There shall be no vehicle access over or through the land disposal area apart from designated access areas, such that it adversely affects the performance of the disposal area.
- 21.25. This permit does not authorise the discharge of sludge to land or water, other than to an approved landfill facility or alternative consented location.
- 22.26. If the consent holder:
  - (a) Discovers koiwi tangata (human skeletal remains), or Maori artefact material, the Pennit Holder shall without delay:
  - (i) Notify the Consent Authority, Tangata whenua and New Zealand Historic Places Trust and in the case of skeletal remains, the New Zealand Police.
  - (ii) Stop work within the immediate vicinity of the discovery to allow a site inspection by the New Zealand Historic Places Trust and the appropriate runanga and their advisors, who shall determine whether the discovery is likely to be extensive; if a thorough site investigation is required and whether an Archaeological Authority is required.
  - (iii) Any koiwi tangata discovered shall be handled and removed by tribal elders responsible for the tikanga (custom) appropriate to its removal or preservation. Site work shall recommence following consultation with the Consent Authority, the New Zealand Historic Places Trust, Tangata whenua, and in the case of skeletal remains, the NZ Police, provided that any relevant statutory permissions have been obtained.

material, or disturbs a previously unidentified archaeological or heritage site, the Permit Holder shall without delay:

- (i) Stop work within the immediate vicinity of the discovery or disturbance; and
- (ii) Advise the New Zealand Historic Places Trust, and in the case of Maori features or materials, the Tangata whenua, and if required, shall make an application for an Archaeological Authority pursuant to the Historic Places Act 1993; and
- (iii) Arrange for a suitably qualified archaeologist to undertake a survey of the site.

Site work shall recommence following consultation with the Consent Authority.

- 23.27. 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;
  - (b) ensuring the conditions of this consent are consistent with any National Policy Statements, National Environmental Standards Regulations, relevant plans and/or the Otago Regional Policy Statement.



Issued at Dunedin this 5th day of June 2015

Reissued at Dunedin this 9<sup>th</sup> day of March 2017 for the purpose of amending the legal description and map reference and varying Conditions 3, 4, 5, 10, 13, 16 and the addition of new conditions 9, 10, 21, 22, 23."

Marian Weaver
Resource Manager Procedures & Protocols





Our Reference: 1377847943-21156 Consent No. 2008.238.V2

### **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 I 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)*

<sup>\*</sup> 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.
- 1823. There shall be no vehicle access over or through the land disposal area, such that it adversely effects the performance of the disposal area.
- 1924. This permit does not authorise the discharge of sludge to land or water.
- <del>20</del>25. The consent holder shall erect and maintain signs at suitable locations about the discharge area indicating the presence of a treated wastewater discharge.
- 2126. 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 5<sup>th</sup> day of June 2015 for the purpose of amending the map reference and varying Conditions 1, 3, 4 and 12.

Reissued at Dunedin this 9<sup>th</sup> 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 24<sup>th</sup> 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

Our Reference: A766704 Consent No. RM13.215.01

#### 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 contaminants to air for the purpose of operating the Queenstown waste water treatment plant

For a term expiring: 18 March 2044

Location of consent activity:

Queenstown, approximately 1.2 kilometres south southeast of the intersection of Shotover Delta Road and Frankton-Ladies Mile Highway (State Highway 6)

Legal description of consent location:

Pt Sec 141 and Secs 142 – 145 & 152 Blk I Shotover SD, Lot 1 DP 306621, Lot 1 DP 15636, Crown Land Blk I Shotover SD

Map Reference: NZTM2000 E1265922 N5006626

### **Conditions**

#### Specific

- 1. This consent shall only be exercised in conjunction with Discharge Permit 2008.238.V1, Discharge Permit RM13.215.02, Discharge Permit RM13.215.03, Discharge Permit RM13.215.04 and any subsequent variations to these permits.
- 2. This consent shall not be exercised until Discharge Permit 2008.239 has been surrendered or has expired.

### Performance Monitoring and Odour Reporting

- 3. The Consent Holder shall adopt the best practicable options (BPO) to prevent or minimise odour discharges from the site. The BPOs shall be set out in an Odour Management Plan that is to be peer reviewed by a suitably qualified air quality specialist appointed in consultation with the Consent Authority. The peer reviewed Odour Management Plan shall be provided to the Consent Authority and the Reference Group within 4 months of the first exercise of this consent for review and comment. The Odour Management Plan shall include, but not be limited to:
  - (a) Details of the best practicable option(s) to prevent or minimise odour discharges from the site;
  - (b) A description of the potential sources of discharges of odour to air on the site;



