

IN THE MATTER

of the Resource Management  
Act 1991

AND

IN THE MATTER

of appeals under section 121  
of the Act

BETWEEN

MANUKAU CITY  
COUNCIL

ENV-2006-AKL-000831

AND

SCOTT AND SANDRA  
LOUDON

ENV-2006-AKL-000838

AND

WHITFORD RESIDENTS  
AND RATEPAYERS  
ASSOCIATION

ENV-2006-AKL-000840

Appellants

AND

AUCKLAND REGIONAL  
COUNCIL

Respondents

BEFORE THE ENVIRONMENT COURT

Environment Judge R G Whiting sitting alone under section 279 of  
the Act

IN CHAMBERS at Auckland



## CONSENT ORDER

### **Introduction**

- 1 The Court has read and considered the appeals, the respondent's replies, and the memorandum of parties dated 14 March 2008 concerning the resource consents for the Whitford Sanitary Landfill.
- 2 Fulton Hogan Limited, Garth Cumberland Sandra Loudon, Scott Loudon, Whitford Residents and Ratepayers Association and Graham Currie have given notice of an intention to become parties under s274 and have signed the memorandum setting out the relief sought.
- 3 Manukau City Council also signed the memorandum setting out the relief sought in its regulatory capacity with respect to the Whitford Landfill.
- 4 No other person has given notice of an intention to become a party under s274 to any of the three appeals to which this consent order relates.
- 5 The Court is making this order under s279(1)(b) of the Act, such order being by consent, rather than representing a decision or determination on the merits pursuant to s297. The Court understands for present purposes that:
  - (a) All parties to the proceedings have executed the memorandum requesting this order; and
  - (b) All parties are satisfied that all matters proposed for the Court's endorsement fall within the Court's jurisdiction and conform to relevant requirements and objectives of the Act, including in particular Part 2.

### **Order**

- 6 Therefore the Court orders, by consent, that:
  - (a) The conditions attaching to the resource consents that are the subject of this appeal are amended on the terms provided in **Appendix A**; and



(b) The appeals otherwise be dismissed.

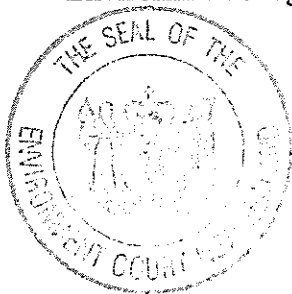
7 There is no order for costs.

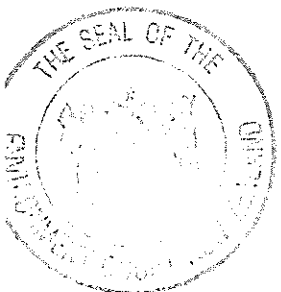
DATED at Auckland this 31<sup>st</sup> day of March, 2008



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R G Whiting  
Environment Judge



**APPENDIX A – FINAL RESOURCE CONSENT CONDITIONS**

1167560.05

**AUCKLAND REGIONAL COUNCIL**

**RESOURCE CONSENT**

**Granted pursuant to the Resource Management Act 1991**

**PERMIT NO. 30896**

**CONSENT HOLDER:** Manukau City Council

**FILE REFERENCE:** 14854

**CONDITIONS OF CONSENT:**

**Duration of Consent:** This consent shall expire on 30 April 2026 unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the Resource Management Act 1991.

**Purpose of Consent:** To authorise the discharge of contaminants into air from the Whitford Landfill, in accordance with Section 15(1)(c) of the Resource Management Act 1991.

**Site Location:** Trig Road, Whitford

**Legal Description of Land:** Part Allotment 35 DP 15031 Maraetai Parish CT NA778/186

Part Allotment 35 SO 9373 Maraetai Parish

Part Allotment 35 Maraetai Parish CT NA211072

Part Allotment 37 Maraetai Parish CT NA17D/276, 872/5, 932/255

Lot 1 DP 41567 CT NA1366/97

Lot 1 DP 212075 CT NA137D/340

Sections 1, 2, 3 & 4 SO 339588 (formerly Waikopua Road – now stopped)

