

Our reference: A1818696 Consent No: 2009.381.V3

#### **DISCHARGE PERMIT**

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

Name: WG Limited Partnership (Previously known as Wallace Group Limited

Partnership)

Address: 17th Floor, 120 Albert Street, Auckland Central, Auckland

To discharge contaminants to air for the purpose of operating an animal waste rendering plant

For a term expiring 1 August 2035

Location of Activity: 37 Boundary Road, Burnside, Dunedin

Approximately 700 metres southwest of the intersection of

Reservoir Road and Townleys Road, Burnside, Dunedin

Legal description of land at point of discharge: Lots 1 and 2 DP 21212 and Pt Sec 61

Blk VI Dunedin and East Taieri SD and Lots 2 and 3 DP 436310 and Pt Sec 44 Blk IV Dunedin and East Taieri SD

Map reference NZTM 2000: E1401907 N4914474 (approximate mid-point of site)

# Conditions Specific

1. This consent authorises the discharge of contaminants to air in connection with the operation of an animal waste rendering plant at the location specified above. The activity must be carried out in accordance and documentation referenced by the Consent Authority as consent number 2009.381.V3 including updated plans as required by Condition 2D(a).

If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.

#### 2A SQEP Audit

- a) The Consent Holder must commission a suitably qualified and experienced professional (SQEP) specialising in odour management to undertake an audit of the site's odour management foul air collection, extraction and treatment system by 2 months from the date of issue of the post-consent review decision and every 5 years thereafter.
- b) The Consent Holder must submit the relevant professional details of a SQEP to the Consent Authority for certification. The SQEP must be:



- i. an air quality professional holding a current certification from the Clean Air Society of Australia and New Zealand (CASANZ).
- c) To certify the SQEP to satisfy Condition 2A(b), the Consent Authority may only assess the SQEP with respect to the matters in 2A(b)(i).
- d) In order to certify the SQEP to satisfy Condition 2A(b), the Consent Authority may request further information from the Consent Holder to determine whether the certification requirements have been met.
- e) The Consent Authority must provide the Consent Holder with a decision in writing (email), including reasons, stating whether the Consent Authority considers the SQEP meets or does not meet the certification requirements of 2A(b)(i).
- f) Within 1 month of receiving written notification from the Consent Authority that a SQEP required by 2A(b) cannot be certified, the Consent Holder must submit the relevant professional details of an alternative SQEP to the Consent Authority for certification.
- g) The purpose of the audit is to identify what measures must be implemented to avoid the discharge of odour beyond the boundaries of the site which is noxious, dangerous, offensive or objectionable. The audit must include the following as a minimum:
  - i. Identification of all odour sources at the site.
  - ii. Which odour emitting plant facilities, buildings and activities require enclosure, point source odour extraction or other treatment.
  - iii. The appropriate air extraction rate from each point source and building space. Building space extraction and associated vents/building openings must be calculated such that a negative pressure environment within the building space can be maintained at all times.
  - iv. Design specifications for the fan(s) used for the point source and building air extraction.
  - v. Design specifications for the foul air treatment system (biofilter and any other air treatment required) based on the above calculated air extraction rates and associated foul air composition.
  - vi. Site odour management procedures including how to implement contingency measures where required.
  - vii. Any other measures for containment, collection, conveyance and treatment of odorous compounds necessary to avoid the discharge beyond the boundaries of the site of odour that is noxious, dangerous, offensive, or objectionable.
  - viii. Timeframes for implementation for each of the measures.
  - ix. Maintenance and repair requirements for all odour emitting plant facilities.
- h) All reports from the SQEP including drafts must be provided to the Consent Authority for certification at the same time as they are provided to the consent holder.
- i) To certify a report required by Condition 2A(g), the Consent Authority may only assess the report with respect to the matters in 2A(g).
- j) In order to certify a report required by Condition 2A(g), the Consent Authority may request further information from the Consent Holder to determine whether the certification requirements have been met.



- k) The Consent Authority must provide the Consent Holder with a decision in writing (email), including reasons, stating whether the Consent Authority considers the report meets or does not meet the certification requirements.
- Within 1 month of receiving written notification from the Consent Authority that a report required by 2A(g) cannot be certified, the Consent Holder must submit an amended report to the Consent Authority for certification.

