

## Attachment 2

### Recommended Conditions

1. The location, design, and operation of the hot-dip galvanising plant shall be carried out in accordance with the application and associated documents lodged with the Wellington Regional Council on 1 February 2000, and Application for Air Discharge Permit: Additional Information received by the Wellington Regional Council on 3 July 2000.

*Note: Any change from the location, design concepts and parameters, implementation and/or operation may require a new resource consent or a change in consent conditions pursuant to section 127 of the Resource Management Act 1991.*

2. There shall be no discharges to air (including but not limited to odour, particulate matter, and visible emissions (other than water vapour and steam)) resulting from the exercise of this permit, which in the opinion of an enforcement officer of the Wellington Regional Council, are noxious, dangerous, offensive or objectionable at or beyond the legal boundary of the site from which the permit holder operates.

*Note: For the purposes of condition 2, the legal description of the site is Lot 1 DP 25464, Pt CT F4/655.*

3. To minimise fugitive dust emissions from the plant building, the permit holder shall, where practicable, keep the roller door on the eastern side of the plant closed to a maximum 600mm gap at the bottom when carrying out activities that generate fume. If this proves insufficient to prevent dust emissions from the doorway, then the door shall be fully closed when carrying out activities that generate fume.
4. All product to be galvanised shall be as free as practicable from organic material, including oil, paint, plastics and other materials, which may give rise to excessive smoke or fume emissions.
5. All product to be galvanised shall be as dry as practicable, to reduce the potential for steam explosions within the zinc bath, which may give rise to excessive fume emissions.
6. Dross removal, disposal and/or storage shall be carried out in such a manner to ensure that the discharge of contaminants to air is minimised.
7. The permit holder shall ensure that the yard and plant building are cleaned as often as necessary to minimise the build-up of particulate matter. Areas to be cleaned include floors, entranceways to the site and plant building, and all hard pan areas. Any spillage of particulate matter shall be cleaned as soon as possible.

*Note: Conditions 5, 6 and 7 regulate the operation of the galvanising process to ensure the discharge of contaminants are minimised, and in any case do not cause nuisance beyond the boundary of the site. Following the installation and implementation of effective emission control equipment, these conditions*

*shall be interpreted in accordance with the potential to cause adverse environmental effects with effective emission control equipment operating.*

8. The permit holder shall install an additional roof fan at the southern end of the factory building within three months of the commencement of this permit.
9. The permit holder shall investigate and identify a preferred emission control option, and associated monitoring methods. The permit holder shall evaluate the options, and shall submit an implementation plan for the preferred emission control option, and associated monitoring methods to the Manager, Consents Management, Wellington Regional Council for certification, within 2 ½ years of the commencement of this permit.
10. The preferred emission control option shall be installed and implemented by the permit holder within four years of the commencement of this permit.
11. The permit holder shall prepare, and then undertake within six months of the installation of the preferred emission control option, a testing programme to monitor the discharge and performance of the preferred emission control option.
12. The testing programme, required by Condition 11, shall include testing for the following contaminants:

**Contaminant**

Particulate matter including zinc, lead and their compounds  
Hydrogen chloride gas and mist  
Ammonium chloride  
Cadmium

Testing shall be performed during normal plant operations and shall encompass all parts of the typical day's galvanising process. All testing shall contain at least three separate samples and both the emission rate and concentrations of each contaminant shall be reported for each sample. All results shall be corrected to 0°C, and 1 atmosphere, on a dry gas basis.

*Note: Testing for cadmium is only required in the initial testing programme.*

13. The methodology of the testing programme required under condition 11, including sampling location, sampling and analytical methods, shall be to the satisfaction of the Manager, Consents Management, Wellington Regional Council.  
  