**Territorial Authority:** Manukau City Council

**Approximate Map Reference:** NZTM 1777600 mE 5910350 mN

NZTM 1777450 mE 5910400 mN

**DEFINITIONS:**

**Council:** Means the Auckland Regional Council



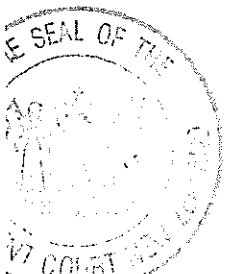
Manager:	Means the Group Manager, Consents and Consents Compliance, Auckland Regional Council
Landfill:	Means the Whitford Landfill
Site:	Means the legal description of land
Notional Odour Boundary	Means the area shaded in Figure 1 of this consent document
Hazardous Air Pollutants:	are those substances listed in schedule 7 of the proposed Auckland regional Plan: Air, land & water(June 2005)
Cleanfill:	As defined in Chapter 12 – Definition and Abbreviations of the Proposed Auckland Regional Plan: Air, Land and Water (June 2005) pp 12-5
Footprint U	As defined in Figure 7, Volume 3 of application number 30896 dated 16 September 2005
Contour Plan U	As defined in Figure 7 or 9 Volume 3 of application number 30896 dated 16 September 2005

**GENERAL CONDITIONS:**

- 1 That the servants or agents of the Council shall be permitted access to the relevant parts of the property at all reasonable times for the purpose of carrying out inspections, surveys, investigations, tests, measurements or taking samples.
- 2 That the Consent Holder shall operate the Landfill and associated processes in accordance with the documentation submitted to the Council as part of application number 30896, where not amended by the conditions of this resource consent. No alterations shall be made to the Landfill or processes that do not, or are not likely to, comply with the provisions of this consent, a regional rule, or regulations under the Resource Management Act 1991.

**LIMIT CONDITIONS:**

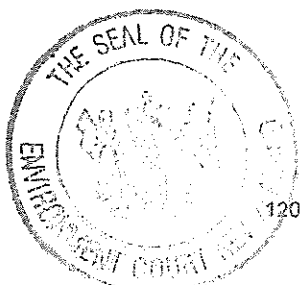
- 3 That the Consent Holder shall at all times operate, maintain, supervise, monitor and control all processes on site so that emissions authorised by this consent are maintained at the minimum practicable level.
- 4 That beyond the boundary of the site there shall be no dust, particulate, smoke, ash or fume caused by discharges from the site which, in the opinion of an enforcement officer, is noxious, dangerous, offensive or objectionable.
- 5 That beyond the Notional Odour Boundary there shall be no odour caused by discharges from the site, which in the opinion of an enforcement officer is offensive or objectionable.
- 6 That no discharges from any activity on site shall give rise to visible emissions, other than water vapour and steam, to an extent which, in the opinion of an enforcement officer, is noxious, dangerous, offensive or objectionable.



- 7 That beyond the boundary of the site there shall be no discharge into air of any hazardous air pollutant caused by discharges from the site, which is present at a concentration that is, or is likely to be, detrimental to human health or the environment.
- 8 That without prejudice to the generality of Condition 3:
  - (a) The concentration of methane in monitoring probes outside the landfill footprint shall not exceed 5% by volume.
  - (b) The residual nitrogen content of landfill gas in all extraction wells shall not exceed 20% by volume.

**PROCESS CONDITIONS:**

- 9 That the Consent Holder shall operate the gas extraction system in a manner that ensures that the rate of extraction of landfill gas is maximised, while minimising the risk of landfill fire due to over extraction.
- 10 That if the monitoring carried out in accordance with Condition 30 demonstrates that the concentration of methane at the surface of the landfill areas with intermediate or final cover is greater than 0.5% by volume, then remedial action shall be carried out and the gas concentration re-tested within 14 days. If this is not practicable, the Consent Holder shall provide, to the satisfaction of the Manager, a proposed programme of remedial action, including a timetable, within 14 days of the exceedance and shall obtain the written approval of the Manager for the proposed programme. The proposed programme shall be implemented to the satisfaction of the Manager within the approved time period.
- 11 That gas extraction wells shall be connected to the gas extraction system as soon as practicable and in any case not longer than 6 months after placing waste within the radius of influence of the wells. Passive flares shall be allowed to burn the gas venting from the wells prior to connection to the gas extraction system. The passive flares shall have the following minimum specifications:
  - (a) Flame arrester and backflow prevention devices, or similar equivalent system
  - (b) Continuous automatic ignition system
  - (c) Automatic isolation systems to ensure that there is no discharge of unburnt landfill gas from the flare in the event of flame loss.
- 12 That, except as provided in Condition 11, all extracted landfill gas shall be treated in accordance with a methodology proposed by the Consent Holder, assessed and approved by the Manager and recorded in the Air Quality Management Plan prepared in accordance with Condition 39. If combusted in a flare or generator(s), it shall be in accordance with the following:
  - (a) The landfill gas flare shall have the following minimum specifications:
    - (i) Flame arrester and backflow prevention devices, or similar equivalent system