## 2B Implementing SQEP Audit Report

- a) The Consent Holder must, within the timeframes stated in the audit, take the measures specified in the SQEP audit report.
- b) All actions required by the first certified SQEP audit report must be implemented by 31 Dec 2023 and then within 6 months of every certified 5 yearly SQEP audit report.
- c) At all times, including while the actions required in a certified SQEP audit report are being implemented the Consent Holder must manage odour on-site in accordance with Conditions 4A 4G of this consent. Nothing derogates from condition 20 of this consent.
- 2C At least 48 hours prior to the commencement of any works required by Condition 2B, the Consent Holder must provide notice in writing (email) to the consent authority of the works.
- 2D Within 3 months of completion of the work specified in a certified SQEP audit report under Condition 2A, and Condition 2B the Consent Holder must provide the Consent Authority with:
  - a) As built drawings for and documentation that describes all the work undertaken; and
  - b) Certification from the SQEP who wrote the relevant SQEP audit report that the work has been carried out in accordance with the relevant certified SQEP audit report.

### 3 (deleted)

- 4A Rendering of animal products may occur only if;
  - a) No more than four cookers are used onsite at any one time, and
  - b) The volume of raw material (i.e., all material received on site for processing in the rendering plant including bones, trimmings, offal and blood) processed in any 24-hour period does not exceed 70 tonnes; and
  - c) All raw material is processed within 24 hours of receipt at the site; and
  - d) The rendering plant and any buildings on the site containing raw material which is exposed to air operate under negative air pressure at all times by means of a foul air extraction and treatment system.
- 4B If any requirement of Condition 4A cannot be met, all rendering activity must cease immediately, and all contingency measures set out in Condition 4P as well as any additional measures specified in the certified Air Quality Management Plan (AQMP) required under Condition 4H must be implemented without delay.



- 4C Raw material arriving on-site for processing may be received for processing only in the following circumstances:
  - a) The raw material must be no older than 24 hours (from slaughter); and
  - b) All raw material must be fresh on arrival and not rotten; and
  - c) The raw material has not been in-transit from the point of origin to the site for a duration of more than 10 hours; and
  - d) The raw material meets all other requirements for receipt specified in the certified AQMP required by Condition 4H.
- 4D The following details of all deliveries of raw material must be recorded in writing and retained on-site by the consent holder for no less than 2 years:
  - a) Origin of the raw material;
  - b) Volume;
  - c) Type (e.g., hard, soft, blood);
  - d) Age (hours since slaughter);
  - e) Condition on arrival at the site;
  - f) Date and Time of receipt at the site; and
  - g) Whether received for processing or not.
- 4E If raw material arriving on-site does not meet any one of the requirements of Condition 4C, the raw material must not be received for processing and must be immediately sent to either:
  - a) the point of origin; or
  - b) a landfill site authorised to receive the material; or
  - c) another location specified in the certified AQMP required by Condition 4H.
- 4F Raw material received for processing under Condition 4C must be stored in either:
  - a) Enclosed bins contained within a building or under cover not exposed to sunlight. The bins must remain closed at all times except as necessary to remove raw material or to add raw material to the bins; or
  - b) An enclosed storage bay under a negative pressure system and connected to the biofilter; or
  - c) In a refrigerated storage unit/building.

## 4G Storage

a) Storage bins, storage bays and ancillary areas must be washed down once every 24 hours or between each delivery (whichever is less) to remove any raw material and associated break-down products from the raw material. Wash-down material must be disposed of through the site's liquid trade wastes system.



- b) There must not be any raw material, partially processed material, leachate, waste products (including fats/tallow) on the ground or on external walls of any buildings or structures.
- c) There must be no storage of raw material, waste or reject product outside. All such material may only be temporarily stored indoors and must be transported off-site in sealed containers as soon as practicable.
- d) All external open drains and sumps must be flushed such that there is no residual waste in these drains at any time.
- e) All product conveyors and transfer points outside of a building must be sealed to prevent fugitive odour emissions from these sources.