The testing programme shall be submitted for certification to the Manager, Consents Management, Wellington Regional Council, within six weeks of the installation of the preferred emission control option.
14. The testing programme, required under condition 11, shall also be carried out every six months after the initial testing programme.
15. The results of the testing programme, including all relevant plant operating parameters and conditions, and all calculations and assumptions, shall be submitted to the Manager, Consents Management, Wellington Regional Council, within two months of the completion of the testing.

## Complaints and Incidents Reports

16. The permit holder shall keep a permanent record of any complaints received alleging adverse effects from the permit holder's operations. The complaints record shall contain the following where practicable:
- (a) the name and address of the complainant, if supplied;
  - (b) identification of the nature of the complaint;
  - (c) date and time of the complaint and alleged event;
  - (d) weather conditions at the time of the alleged event;
  - (e) results of the permit holder's investigations; and
  - (f) any mitigation measures adopted.

The complaints' record shall be made available to the Wellington Regional Council on request.

The permit holder shall notify the Manager, Consents Management, Wellington Regional Council, in writing within 24 hours of any complaints received, which relate to the exercise of this permit, or the next working day.

17. The permit holder shall keep a permanent record of any incident that results, or could result, in an adverse effect on the environment beyond the boundary.

The permit holder shall notify the Manager, Consents Management, Wellington Regional Council of any such incident within 24 hours of the incident being brought to the attention of the permit holder or the next working day.

The permit holder shall forward an incident report to the Manager, Consents Management, Wellington Regional Council within seven working days of the incident occurring. This report shall describe reasons for the incident, measures taken to mitigate the incident, and measures to prevent recurrence.

*Note: For the purposes of this permit, incidents include, but are not limited to, events such as power or mechanical failure, monitoring equipment failure or unusual discharges.*

## Operations and Maintenance Manual

18. The permit holder shall review the Operation and Maintenance Manual for the site. The manual shall at least address the following matters in order to minimise the discharge of fume:
- (a) operation, inspection and maintenance of the zinc bath, including the removal of ash and dross, and the replenishment of zinc;
  - (b) procedures adopted to ensure that all materials to be galvanised are dry so as to prevent steam explosions within the zinc bath and the consequent generation of fume;
  - (c) operation and maintenance of the degreasing, rinse, acid pickling and prefluxing baths and processes;
  - (d) procedures adopted to ensure that the plant complies with the conditions of this permit at all times;

- (e) contingency plans in the case of accidents and emergencies, such as spills, fires, and incidents where the discharge of excessive fume was unavoidable. All such accidents, spills, fires and accidental discharges to air are to be recorded in a log kept with the plant at all times and made available for inspection to the Wellington Regional Council;
- (f) any other issues considered important.

The permit holder shall operate in accordance with the Operations and Maintenance Manual.

A copy of the reviewed manual shall be forwarded to the Manager, Consents Management, Wellington Regional Council, within six months of the date of granting of this consent.

19. The Operations and Maintenance Manual shall be reviewed and updated annually, to accommodate the operation and maintenance of the new equipment, including contingency measures for equipment malfunction, and change in operational procedures.
20. The Wellington Regional Council may review any or all conditions of this permit by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time within six months of the first, third, fifth, and eighth anniversaries of the date of the granting of this permit for any of the following purposes:
  - (a) To deal with any adverse effects on the environment which may arise from the exercise of this permit, and which are appropriate to deal with at a later stage;
  - (b) To consider developments in control technology and management practices that would enable practical reductions in the discharge of contaminants to air.
21. The Wellington Regional Council shall be entitled to recover from the consent holder the costs of the conduct of any review, calculated in accordance with and limited to that council's scale of charges in-force and applicable at that time pursuant to section 36 of the Resource Management Act 1991.
22. The permit holder may apply at any time, pursuant to section 127 of the Resource Management Act 1991:
  - for the change or cancellation of any consent condition other than that relating to the term of the permit;
  - for the change of permit condition 10, relating to the installation and implementation of the emission control option and associated monitoring; and,
  - to reduce the frequency of monitoring under condition 14, and/or the contaminants monitored under condition 12.
23. In terms of section 123(c) of the Resource Management Act 1991, the period for which this permit is granted is limited to ten years from the date of granting of this permit.