- (ii) Continuous automatic ignition system
- (iii) Automatic isolation systems to ensure that there is no discharge of unburnt landfill gas from the flare in the event of flame loss
- (iv) Adequate sampling ports to enable emissions testing to be undertaken
- (v) Provision for safe access to sampling ports while any emission tests are being undertaken
- (vi) Minimum temperature of 750°C and retention time of 0.5 seconds
- (vii) A permanent temperature indicator at half a stack diameter from the top of the flare with a visual readout at ground level.

(b) The landfill gas generator(s) shall comply with specifications (a)(i) to (a)(v) above.

13 That when the number of landfill gas generators on site reaches six, emissions into air from all generators shall be vented to atmosphere via one combined stack. When the number of landfill gas generators reaches ten, emissions into air from all generators not vented via the first combined stack shall be vented to atmosphere via a second combined stack. Each combined stack shall:

- (i) Be at least 10 metres in height with a diameter of not greater than 2 metres
- (ii) Have adequate sampling ports to enable representative emissions testing to be undertaken
- (iii) Have provision for safe access to the sampling ports to enable representative emissions tests to be undertaken
- (iv) Be constructed prior to the commissioning of the sixth and tenth generators respectively.

Prior to the installation of each of the combined stacks, each individual generator shall vent to atmosphere via a stack of not less than 6 metres above the surrounding ground level. All stacks shall be constructed to the satisfaction of the Manager.

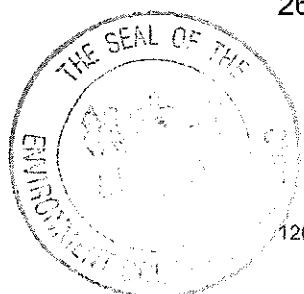
14 That a backup flare shall be available for combustion of extracted landfill gas should the primary landfill gas flare be unavailable for maintenance or repair. The backup flare shall have the following minimum specifications:

- (a) Flame arrester and backflow prevention devices, or similar equivalent system
- (b) Continuous automatic ignition system
- (c) Automatic isolation systems to ensure that there is no discharge of unburnt landfill gas from the flare in the event of flame loss.





- 15 That the gas collection and treatment system shall be restored to normal operation as soon as practicable in the event of malfunction or fault.
- 16 That the uncovered areas of the working face shall be kept to a practicable minimum and shall not exceed 900 square metres except in exceptional circumstances when a maximum of 1200 square metres shall be permitted. Furthermore, all necessary steps shall be taken to minimise odour from exposed refuse.
- 17 That exposed refuse shall be covered with soil regularly and promptly to a minimum compacted depth of 150 millimetres and no refuse shall remain exposed overnight. Other cover material may be used if approved by the Manager.
- 18 That the Consent Holder shall maintain a location for an alternative working face that is sufficiently removed from the operational working face, so that on a day by day basis the downwind distance to the nearest sensitive area is adequate to ensure compliance with Conditions 4 and 5.
- 19 That malodorous special wastes shall be accepted only by prior arrangement and shall be covered immediately upon acceptance. Furthermore, malodorous special wastes shall only be accepted when there is sufficient fresh refuse or cleanfill available and no later than 3 pm, Monday to Friday.
- 20 That the Consent Holder shall suppress dust emissions by the application of water whenever weather conditions are such that significant visible dust emissions may occur.
- 21 That all landfill roads and vehicle manoeuvring and stand areas shall be maintained in such condition that the road base and surfacing can withstand use by vehicles without causing significant breakdown of the surface or significant transport of surface material on tyres. Where necessary, the Consent Holder shall import gravel or other similar materials to provide workable wet weather surface conditions.
- 22 That wheel washing facilities shall be provided at the exit of the premises and shall be used by all vehicles where there is significant accumulation of surface material on tyres.
- 23 That all landfill vehicle exits from the site shall be cleaned as necessary such that no significant dirt or other material is transferred to Trig Road or Whitford-Maraetai Road.
- 24 That, if necessary, vehicle speeds on site shall be limited by the Consent Holder to ensure that vehicle movements do not cause significant visible dust emissions on the landfill site or access roads.
- 25 That water supply of sufficient capacity shall be maintained within the terms of any other consent, such that the application of water as a dust control measure is not limited.
- 26 That the Consent Holder shall ensure that no material shall be disposed of by open burning on site.