# 4H Air Quality Management Plan

- a) The Consent Holder must, within three months from the date of certification of the SQEP audit report provide to the Consent Authority for certification an AQMP. The AQMP must accurately describe in detail all monitoring, management and operational procedures, methodologies and contingency plans required to comply with the conditions of this consent. The AQMP must as a minimum include:
  - A description of the site, on-site processes, receiving environment, and identification of sensitive receptors beyond the boundary of the site.
  - ii. Identification of the sources and activities which discharge odour, and the source specific mitigation/management procedures to minimize odour discharges from each of these sources/activities. These source specific controls are to include redundancy/contingency measures should the primary or standard mitigation not be sufficient to control odour discharge from any given source.
  - iii. A table stating the target negative pressure values for all buildings/equipment subject to air extraction;
  - iv. Procedures which outline the process for adjusting the foul air extraction system to achieve the target negative pressure levels, identify the location of pressure test points, and also state the frequency of assessment at each point;
  - v. Procedures which outline the process for measuring the volumetric air flow rate of building air extraction ducts as actual m³/hour, the location of the test points, and the frequency of assessment;
  - vi. Rendering and blood processing raw material controls including a management system to ensure compliance with the conditions of consent 4A 4G relating to the origin of raw material, stabilization of raw material, and timeframes for receipt and processing;
  - vii. Identification of key process parameters which influence odour and other contaminant emissions from raw material delivery/receipt, rendering activities and blood processing, meal and tallow storage and handling, the biofilter(s) and the wastewater treatment plant. A description of the maintenance, calibration, monitoring, control and a recording system for these key process parameters;



- viii. Methods of determining and recording biofilter parameters and the frequency of sampling to demonstrate compliance with Consent condition 4N and 4O.
- ix. Maintenance and monitoring, including frequency of monitoring, of building integrity for building tightness purposes.
- x. Preventive maintenance system procedures including identification of critical spares and procedures to ensure timely availability of critical spares on site so as to ensure compliance at all times with this resource consent;
- xi. Site contingency procedures for each emergency, plant breakdown, equipment failure and malfunction that could result in non-compliance with this resource consent;
- xii. Procedures for assessment of each batch of raw material and for removal of material not compliant with Condition 4C;
- xiii. Housekeeping and cleaning procedures, including frequency;
- xiv. Identification and control of miscellaneous emissions which may individually or collectively cause odour or other air-related issues outside the boundaries of the site;
- xv. Procedures for undertaking the odour scout surveys required in Consent condition 4T.
- xvi. Maintenance and calibration procedures/requirements, including frequency of maintenance and calibration, for all monitoring equipment and sensors (i.e. weather station, air flow meters, temperature sensors, etc.).
- xvii. Complaints investigation, monitoring and reporting;
- xviii. Procedures to ensure that staff are appropriately trained in the dayto-day operation of the equipment, and changes to the operation of the equipment over time;
- xix. Identification of staff and contractor responsibilities;
- xx. Any other matters required by these consent conditions to be addressed in the AQMP; and
- xxi. A map that identifies all components of the rendering process and emission controls.
- b) The Consent Holder must review and update the AQMP every two years and provide a copy to the consent authority for certification. The consent holder must at all times exercise this consent in accordance with the current certified AQMP.
- c) To certify an AQMP required by Condition 4H(a) or 4H(b), the Consent Authority may only assess the report with respect to the matters in 4H(a).
- d) In order to certify an AQMP required by Condition 4H(a) or 4H(b), the Consent Authority may request further information from the Consent Holder to determine whether the certification requirements have been met.
- e) The Consent Authority must provide the Consent Holder with a decision in writing (email), including reasons, stating whether the Consent



- Authority considers the AQMP meets or does not meet the certification requirements.
- f) Within 1 month of receiving written notification from that Consent Authority that a report required by 4H(a) or 4H(b) cannot be certified, the Consent Holder must submit an amended report to the Consent Authority for certification.

## 4I Negative Air Pressure System

- a) The negative air pressure system must achieve effective and optimised extraction for every piece of equipment and building subject to negative air pressure system extraction by as a minimum implementing the following:
- b) The actual pressures, air flow rates, vacuums and temperatures achieved must comply with the target ranges set in the most updated version of the certified AQMP at all times while those process units are in use.
- c) The consent holder must record the extraction monitoring data and identify any instances where the measured data was outside of the target pressure ranges and what, if any, consequences of this were observed. The Consent Holder must provide records of the extraction monitoring data over any specified time period to the Consent Authority within one week of a request.
- d) Irrespective of complying with the negative pressure/vacuum, air flow, and temperature targets, the negative air pressure system must be operated at all times to ensure fugitive emission of odour from processing equipment into the processing buildings is reduced to a practicable minimum and fugitive odour emissions out of buildings does not occur.

