



**environment  
SOUTHLAND**

**Application No: N015-002  
Consent No:203379**

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(Private Bag 90116)  
Invercargill

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## **Coastal Permit**

**Pursuant to Section 104B** of the Resource Management Act 1991, a resource consent is hereby granted by the Southland Regional Council (the "Council") to **New Zealand Aluminium Smelter Ltd** (the "consent holder") of **Private Bag 90110, Invercargill** from **6 June 2006**.

**Please read this Consent carefully, and ensure that any staff or contractors carrying out activities under this Consent on your behalf are aware of all the conditions of the Consent.**

### **Details of Permit**

|  |   |
|--|---|
| Purpose for which permit is granted:   | To discharge treated effluent to the coastal marine area    |
| Location                               | - site locality Foveaux Strait at Tiwai Point               |
|  | - map reference E47:578-909                                 |
|  | - receiving environment Foveaux Strait, coastal marine area |
| Legal description of land at the site: | Seabed  |
| Expiry date:                           | 6 June 2031   |

### **Schedule of Conditions**

1. This consent is granted for a period of 25 years.

*(Note: Pursuant to Sections 123 and 124 of the Resource Management Act 1991, a new consent may be required at the expiration of this consent. The application will be considered in accordance with the plans in effect at that time, and the adverse effects of the proposed activity).*

2. The following definitions apply to the conditions of this consent:
  - (a) coastal water monitoring site - a site which is:

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- (i) at a point beyond the boundary of a 100 metre radius arc about the discharge points located at or about map reference E47:578:909,
    - (ii) used to monitor the effects of the discharge on the coastal water; and
    - (iii) chosen in accordance with condition (8)(b).
  - (b) control site - a site best representing the background water quality, the location of which is chosen in accordance with condition (8)(c),
  - (c) representative sample – of a discharge means a grab sample taken between 30 minutes after discharging has started and 30 minute before discharging has ended in one of the rising tide periods that a batch of treated effluent is discharged.
3. The volume of treated effluent discharged shall not exceed 140 m<sup>3</sup>/day.
  4. Treated effluent shall only be discharged during the three and a half hour period of rising tide commencing two hours after low tide at Bluff (as specified in the current New Zealand Almanac, or its equivalent). A batch of treated effluent can be discharged during more than one period of rising tide but must be completed within four rising tide periods from when discharging commenced and no treated effluent is added to the batch once discharging has commenced.
  5. The discharge rate shall be controlled to maintain or exceed the specified dilution ratio for the discharge and the coastal water at and beyond the boundary of a 100 metre radius arc about the discharge points located at or about map reference E47:578:909. The dilution ratio shall be as specified, from time to time, by the Council's Director of Environmental Management in consultation with the consent holder. Although dilution occurs through the entire water column, in no case shall the dilution ratio be less than an arithmetic average of 1:5000 in the top two metres of the coastal water over the period of the discharge.
  6. The limits applying to each representative sample of a discharge are:
    - (a) the total suspended solids concentration shall not exceed 100 gm<sup>-3</sup>, and
    - (b) the free cyanide (equivalent to undissociated hydrogen cyanide and the dissociated cyanide ion) concentration shall not exceed 20 gm<sup>-3</sup>.
  7. The limits applying at the coastal water monitoring site are given in Schedule "A".
  8. The discharge, the coastal water monitoring site and the control site(s) shall be as follows:
    - (a) Discharge: the valve on the discharge pipe prior to the pipe going under ground;
    - (b) Coastal water monitoring site: off shore and an estimated 100 metres in an easterly direction from the end of the discharge pipe during discharge; and
    - (c) Control site: off shore and an estimated 200 metres in a westerly direction from the end of the discharge pipe during discharge.

The exact locations shall be established, from time to time, by agreement between the Council's Director of Environmental Management and the consent holder.
  9. The consent holder shall measure and record the rate of each discharge.
  10. One representative sample shall be obtained from each discharge at the location established in condition 8(a) and analysed for:

- (a) fluoride concentration,
  - (b) total suspended solids concentration, and
  - (c) free cyanide concentration.
11. The coastal water at and beyond the boundary of a 100 metre radius arc about the discharge points located at or about E47:578:909 shall be visually assessed by the consent holder, during each discharge, for the presence or absence of any conspicuous oil or grease films.
12. The monitoring at the coastal water monitoring site and at the control site(s) shall be carried out once each calendar year, when a discharge is occurring, by:
- (a) collecting one representative sample at each location and analysing each representative sample for:
    - fluoride concentration,
    - total cyanide concentration,
    - conductivity,
    - pH, and
    - dissolved oxygen concentration and % saturation.
  - (b) measuring the temperature of the coastal water at each location.
- A representative sample at the coastal water monitoring site and at the control site(s), means a sub-surface grab sample and can include sub-surface field measurements.
13. The consent holder shall report to the Council's Director of Environmental Management, at least once each calendar year, the following data to allow the dilution ratio to be reviewed or specified:
- (a) whether the condition or design of the diffuser has changed,
  - (b) the average and range of discharge rates since the period covered by the previous report.
14. The sample preservation and analyses for the monitoring conducted under this consent shall be those specified in the most recent edition of APHA "Standard Methods for the Examination of Water and Wastewater" or by methods approved by the Council's Director of Environmental Management.
15. The results of monitoring carried out in accordance with the conditions of the consent shall be supplied to the Council no later than 20 working days from the end of each calendar quarter.
16. Except where the Council acts as the consent holder's agent, the Council may audit the consent holder's monitoring conducted in accordance with the conditions of this consent. The details of the auditing shall be approved by the Council's Director of Environmental Management in consultation with the consent holder. The annual auditing may include:
- (a) up to two of the representative samples of the discharge, and
  - (b) the representative sample and measurements either at the coastal water monitoring site or at one of the control sites.

17. The Council may, in accordance with conditions of this consent, and in accordance with Sections 128 and 129 of the Act, serve notice at three yearly intervals from the commencement of this consent of its intention to review the conditions of this consent for the purpose of dealing with any adverse effects on the environment which were not anticipated when this consent was granted.
18. The consent holder shall pay the Council the following user charges which are fixed under Section 36 of the Act:
  - (a) an administration charge, and
  - (b) a compliance monitoring and supervision charge.

The user charges are payable, on invoice, on the first day of July each year.

for the **Southland Regional Council**

W J Tuckey  
**Director of Environmental Management**

## **Schedule A - People and Aquatic Life Water standards**

Waters being managed for the purposes of People and Aquatic Life (P & AL) must meet the following standards, after reasonable mixing of any contaminant or water within the receiving water and disregarding the effect of any natural perturbations that may affect the water body:

- 1 the natural temperature of the water shall not be changed by more than 3° Celsius and the natural temperature of the water shall not exceed 25° Celsius;
- 2 any pH change and/or any discharge of a contaminant into water or water into water or onto the seabed shall not result in a loss of biological diversity or a change in community composition;
- 3 the concentration of dissolved oxygen shall exceed 80% of saturation concentration;
- 4 fish and other aquatic organisms shall not be rendered unsuitable for human consumption by the presence of contaminants;
- 5 there shall be no undesirable biological growths as a result of any discharge of a contaminant into the water;
- 6 aquatic life is not adversely affected by the taking of any physical, chemical or biological constituent from that water;
- 7 visual clarity shall not be diminished by more than twenty per cent;
- 8 the water shall not be rendered unsuitable for bathing by the presence of contaminants;
- 9 the water shall not be altered in those characteristics which have a direct bearing upon cultural or spiritual values.