- (c) Methods adopted to minimise odour including, but not limited to, the operation and ventilation of the wastewater treatment system, and the storage and management of screenings and sludge;
- (d) Method(s) for complying with conditions;
- (e) Management and operational procedures and contingency plans to prevent or minimise odour;
- (f) Decommissioning and Construction Odour Management Plan. This is to be updated at least 3 months prior to the decommissioning of any of the existing wastewater management and disposal facilities at the site, or any significant upgrade works. The plan shall include, but not be limited to:
  - i. A description of the proposed decommissioning or upgrade works:
  - ii. Proposed work schedule;
- iii. An assessment of the likely odour effects of the work including, but not limited to, any temporary or permanent ponds, any screening or pretreatment processes, any facilities for receipt of material other than through the sewage pipe network, any tanks and any processing facilities and ultimate disposal of treated wastewater and sludges (if on-site);
- iv. Consideration of where dispersion modelling of odours is required to better understand the potential effects of odour emissions including consideration of katabatic winds:
- Where upgrade works are proposed, identification of the best practicable options to control odours from each potential odour source taking into consideration the sensitivity of the receiving environment and risk of adverse effects;
- vi. Consideration of alternative odour-minimising, decommissioning and construction methodologies and their respective odour generating potential;
- vii. Management, of sludge from the ponds and channel:
- viii. Proposed changes to the Odour Management Plan; and
- ix. Any other issues considered relevant by the consent holder.
- (g) Management and operational procedures and contingency plans to minimise odour during the commissioning phases;
- (h) Method(s) for recording and responding to complaints from the public;
- (i) A description of the monitoring required to comply with the conditions of this consent;
- (j) Assignment of responsibility for implementing and updating the Odour Management Plan; and
- (k) A plan showing the legal boundary of the Queenstown Wastewater Treatment and Disposal System site.

The consent holder shall ensure that the Consent Authority and the Reference Group have the most recent copy of the Odour Management Plan at all times.

- 4. (a) The Odour Management Plan shall be reviewed by the consent holder no less than once per calendar year. This review shall consider:
  - (i) The implications of any actual or anticipated increases in wastewater inflow, organic load and sludge generation on the performance of the treatment plant over the following 12 months, having particular regard to preventing generation of any new offensive or objectionable odours;



- (ii) The recommendations of any odour performance reviews undertaken in accordance with Condition 5; and
- (iii) The recommendations of any further details of the Decommissioning and Construction component of the Odour Management Plan.
- (b) A report detailing the findings of the annual Odour Management Plan review shall be provided to the Reference Group within one month of the review being completed.
- (c) The consent holder shall have any amendments to the Odour Management Plan independently peer reviewed by a suitably qualified air quality specialist engaged in consultation with the Consent Authority within three months of the amendments being made.
- 5. Within 3 years of the commencement of this consent and every 3 years thereafter, the consent holder shall submit a report to the Consent Authority reviewing the odour performance of the site over the preceding 3 year period. The report shall be prepared by a suitably qualified air quality specialist engaged in consultation with the Consent Authority. The review shall include, but not be limited to:
  - (a) An assessment of the technology being used to manage site odour against technology currently available;
  - (b) An assessment of development adjacent to the site and its potential implication on site odour management and compliance with the conditions of this consent;
  - (c) An assessment of the effectiveness of the Management and Operational Procedures and Contingency Plans and Decommissioning and Construction Plans (as detailed in the Odour Management Plan) to minimise offsite odour discharges;
  - (d) An assessment of what upgrades are required to ensure compliance with the conditions of this consent during the following 3 year period;
  - (e) The results of the odour monitoring undertaken in accordance with the conditions of this consent;
  - (f) A record of complaints regarding to odour from the site; and
  - (g) Recommendations for improvements in management or operational procedures to ensure compliance with the conditions of this consent.

The odour performance review report shall be provided to the Reference Group within one month of the review being completed.

- 6. The Consent Holder walkover surveys of odours around the boundary of the site. The minimum frequency of odour walkover surveys shall be:
  - (a) At least once per day for 30 days following the completion of any upgrade works that may result in the discharge of odour;
  - (b) At least once per day for 3 days following any external complaints received and confirmed as coming from the site; and
  - (c) At least once per day for 3 days following any off-site odour identification as coming from the site during the odour walkover survey.



The odour walkover surveys shall be undertaken by a person who may be employed by the consent holder or the treatment plant operator, but who does not work on the site.

- 7. Records of each odour walkover survey conducted in accordance with Condition 6 shall be maintained and kept for a minimum of 6 years. The records shall include, but not be limited to:
  - (a) The date, start and finish times of the survey;
  - (b) The wind direction and strength, and weather conditions throughout the survey period;
  - (c) The location and strength/intensity, character and duration of any odours observed;
  - (d) Investigations into the source of any odour identified, whether from the site or elsewhere; and
  - (e) Plant operating conditions at the time of the survey.
- 8. The consent holder shall keep a record of any complaints received regarding discharges of odour from the site. The record shall, as a minimum, include the following:
  - (a) The time and place at which the complaint was generated;
  - (b) The nature of the complaint:
  - (c) Operating conditions at the time of the complaint, including any malfunctioning or breakdown of control equipment;
  - (d) Wind and weather conditions at the time of the complaint; and
  - (e) Corrective action taken by the consent holder to minimise the risk and extent of the recurrence of the causes of the complaint.