### 4J Negative Air Pressure System Duct Maintenance

- a) In the AQMP, the Consent Holder must identify any ducting requiring regular inspections and cleaning and state the frequency that those ducts will be inspected and cleaned to ensure that the air extraction system meets the minimum performance standards outlined in this consent.
- b) All pressure, air flow and temperature sensors must be regularly calibrated and kept sufficiently clean to provide accurate readings.
- c) The inspections and cleaning must be documented stating what was checked or cleaned and on what date and an estimate of the degree of internal fouling must be recorded and retained for trends to be assessed. The documentation must be retained on-site, appended to each annual report, and provided to the consent authority within one week of a request.

### 4K Blood Tank Storage

- a) All raw blood must be stored in fully enclosed, leak-free tanks.
- b) The blood tank vent must be ducted either directly or indirectly into the foul air extraction system.
- 4L Building Air Extraction System (BAS) Minimum Design Standard



- a) The BAS must meet the minimum performance standards identified in the current, certified SQEP report under condition 2A.
- b) At all times that raw material is being processed or raw material is present within the buildings, the BAS must maintain negative pressure to effectively minimise the fugitive release of odour from the buildings.
- c) The BAS air extraction rate must be constructed and maintained in accordance with the current, certified SQEP Audit Report recommended parameters.

#### Advice note:

It is anticipated that the building air extraction rate will be designed to achieve in the order of 13 air changes per hour, however this is subject to the SQEP audit and recommendations.

### 4M Building Tightness

- a) The buildings subject to the BAS must be constructed, operated and maintained to avoid air leakage out of the processing buildings. The building roof and wall cladding, including the partition walls separating the raw material receipt buildings and the rendering areas, must be maintained so that there are no holes or gaps (other than purpose-built BAS air inlet vents).
- b) The Consent Holder must inspect the roof and walls at least 3 monthly to identify any holes or gaps and subsequently have those sealed as soon as practicable. A written record of each inspection including dates of inspection, identified actions and dates that actions are implemented must be made and appended to each annual report and provided to the Consent Authority within one week of a request.
- c) The vehicle door for the raw material loading bay must be open only during unloading, and then for as short a time as practicable. Raw material must not be unloaded unless the unloading bay air extraction system is working in accordance with the BAS minimum performance standard extraction rate.
- d) All other doors to processing buildings and other odorous areas must be kept closed while not in use for entrance or exit and then only opened for as short a time as is practicable.
- e) The consent holder must install electronic monitoring, recording and audible alarms on all external doors which alert if left open. The consent holder must install those measures by 31 December 2023.

### 4N Biofilter Performance Requirements

- a) The biofilter must be designed and operated in accordance with the current, certified SQEP audit report.
- b) The biofilter(s) must be designed to have a minimum empty bed residence time (EBRT) of 50 seconds.
- c) All process air, ventilation air, and any other air, which is required to be passed through the biofilter air treatment system as part of the site air



- treatment, must be passed through the biofilter air treatment system at all times the site is operating or when raw material is inside the buildings.
- d) The biofilter air treatment system must function so odour is not detectable beyond site boundary.
- e) When processes are not operating, or there is no raw material inside the buildings, sufficient airflow must be maintained through the biofilter air treatment system to ensure the media remains in an aerobic condition.
- f) If the biofilter air treatment system fails to adequately remove odour from the extracted air, the consent holder must immediately cease all further processing, and must take all raw material to another site until the biofilter air treatment system is repaired and capable of treating the air emissions in accordance with the requirements outlined in this Consent.
- The biofilter(s) must be operated and managed in accordance with the following requirements:
  - a) The temperature gauge(s) on the inlet duct(s) to the biofilter(s) be continuously operated and maintained and records kept of the inlet duct temperatures and trends. The biofilter(s) inlet air temperature must not exceed the range specified in the SQEP audit and AQMP, but at a minimum between the range of 20 45 degrees Celsius.
  - b) Pressure-drop across the distribution system and media must be recorded and logged continuously for the biofilter(s). The biofilter back pressure must be maintained within the range specified in the SQEP audit and AQMP.
  - c) If the back pressure goes outside of the operating range specified, the consent holder must investigate the cause and take remedial action as soon as practicable.
  - d) Representative bed pH must be recorded and maintained in accordance with the current, certified SQEP audit report and certified AQMP, but pH monitoring frequency must be no less than every three months, and the bed pH must be maintained at a pH of no less than 5.0 in the upper two-thirds of the bed.
  - e) Air must be pre-humidified prior to entering the biofilters, and the relative humidity of the air entering the biofilters must be measured, recorded, and be maintained at no less than 95% relative humidity. The bed moisture content, at representative locations and depths within the biofilter, must be recorded monthly for the biofilter(s), and must be maintained in the range of 40% to 65% by weight.
  - f) The airflow into the biofilter(s) must be measured in accordance with the SQEP audit report and AQMP, but as a minimum every six months and records kept on site by the Consent Holder.
  - g) The flow distribution of air through the biofilter bed(s) must be checked in accordance with the current, certified SQEP audit report and certified AQMP but no less than every six months to ensure that the flow is relatively even. This can be undertaken by observing and photographing rising steam on cold mornings or by using and photographing smoke tests.
  - h) The Consent Holder must conduct qualitative visual and olfactory assessments of the condition of the biofilter bed media, including possible compaction, short circuiting, cracking or clogging of the media beds,