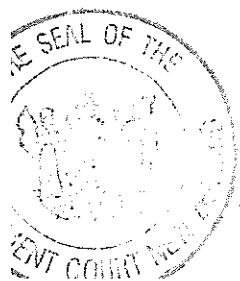


- 27 That, notwithstanding the provisions of Condition 39, the Consent Holder shall review the landfill performance with the Manager and the Whitford Landfill Community Liaison Committee prior to the placement of putrescible waste above RL 90 within area shown on Figure 2 attached to this consent. This review shall be completed as soon as practicable and no later than twelve months prior to the intended commencement of placement of refuse in this area. The review shall consider the combined:
- (a) Adequacy of the consent conditions
  - (b) Management procedures
  - (c) Operational performance
  - (d) Separation distances to residential dwellings, with consideration given to the timing of establishment of the dwellings in relation to the time of granting this consent
  - (e) Complaints History.

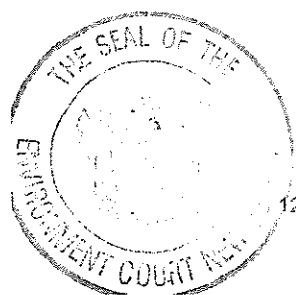
The Consent Holder may be required to submit an updated assessment of odour effects, and may be required to provide further information in order for the Group Manager to determine whether or not the proposed placement of putrescible waste above RL 90 within area shown on Figure 2, can commence under the terms of this consent.

#### MONITORING CONDITIONS:

- 28 That a walkover site inspection shall be undertaken no less frequently than weekly. Any evidence of actual or potential landfill gas leaks, such as odour, cracks in the landfill surface, gas bubbles, leaks in the gas extraction system or vegetation damage shall be investigated. Where necessary remedial action shall be undertaken as soon as practicable to minimise fugitive gas discharges. The Consent Holder shall record the results of this monitoring and any remedial action taken.
- 29 That methane concentrations shall be measured and recorded on a monthly basis for each of the monitoring probes outside of the landfill footprint to demonstrate compliance with Condition 8.
- 30 That monitoring of surface methane concentrations shall be carried out on a quarterly basis and as required in accordance with Condition 42.
- 31 That landfill gas shall be monitored on a monthly basis at each extraction wellhead or, if more appropriate, at manifold points. The following parameters shall be measured and recorded:
- (a) Gas flow rate
  - (b) Gas composition (% methane, % oxygen, % carbon dioxide, ppm carbon monoxide)
  - (c) Gas temperature
  - (d) Ambient temperature



- (e) Gas pressure
  - (f) Barometric pressure.
- 32 That the landfill gas (blended) shall be monitored at each flare station on a six monthly basis. The following parameters shall be measured and recorded.
- (a) Gas flowrate
  - (b) Gas composition (% methane, % oxygen, % carbon dioxide, ppm carbon monoxide)
  - (c) Gas temperature
  - (d) Ambient temperature
  - (e) Gas pressure
  - (f) Hydrogen sulphide
  - (g) Total non-methane organic compounds.
- 33 That on site weather conditions shall be continuously measured and recorded. The parameters shall include:
- (a) Wind velocity and direction
  - (b) Barometric pressure
  - (c) Temperature.
- 34 That the Consent Holder shall implement monitoring measures that enable identification of all vehicles entering the site such that if malodorous loads are received at the working face, these wastes can be tracked to their source and subsequent loads from the source shall only be accepted in accordance with Condition 19.
- 35 That in the event that regular or frequent complaints regarding dust from the site are received, and validated by an enforcement officer as originating from the landfill, the Consent Holder shall undertake monitoring of total suspended particulate (TSP) to the satisfaction of the Manager. Analysis of the TSP samples may be required at the discretion of the manager.
- 36 That the Consent Holder shall undertake source emissions testing of either the combined generator exhaust stack(s) required under Condition 13 or at least three representative single generator exhaust stacks within the combined stacks. The testing shall be conducted as follows:
- (a) Be conducted for nitrogen oxides (reported as nitrous oxide and nitrogen dioxide), carbon dioxide and PM<sub>10</sub>
  - (b) Be conducted within six months of the commissioning of each combined stack
  - (c) Be conducted in accordance with approved methods and to the satisfaction of the Manager