## **Reasons for Suggested Conditions**

Conditions 1-8 are recommended to ensure the permit holder carries out the processes associated with operating a hot-dip galvanising plant as outlined in the application documents, while minimising any emissions to air, as a result of these processes.

Conditions 9-15 are recommended to ensure the permit holder investigates and implements an emission control option and associated monitoring methods to eliminate any emissions to air from normal galvanising processes. Requirements for a testing programme are also recommended in these conditions.

Conditions 16 and 17 are recommended to ensure the permit holder keeps a log of any complaints received, or any incidents that occur at the plant, and that this information is provided to the Wellington Regional Council.

Conditions 18 and 19 are recommended to provide the Wellington Regional Council with an up-to-date copy of the operations and maintenance carried out at the plant.

Conditions 20 and 21 provide the Wellington Regional Council with the opportunity to review any of the conditions of the permit, and recover any costs associated with such a review. Condition 22 provides the permit holder with the opportunity to change or cancel any of the conditions of the permit except for the term of permit.

Condition 23 recommends the term of this discharge permit be ten years.

## Appendix 1: Summary of Submissions

<b>Surname</b>	<b>First Names</b>	<b>Submission Reason</b>	<b>Support/Oppose /Conditional</b>	<b>Hearing Wish Fl</b>
GNB Technologies	Janeen Wood	Opposes the application. Opposes the application on the grounds that: - the discharge to atmosphere occurs through roof vents and access doors. - there are no apparent controls on the discharge - there is no quantification/identification of the discharges.	Oppose	Y
Opus International Consultants	William Pitt	Supports the application. Concerns regarding white/grey fume from the galvanising plant which during certain weather conditions is released in the direction of the submitter's premises.	Conditional	Y
Regional Public Health	Chris Edmonds	Neither supports nor opposes the application. Submission made in capacity as public health provider. Concerns relate to the potential adverse public health effects from discharges to air associated with the hot dip galvanising process.	Y	
Hutt City Council	Dean Bentley	Has concerns regarding the process management with regard to ensuring that nuisance to neighbours and adverse effects on the environment do not occur. Past nuisances have been caused by poor management practices.	Y	

## Appendix 2: Matters to be Considered

Section 15(1)(c) of the Resource Management Act 1991 (Act) requires that no contaminant from any industrial or trade premises may be discharged into the air unless it is expressly allowed by a rule in a regional plan, a resource consent or a regulation. Section 2 of the Act defines a contaminant to include:

*“Any substance (including gases, liquids, solids, and micro-organisms) or energy (excluding noise) or heat that either by itself or in combination with the same, similar or other substance, energy, or heat-*

(a) ...

(b) *When discharged onto or into land or into air, changes or is likely to change the physical, chemical or biological condition of the land or air onto or into which it is discharged.*

It appears that the process proposed will change the physical and chemical nature of the air into which it is discharged.

Section 2 defines industrial or trade premises to include:

(a) *Any premises used for an industrial or trade purpose; or*

(b) *Any premises used for the storage, transfer, treatment or disposal of waste minerals or for other waste management purposes, or used for composting organic waste materials; or*

(c) *Any other premises from which a contaminant is discharged in connection with an industrial or trade process -*

*and includes any factory farm but does not include any production land.*

Industrial or trade process is defined to include:

*Every part of a process from the receipt of raw material to the dispatch or use in another process or disposal of any product or waste material and any intervening storage of the raw material, partly processed matter or product.*

The discharge of contaminants from the zinc galvanising process comes from within the definition of “industrial or trade process” in section 2 of the Act. Therefore, a resource consent is required from the Regional Council to discharge emissions from this plant into air unless the discharge is allowed by a rule in a Regional Plan.