weeds and level of odour, and keep records of the inspections in accordance with the current, certified SQEP audit report and certified AQMP.

- i) The air distribution pipes must be inspected in accordance with the current, certified SQEP audit report and certified AQMP but no less than every 6 months and cleaned out when required. The inspections and cleaning must be recorded.
- j) Yearly inspections must be undertaken by a SQEP. The Consent Holder must provide the inspection report to the Consent Authority immediately following receipt from the SQEP. The Inspection report must comment on the condition of the biofilter(s) and make recommendations where issues or potential issues are identified. The report must include a recommendation on whether the media requires replacement. Any replacement of the media must be undertaken within three months of the report.
- k) The Consent Holder must carry out and record all other monitoring required by the current, certified SQEP audit report and the current certified AQMP.

## 4P Consent Holder Instigated Contingency Measures

- a) If the Consent Holder receives information that there is a breach or likely breach of Conditions 4A or 20, the Consent Holder must:
  - i. Immediately notify the Consent Authority in writing (email);
  - ii. If the odour is likely to be from the rendering plant directly or indirectly including from a biofilter(s), cease processing raw material in the rendering line(s) generating odour or all lines if the source of odour cannot be identified; and
  - iii. If the cause cannot be rectified within 24 hours of odour first being detected, divert away from the site any incoming raw material;
  - iv. Ascertain the cause or likely cause of the odour as soon as practicable and rectify the cause:
  - v. Unloaded raw material already on site must be removed and disposed of in accordance with condition 4E.
- b) The Consent Holder must provide a written report (via email) to the Consent Authority and offer to provide a copy to any complainant relevant to the specific incident (unless contact details are not available) within one week of the event first occurring. The report must specify:
  - i. the date and approximate time of the commencement of the odour event;
  - ii. the date and time the plant ceased processing raw material or partially ceased processing raw material;
  - iii. the cause or likely cause of the odour event and any factors that influenced its severity;
  - the nature and timing of any measures implemented by the Consent Holder to correct the cause of the odour event and mitigate its effects;



- v. the date(s) and time(s) the plant recommenced processing raw material;
- vi. the nature and timing of the steps to be taken in future to prevent similar events; and
- vii. Proposed recommencement date
- c) Within 24 hours of a request from the Consent Authority, the Consent Holder must provide documentation and/or data that demonstrates which equipment was operating in the period specified by the Consent Authority.
- d) Processing must not recommence until the consent holder has received written confirmation from the Consent Authority in response to the report required by Condition 4P(b) that works can recommence.
- The Consent Holder must at all times have written arrangements to enable the Consent Holder to dispose of raw material whenever raw or partially processed material cannot be received or processed at the site. Copies of these arrangements must be provided to the ORC within one week of a request.

## 4R Odour Survey

- a) If the Consent Holder or the Consent Authority receives at least 5 complaints verified by the Consent Authority regarding odour from the site within any 365-day period the Consent Holder must undertake an odour survey of all occupiers of dwellings and businesses within a 1.5 km radius of the rendering plant to determine the significance of odour from the site and its effect.
- b) The Consent Holder must inform the Consent Authority in writing of the date of the odour survey at least 48 hours prior to the commencement of the survey.
- c) The survey must be designed and undertaken by an independent SQEP. The survey questions must be based on all of the FIDOL factors.
- d) The Consent Holder must have instigated the survey within one month of receiving written notice from the Consent Authority and must provide the results of the survey to the Consent Authority within 2 months of receiving written notice from the Consent Authority.