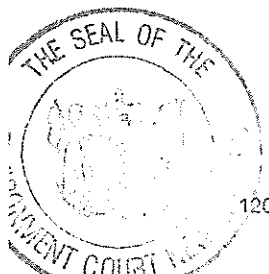
- (d) Be conducted during normal operating conditions that give rise to maximum emissions
- (e) Comprise not less than three separate samples for each type of emissions test undertaken
- (f) Be designed and undertaken by appropriately qualified and independent person.

The results of the testing, including all raw data, the relevant operating parameters, all calculations, assumptions and an interpretation of the results shall be submitted to the Manager within 20 working days of the samples being taken. All testing shall be performed and reported to the satisfaction of the Manager.

- 37 If the results of the emission testing required in Condition 36 show that the emission rate of NO<sub>2</sub> is more than 10% greater than the estimated emission rate set out in documentation submitted to the council as part of application number 30896, the consent holder shall review with the manager the Air Quality Management Plan with regard to landfill gas treatment prior to the installation of any further landfill gas generators. The review should consider the offsite effects of NO<sub>2</sub>; the actions, if any, proposed to mitigate these effects and may include dispersion modelling. The review shall be submitted the manager for his approval 3 months after the results of emission tests in Condition 36 have been submitted to the manager.
- 38 The consent holder shall undertake an initial survey of hazardous air pollutants offsite in 2008. The location of the survey and the methods used shall be approved by the manager. The survey shall be repeated every 6 years unless the consent holder gets the approval from the manager to waive this requirement. The consent holder shall submit a report to the manager within 3 months of the samples being collected, with the results of monitoring and an assessment of compliance with Condition 7.

#### **AIR QUALITY MANAGEMENT PLAN:**

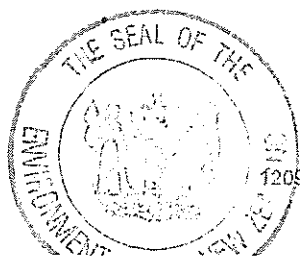
- 39 That the consent holder shall prepare an Air Quality Management Plan, which accurately records all management, operational and monitoring procedures, methodologies and contingency plans necessary to comply with the conditions of this consent. Particular regard shall be given to the following matters:
  - (a) The management of landfill gas, including contingency measures associated with landfill gas extraction and treatment
  - (b) The management of odour discharges including those associated with leachate
  - (c) Waste acceptance procedures and procedures for monitoring and reviewing the acceptance of received waste
  - (d) The management of reverse sensitivity issues associated with the landfill and how the consent holder plans to address any identified issues.



The Consent Holder shall submit a revised Air Quality Management Plan within six months of this consent being granted. All subsequent changes shall be submitted to the Manager for review prior to becoming operational. The Manager will advise the Consent Holder in writing if any aspects of the Air Quality Management Plan are considered to be inconsistent with the provisions of this consent.

## LOGGING AND REPORTING CONDITIONS

- 40 That all records, logs, monitoring and test results that are required by the conditions of this consent shall be made available on request, during operating hours, to an enforcement officer and shall be kept for a minimum period of 12 months from the date of each entry.
- 41 That the Consent Holder shall notify an enforcement officer as soon as practicable in the event of any significant discharge of contaminants into air, which may result in adverse effects on the environment.
- 42 That, if an air quality complaint is received and validated by an enforcement officer, the Consent Holder shall submit a report to the Manager within 3 landfill working days of the complaint detailing the action(s) undertaken to mitigate the problem and the results of these actions. If it is not practicable to mitigate the problem within this time period, the report shall detail the action(s) to be undertaken and the timetable for the action. In the event that an odour complaint has been validated by an enforcement officer and landfill staff and the cause cannot be identified, these actions shall include surface methane concentration monitoring within seven landfill working days of receipt of the complaint. A report shall be submitted to the Manager at the completion of all mitigation actions, summarising the actions undertaken and the results of these actions.
- 43 That the Consent Holder shall submit a summary of landfill gas monitoring results to the Manager at the end of each calendar year. The summary shall include:
  - (a) The average volume of landfill gas extracted (m<sup>3</sup>/hr)
  - (b) A summary of monitoring, results and remedial action required by 2 to 32(g).
  - (c) A comparison of the actual landfill gas production rate with that predicted. Revised predictions shall be included where significant discrepancies are identified, as well as an explanation for the discrepancies
  - (d) An estimate of average waste composition.
- 44 That the Consent Holder shall log any air quality complaints received. The complaint details shall include:
  - (a) The date, time, position and nature of the complaint
  - (b) The name, phone number and address of the complainant, unless the complainant elects not to supply these details