The consent holder shall submit a copy of the written record of the complaint to the Consent Authority within two weeks after any complaint being received, together with the details of the corrective actions taken.

- 9. (a) Within three months of the first exercise of this consent, the consent holder shall invite iwi representatives (Kāi Tahu ki Otago and Ngāi Tahu ki Murihiku) and stakeholder representatives, including Public Health South and Remarkables Park Limited/Shotover Park Limited, to form a Reference Group. The purpose of the Reference Group shall be to facilitate consultation between the consent holder, stakeholder representatives and iwi representatives (Kāi Tahu ki Otago and Ngāi Tahu ki Murihiku) during the upgrading and operation of the wastewater treatment plant.
  - (b) The Reference Group shall have the following functions:
  - To receive and review the monitoring data and reports from the physical and biological monitoring. If necessary, a reasonable level of technical expertise shall be made available by the consent holder to interpret the monitoring data;
  - To receive and review the annual monitoring report;
  - To receive and review the implementation plan for the upgrade of the treatment and disposal system;
  - Discuss any odour nuisance associated with the site;
  - Discuss the performance of any emission control equipment;
  - Discuss the outcome of any investigations or reports commissioned by the consent holder, Consent Authority or the Reference Group representatives in relation to the exercise of this consent:
  - Discuss and make recommendations to any proposed or upcoming upgrade works; and



- To discuss and make recommendations to the consent holder on management actions to avoid, remedy or mitigate any adverse effects of the treatment and disposal system.
- (c) The consent holder shall, at least once every six months, invite the Reference Group to a meeting to discuss any matter relating to the exercise and monitoring of this consent. The consent holder shall meet reasonable costs of attending meetings of the Reference Group. The consent holder shall keep minutes of any meeting of the Reference Group and provide the Consent Authority with copies of the minutes.
- 10. (a) Within three months of the first exercise of this consent, the consent holder shall provide the Consent Authority and the Reference Group with an Implementation Plan for the staged upgrade of the wastewater treatment plant.
  - (b) The Implementation Plan shall describe the program of work required to ensure that:
  - By no later than 31 December 2017 flows of up to 9,000 cubic metres per day of treated wastewater are discharged to land.
  - By no later than 31 December 2022, the discharge of treated wastewater to the Shotover River shall cease.
  - By no later than 31 December 2031, Stage 3 (a full upgrade of the treatment and disposal system to achieve mean 10:10:10:10 (BOD:TSS:TN:E.Coli) effluent quality as required by Discharge Permit 2008.238.V1) is operational.
  - (c) By no later than 31 January each year, the consent holder shall provide an annual report to the Consent Authority and the Reference Group detailing progress made with the program of work outlined in the Implementation Plan.

#### General

- 11. There shall be no discharge of odour, as a result of the exercise of this consent, that is noxious, dangerous, offensive or objectionable to the extent that is causes an adverse effect beyond the site boundary, in the opinion of an authorised officer of the Consent Authority. This shall include but not be limited to:
  - a. Ensuring offensive or objectionable odour emissions from stored septage waste and primary screening facilities are treated via and appropriate odour treatment system to ensure compliance with Condition 11;
  - b. Ensuring that there are no objectionable odour emissions as a result of storage and/or handling of sludge generated from any wastewater treatment processes, including within the existing wastewater treatment ponds, to ensure compliance with Condition 11;
  - c. Ensuring that there are no objectionable odour emissions as a result of any disposal of effluent to land or as a result of any seepage of effluent ponding that may occur; and
  - d. Condition 11 does not apply during a period of up to six weeks for the initial commissioning of the plant. The consent holder shall take all practical steps, as required in Condition 3, to minimise odour during this period.
  - c. Ensuring that there are no offensive or objectionable odour emissions as a result of any flow or load balancing or temporary storage of raw influent wastewater under any future upgrade.



- 12. 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) to deal with any adverse effect on the environment, particularly odour discharges, which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage;
  - (b) ensuring the conditions of this consent are consistent with any National Environmental Standards Regulations, relevant plans and/or the Otago Regional Policy Statement; and
  - (c) requiring the consent holder to adopt the BPO to remove or reduce any adverse effect on the environment arising as a result of the exercise of this consent.

Issued at Dunedin this 5th day of June 2015

Christopher P Shaw Manager Consents