Advice Note: These provisions enable the consent holder to meet the conditions of this consent. Reciprocal contingency agreements are acceptable providing raw material imported onto the consent holder's premises comply with all conditions of this consent.

### 4S Odour Scouting

a) The Consent Holder must undertake at least daily inspections around the plant to identify and rectify any situation that is unnecessarily adding to the release of odour from the rendering operation. A brief written record of each inspection including any actions taken, must be made and retained on-site by the Consent Holder for at least two years and appended to each annual report.



- b) The Consent Holder must undertake at least weekly odour scouting at the downwind site boundary. The outcome of the scouting must be briefly recorded and retained on-site by the Consent Holder for at least two years, including:
  - i. Wind direction during scouting;
  - ii. Location of scouting;
  - iii. Date and time of scouting;
  - iv. Duration of the scouting;
  - v. Whether any odour from the rendering operation was detected, and if odour was detected, a description of the odour in terms of each of the FIDOL factors.
- c) If odour from the rendering operation is detected at the downwind odour scouting point, further odour scouting must be undertaken at a greater distance downwind of the site. The process must be repeated until no odour from the rendering operation is detected.

### 4T Odour Detected Offsite

- a) If odour is detected offsite, the consent holder must consider whether it must implement the Condition 4P process (regarding Consent holder-instigated mitigation actions to avoid further offsite objectionable odour).
- b) The records of the above scouting must be provided by email to the Consent Authority within 48 hours of a request, and a summary provided in the monthly reports.
- c) To ensure accurate identification of odour, the person undertaking the scouting must not be someone who works inside the plant processing areas (e.g. off site or office staff) or have an ability to detect odour that is less acute than the average person.

# 4U Complaints Register

- a) The Consent Holder must maintain a complaints register recording all odour, dust, and smoke complaints received. The register must record:
  - i. the date, time and duration of the event detected by the complainant;
  - ii. the name, phone number and address of the complainant, unless the complainant refuses to provide these details;
  - iii. the location of the event complained about and the location of the complainant when the event was detected;
  - iv. any possible cause of the event complained of;
  - v. the weather conditions and wind direction at the time the event was detected by the complainant and for the hour prior to the event being detected;
  - vi. any corrective action taken by the consent holder in response to the complaint; and
  - vii. The consent holders activities at the time of the complaint.



- b) The register must include those complaints received directly from the public and those complaints notified by the Consent Authority.
- c) The Consent Holder must provide a summary of all complaints received over the past year in each annual report and within 48 hours of a request by the Consent Authority.
- If the Consent Authority has received an odour complaint or has undertaken an odour assessment(s) that has identified offsite odour from the site, and if requested by the consent Authority, the Consent Holder must provide to the Consent Authority the following as soon as practicable but within 48 hours of a request:
  - a) Data over any time period regarding the performance of the foul air extraction system, BAS and biofilter(s);
  - b) Operational data/information that demonstrates what rendering equipment was or was not running over any time period.
  - c) Type and quantity of raw material that has been processed over the requested time period.
  - d) Other information as requested by the Consent Authority that relates to the consideration of compliance with the conditions of this consent.

#### 4W Weather Station

- a) The Consent Holder must operate and maintain a weather station on the site to measure and record the air temperature, wind direction and wind velocity on a continuous basis (at no less than 10-minute intervals). The weather data must be retained for the duration of the resource consent. Weather data of any period must be provided to the Consent Authority within 48 hours of a request.
- b) The weather station must be sited and operated in general accordance with AS/NZS 3580.14-2014 (Methods for sampling and analysis of ambient air Meteorological monitoring for ambient air quality monitoring applications) to record the likely dispersion of odour from the site.
- c) Documentation describing the mast location and height and compliance with Condition 5D must be submitted to the Consent Authority two months prior to installation, or if existing 1 month after the completion of the review of the consent conditions.
- d) The weather station required by condition 5C must be calibrated annually, with the documentation of the calibration retained and appended to the annual report and also be provided within one week of a request from the Consent Authority.
- e) The weather station required by condition 5C must include an ultrasonic anemometer or equivalent measurement device capable of measuring wind speeds at a minimum resolution of 0.1 m/s and capable of measuring wind direction at a minimum resolution of one degree.