- (c) Weather conditions, including approximate wind speed and direction, at time of complaint
- (d) Any remedial actions undertaken.

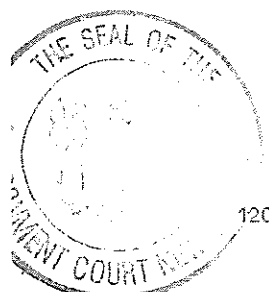
Details of any complaints received shall be provided to the Manager within 24 hours of receipt of the complaint (s).

**REVIEW CONDITIONS:**

- 45 That the conditions of this consent may be reviewed by the Manager pursuant to Section 128 of the Resource Management Act 1991, by the giving of notice pursuant to Section 129 of the Act, in September 2006 and every year thereafter in order to:
- (a) Deal with any significant adverse effect on the environment arising from the exercise of the consent which was not foreseen at the time the application was considered and which is appropriate to deal with at the time of the review
  - (b) Consider the adequacy of conditions which prevent nuisance such as odour beyond the boundary of the site and regarding the disposal of odorous waste, particularly if regular or frequent complaints have been received and validated by an enforcement officer
  - (c) Consider developments in control technology and management practices that would enable practical reductions in the discharge of contaminants into air
  - (d) Alter the monitoring requirements, including requiring further monitoring, or increasing or reducing the frequency of monitoring
  - (e) Take into account any Act of Parliament, Regulation, National Policy Statement, Regional Policy Statement or relevant Regional Plan which relates to limiting, recording or mitigating emissions authorised by this consent.

**ADVICE NOTES:**

- 1 The Consent Holder is advised that they will be required to pay to the Council any administrative charge fixed in accordance with Section 36(1) of the Resource Management Act 1991, or any additional charge required pursuant to Section 36(3) of the Resource Management Act 1991 in respect of this consent.
- 2 The Resource Consent Holder is advised that the date of the commencement of this consent will be as determined by Section 116 of the Resource Management Act 1991, unless a later date is stated as a condition of consent. The provisions of Section 116 of the Resource Management Act 1991 are summarised in the covering letter issued with this consent.
- 3 The Consent Holder is advised that, pursuant to Section 125 of the Resource Management Act 1991, this resource consent lapses on the expiry of two years after the date of commencement of this consent unless the consent is given effect to or other criteria contained within Section 125 are met.

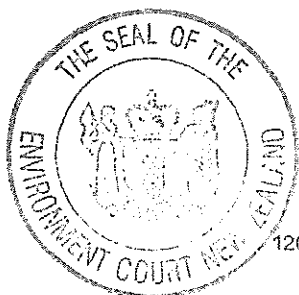


- 4 The Consent Holder is advised that, pursuant to Section 126 of the Resource Management Act 1991, if this resource consent has been exercised, but is not subsequently exercised for a continuous period of two years, the consent may be cancelled by the Council unless other criteria contained within Section 126 are met.
- 5 The Consent Holder is advised that, the Council 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 as per Advice Note 1.

**This consent has been granted by the Auckland Regional Council pursuant to the Resource Management Act 1991.**

Pieter Tuinder  
**Group Manager Consents and Consents Compliance**  
**Auckland Regional Council**

**Date:**



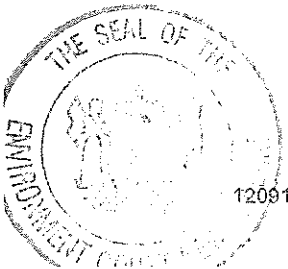




FIGURE 2

PERMIT NO. 30896

