



**environment  
SOUTHLAND**

**Application No: N015-012  
Consent No:203373**

Cnr North Road and Price Street  
(Private Bag 90116)  
Invercargill

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## **Discharge Permit & 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:

- (i) To discharge contaminants onto land (including in circumstances where contaminants may enter water) including surface water (unspecified amount) and cooling, washing and flushing waters (up to 4500 m<sup>3</sup>/day (total for north (900 m<sup>3</sup>/day), west (900 m<sup>3</sup>/day) and south (2700 m<sup>3</sup>/day) drains)) at about map references given in the application; and
- (ii) To discharge water including contaminants into the coastal marine area of Bluff Harbour via the NZAS drains, including surface water (unspecified amount) and cooling, washing and flushing waters (up to 4500 m<sup>3</sup>/day (total for north (900 m<sup>3</sup>/day), west (900 m<sup>3</sup>/day) and south (2700 m<sup>3</sup>/day) drains)) at about map reference given in the application.

Location - site locality  
- map reference  
  
- receiving environment

Tiwai Point  
North E47:560-928  
West E47:554-922  
South E47:553-918  
land and the coastal marine area

Legal description of land at the site:

CT 10C/125 Pt Lot 1 DP 7529 Pt Sec 7 Blk XIII  
Campbelltown HD CT 2A/78 Pt Sec 7 Blk XIII  
Campbelltown HD Pt Run 581 Pt Sec 4 Blk XIII  
Campbelltown HD

Environment Southland is the brand name of  
the Southland Regional Council

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- site which is:
    - (i) at a point beyond the boundary of a 50 metre radius arc about the discharge points of the north, west and south drains located at or about map references given in the application and described in Schedule B;
    - (ii) used to monitor the effects of the discharge on the coastal water, and
  - (b) Control sites  
Sites best representing the background coastal water quality, the locations of which are given in Schedule B.
  - (c) Calendar quarter  
The three month periods of January to March, April to June, July to September and October to December.
  - (d) Period of high tide Bluff  
The period between 2 hours before and 2 hours after the time of high tide at Bluff as specified in the current New Zealand Nautical Almanac or its equivalent.
  - (e) Quarterly average  
The arithmetic average of the weekly results for each calendar quarter of the year.
  - (f) Representative sample  
Of a discharge means a sample that is either:
    - (i) a sub-surface grab sample, and can include sub-surface field measurements,
    - (ii) a grab sample of the discharge where it exits from a flow obstruction, e.g. a weir, or
    - (iii) a sub-surface composite sample taken over a 24 hour period.

At the coastal water monitoring site and at the control sites, it means sub-surface grab samples and can include sub-surface field measurements.
3. The total suspended solids concentration in the drain discharge shall not exceed a quarterly average of 30 g/m<sup>3</sup>. The average concentration shall be calculated from the weekly samples collected in each calendar month in accordance with condition 7(a).

4. The limits applying at the coastal water monitoring site are:
  - (a) the quarterly average fluoride concentration shall not exceed 2 g/m<sup>3</sup> based on the results of representative samples collected in accordance with condition 5(a);
  - (b) the fluoride concentration in any representative sample collected in accordance with condition 6(a) shall not exceed 5 g/m<sup>3</sup>; and
  - (c) the limits in the attached Schedule A for waters classified People & Aquatic Life.
5. The discharge, the coastal water monitoring site and the control sites shall be monitored by the consent holder, or its agent, in accordance with the condition of this consent. There shall be established:
  - (a) one location for monitoring the drain discharge;
  - (b) one location at the coastal water monitoring site; and
  - (c) usually one, but up to two, location/s as a control/s for the drain.
6. The monitoring at the coastal water monitoring site and at the control sites shall be, in a period of high tide Bluff, by:
  - (a) collecting a representative sample each week and analysing for:
    - (i) fluoride concentration
    - (ii) conductivity
    - (iii) pH
  - (b) visually assessing weekly for the presence or absence of any conspicuous oil or grease films;
  - (c) analysing for the dissolved oxygen concentration and % saturation once each calendar year; and
  - (d) measuring temperature once each calendar year.
7. The monitoring of the drain discharge at the location given in Schedule B shall be:
  - (a) during the same periods of high tide Bluff that the monitoring is conducted in accordance with condition 5(a) by collecting a representative sample each week and analysing for:
    - (i) total suspended solids concentration
    - (ii) pH
    - (iii) fluoride concentration
    - (iv) conductivity
  - (b) measuring the discharge temperature once each calendar year during the same period of high tide Bluff that the monitoring is conducted in accordance with condition 6(d).

8. The sample preservation and analyses for the monitoring conducted under this consent shall be by methods approved by the Council's Director of Environmental Management. The consent holder shall notify the Council 20 working days prior to changing any method for the purpose of obtaining such approval.
9. The results of monitoring carried out in accordance with conditions 6 and 7 of this consent shall be supplied to the Council no later than 20 working days from the end of each calendar quarter.
10. 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 up to:
  - (a) two of both the representative samples and measurements of the drain discharge;
  - (b) two of both the representative samples and measurements at the coastal water monitoring site; and
  - (c) two of both the representative samples and measurements of each control site.

The costs of the auditing are to be met by the consent holder.

11. The consent holder shall carry out a study of the effects of the drain discharges on aquatic biota in 2011 and report the results of that study by 31 December 2011. The study shall be carried out in a similar manner and using a similar methodology to that of the study carried out by Depree in 2001. The parameters to be studied and the precise extent of the survey shall be set in consultation with the Council's Director of Environmental Management.
12. The consent holder shall notify the Council's Director of Environmental Management as soon as practicable of any proposed changes to the types of process water treatment chemicals being used by the consent holder and discharged through the drain.
13. 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. The purpose of the reviews shall be to deal with any adverse effects on the environment which were not anticipated when this consent was granted.
14. 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 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.

**Schedule B - Locations for monitoring each drain discharge:**

- North drain from the estimated middle of the drain channel, approximately 100 metres downstream (north) of the oil trap, where the drain passes the gravel cliffs at the beach head;
- West drain from the estimated middle of the drain channel, approximately 70 metres downstream (west) of the oil trap, immediately upstream of the concrete weir; and
- South drain as the discharge falls from the culvert and before it reaches the water in the channel on the foreshore.

Locations for the coastal water monitoring sites:

- North drain, in coastal water at least 0.3 metres deep, at an estimated distance of 50 metres, in the same direction as the tidal flow, from the point where the drain discharge crossing the beach reaches the coastal water;
- West drain, in coastal water at least 0.3 metres deep, at an estimated distance of 50 metres, in the same direction as the tidal flow, from the point where the drain discharge crossing the beach reaches the coastal water; and
- South drain, in coastal water at least 0.3 metres deep, at an estimated distance of 50 metres, in the same direction as the tidal flow, from the point where the drain discharge crossing the beach reaches the coastal water.

Location for the control sites:

- North drain, in coastal water at least 0.3 metres deep, at an estimated distance of 100 metres, in the opposite direction to the tidal flow, from the point where the drain discharge crossing the beach reaches the coastal water;
- West drain, in coastal water at least 0.3 metres deep, at an estimated distance of 100 metres, in the opposite direction to the tidal flow, from the point where the drain discharge crossing the beach reaches the coastal water; and
- South drain, in coastal water at least 0.3 metres deep, at an estimated distance of 100 metres, in the opposite direction to the tidal flow, from the point where the drain discharge crossing the beach reaches the coastal water.