# 4X Annual Report



- a) The Consent Holder must provide to the Consent Authority a written report by 1 September each year. As a minimum this report must include the following:
  - i. assess compliance with each condition of this resource consent, particularly with respect to odour emissions;
  - ii. analyse and provide any reasons for non-compliance or difficulties in achieving compliance with the conditions of this resource consent;
  - iii. based on the objective of preventing odour and other non-compliance, review and identify any areas of poor performance and poor condition of odour control systems including the biofilter(s), foul air and BAS odour extraction systems, and implementation of the AQMP;
  - iv. a summary of any works that have been undertaken to improve the environmental performance of the odour control systems or that are proposed to be undertaken in the up-coming year to improve or that may affect the environmental performance of the odour control systems;
  - v. the results of any odour assessment program carried out in the previous 12-month period;
  - vi. a summary of the previous 12 months monitoring data relating to the air discharges and comparison with the previous annual report data;
  - vii. report on and summarise any odour complaints received; and
  - viii. any other information required in any condition to be appended to the annual report.
- 5. From 1 January 2013 the discharge of particulate matter smaller than 10 microns in diameter (PM<sub>10</sub>) from each boiler stack shall not exceed a concentration of 50 milligrams per cubic metre, when measured in accordance with Condition 12.

Note: If particulate emissions are reported as total suspended particulate then the  $PM_{10}$  concentration will be deemed to be the total suspended particulate concentration.

- 6. The discharge from the coal boiler stacks shall occur at a height of at least 14.2 metres above ground level.
- 7. The sulphur content of the fuel burnt in the boilers shall not exceed 0.4 % by weight.
- 8. No waste, including paper wastes, shall be disposed of in the boilers.

### Performance monitoring

- 9. (deleted)
- 10. The Consent holder shall commission a stack testing professional accredited to IANZ or an equivalent standard approved by the Consent Authority, to measure the discharges of sulphur dioxide from the boiler stack exhausts three months after the commissioning of the new boilers.
  - (a) each measurement shall constitute at least three individual tests. The tests shall be undertaken as far as practical when each boiler operates at a minimum of 75% capacity. Each boiler throughput shall be recorded during the testing procedure. The results of the measurements shall be reported as the average of the three individual tests.



- (b) the methods to be used shall be one or a combination of:
  - (i) US EPA Method 6 Determination Of Sulphur Dioxide Emissions From Stationary Sources; or
  - (ii) US EPA Method 6A Determination Of Sulphur Dioxide, Moisture, And Carbon Dioxide From Fossil Fuel Combustion Sources; or
  - (iii) US EPA Method 6B Determination Of Sulphur Dioxide And Carbon Dioxide Daily Average Emissions From Fossil Fuel Combustion Sources.
- 11. The consent holder shall submit the results of the sulphur dioxide testing required under Condition 10 of this permit to the Consent Authority in electronic and written format not later than one month after completion of the stack testing.
- 12. Source emission testing of discharges into air from the coal boilers stacks shall be undertaken to determine compliance with Condition 5. This emissions testing:
  - (a) shall be undertaken by 1 February 2013, after the site upgrade and installation of the new cookers; and
  - (b) shall be undertaken annually thereafter to determine compliance with Condition 5 above. The tests shall be undertaken as far as practical when the three coal boilers are operating at a minimum of 75% capacity; and
  - (c) utilising the following emission test methods:
    - (i) AS 4323.1-1995: Stationary source emissions Selection of sampling positions;
    - (ii) AS 4323.2-1995: Stationary source emissions Determination of total particulate matter - Isokinetic manual sampling - Gravimetric method or US EPA Method 201A - Determination of PM<sub>10</sub> Emissions (Constant Sampling Rate Procedure);
    - (iii) US EPA Method 3A determination of oxygen and carbon dioxide concentrations in emissions from stationary sources (instrumental analyser procedure);

or other methods subject to the prior approval of the Consent Authority. (See Advice Note (i) below).

- 13. Source emissions testing required by Condition 12 shall comply with the following minimum requirements:
  - (a) comprise not less than three separate samples for each type of emission test undertaken;
  - (b) be designed and undertaken by an appropriately qualified and independent person (i.e. holding accreditation from IANZ or an equivalent body for the particular testing method being used, unless no person or body in New Zealand holds accreditation for that particular test) (See Advice Note (ii) below);
  - (c) the installation (where required) of sampling points to comply with standard sampling requirements;
  - (d) safe access to all sampling points necessary for the purpose of carrying out the sampling of emissions whenever testing is required;
  - (e) notification of the Consent Authority of emissions testing at least ten working days prior to commencement; and
  - (f) the provision of the results of all tests, relevant operating parameters, raw data, all calculations, assumptions and an interpretation of the results within 25 working days of the samples being taken.

### 14. (deleted)



- 15. (deleted)
- 16. (deleted)
- 17. (deleted)
- 18. (deleted)
- 19. The consent holder shall present a written report to the Consent Authority by 30 November 2011. This report shall include as a minimum:
  - (a) an assessment of methods to achieve a reduction of PM<sub>10</sub> and sulphur dioxide emissions or reductions in cumulative emissions by means of alternative energy sources or removal of particulate and sulphur dioxide from on-site emissions or reducing emissions off-site;
  - (b) a description of the options investigated and identification and justification of methods preferred for an upgrade or replacement of the three boilers, including filtration technologies; and
  - (c) confirmation of the proposed method for upgrade or replacement of the three boilers.

#### General

- 20. Beyond the boundary of the site there shall be no odour, dust, particulate, smoke, ash or fume caused by discharges from the site which, in the opinion of an authorised enforcement officer of the Consent Authority, is noxious, dangerous, offensive or objectionable.
- 21. All records, monitoring and test results that are required under any condition of this consent shall be kept on site for a minimum period of two years from the date of each entry and shall be made available on request, during normal operating hours, an authorised enforcement officer or agent of the Consent Authority.
- 22. (deleted)

### **Review**

- 23. 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 receiving the written reports required under Conditions 2A, 4H, 4P(b), 4R(d), 4T(b), 4U(c), 4X, 11 and 19 of this consent, or within three months of receiving any other monitoring information relating to the exercise of the consent, or within the period of three months either side of the date of granting of this consent each year, or within two months of the completion of any enforcement action taken by the Consent Authority in relation to the exercise 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 is appropriate to deal with at a later stage; or
  - (b) ensuring the conditions of this consent are appropriate; or
  - (c) (deleted)
  - (d) Ensuring the conditions of this consent are consistent with any National Environmental Standards, relevant regional plans, and/or the Otago Regional Policy Statement;



- (e) Reviewing the frequency of monitoring or reporting required under this consent or amending the monitoring programme as set out in accordance with Conditions 10 13
- (f) Requiring the Consent Holder to adopt the best practicable option, in order to prevent or minimise any adverse effect on the environment arising as a result of the exercise of this consent; or
- (h) Adding or adjusting compliance limits for the parameters that are analysed in the samples taken under Conditions 10 13.

#### Advice Notes

- i. The approval of the Consent Authority for alternate method(s) for source emissions testing will be based on a demonstrated advantage of the method(s) over the specified method(s) for the accuracy and precision of results and the testing company being suitably accredited for the alternate test method(s).
- ii. Where no one in New Zealand holds appropriate accreditation for the particular testing methods required by this consent, emissions sampling and/or analysis may be undertaken by a suitably experienced person. The Consent Authority may require that any such testing be subject to independent peer review.
- iii. The Consent Authority may at any time undertake source emission testing and/or any other monitoring to ensure compliance with the conditions of this consent. The Consent Holder is advised that they will be required to pay for the costs of this monitoring accordance with Section 36(3) of the RMA.
- iv. Where information is required to be provided to the Consent Authority, this is be provided in writing to *compliance@orc.govt.nz* and the email heading is to reference 2009.381.V3 and the condition/s the information relates to.

Issued at Dunedin this 16th day of September 2010.

Reissued at Dunedin this 7<sup>th</sup> day of December 2016 to remove conditions 1-3 and amend condition 4.

Reissued at Dunedin this  $18^{th}$  day of July 2017 to reflect a transfer of holder from Keep it Clean Limited to Wallace Group Limited Partnership.

Reissued at Dunedin this 15<sup>th</sup> day of November 2017 to remove condition 4(b).

Reissued at Dunedin this 18th day of August 2023 to remove conditions 4, 9, 14 - 18 and 22, add conditions 2A - 2D and 4A - 4X, and to vary Condition 23 after review of conditions and to update the consent holder name and address for service

Allan Cubitt

Independent Decision Maker for Otago Regional Council