Section 104 of the Act *Matters to be Considered* provides as follows:

(1) *Subject to Part II, when considering an application for a resource consent and any submission received, the consent authority shall have regard to –*

- (a) *Any actual or potential effects of allowing the activity; and*
- (b) *Any relevant regulations; and*
- (c) *Any national policy statement, New Zealand Coastal Policy Statement, and regional policy statement; and*
- (d) *Any relevant objectives, policies, rules or other provisions of a plan or proposed plan; and*
- (e) *Any relevant district plan or proposed district plan, where the application is made in accordance with a regional plan; and*
- (f) *Any relevant regional plan or proposed regional plan where an application is made in accordance with a district plan; and*
- (g) *Any relevant water conservation order or draft conservation order; and*
- (h) *Any relevant designations or heritage orders or relevant requirements for designations or heritage orders; and*
- (i) *Any other matters a consent authority considers relevant and reasonably necessary to determine the application ...*

The Regional Policy Statement contains the following four objectives relating to air quality in the Region:

- (1) *High quality air in the Region is maintained and protected, and there is no significant deterioration in air quality in any part of the Region.*
- (2) *Air quality is enhanced in those areas with degraded air quality.*
- (3) *The adverse effects of the discharges of contaminants into air on human health, local or global environmental systems and public amenity are avoided, remedied or mitigated.*
- (4) *The output of gases which potentially promote global warming is at a level which is in the lowest quartile for OECD countries on a per capita basis.*

Of the above objectives, the third is the most relevant for consideration, as a general lack of ambient air quality data for the Region, and nationally co-ordinated initiatives for reduction of the emission of greenhouse gases and ozone depleting gases, mean the other three objectives are more relevant over the longer term.

Twelve policies were developed, in line with the above objectives, and were incorporated into the Regional Policy Statement. Of these policies, the following relevant policies were taken into consideration when assessing the application for an air discharge consent (numbered as in the Regional Policy Statement).

- Policy 8 To avoid, remedy or mitigate the adverse effects of local and global air pollution on human health.*
- Policy 9 To promote measures that achieve a reduction in the emission of greenhouse gases and ozone depleting substances.*
- Policy 10 To avoid, remedy or mitigate the adverse effects of air pollution on surface and ground water, soil, plants and animals.*



*Policy 11 To avoid, remedy or mitigate the adverse effects of air pollution on public amenity values.*

*Policy 12 To avoid, remedy or mitigate the adverse effects of odours on public amenity.*

The Regional Air Quality Management Plan for the Wellington Region contains Rule 12, which specifically excludes “...(d) hot dip galvanising or other processes for the protection of surfaces by metal coating using fluxes” from being a permitted activity. The activity is therefore classified as discretionary and requires a resource consent.

These processes were also specified under Part A 5(e) in the Second Schedule to the Clean Air Act 1972. Clean Air Licence No. 14/0030/89 was issued on 9 November 1989, expiring on 31 March 1994. Under the transitional provisions of the RMA 1991, the Clean Air Licence was deemed a resource consent, and the expiry date extended to 31 March 1995. NZGL was therefore required to obtain a new discharge permit in 1995. Air discharge permit WGN950003 was granted by the WRC on 3 August 1995, and this expired on 1 August 1995.

In addition to the above information, section 108(8) requires that when the consent authority is considering an application for a discharge permit or coastal permit, which would otherwise contravene section 15 (relating to the discharge of contaminants) the consent authority shall, in having regard to the actual or potential effects of allowing the activity, have regard to –

- (a) The nature of the discharge and the sensitivity of the receiving environment to adverse effects and the applicants reasons for making the proposed choice; and*
- (b) Any possible alternative methods of discharge, including discharges to any other receiving environment ...*

It was therefore considered that the following matters are required to be taken into consideration when assessing the application:

- (1) The actual or potential effects of allowing the discharge having regard to:
  - (a) The nature of the discharge*
  - (b) The sensitivity of the receiving environment*
  - (c) The applicant’s reasons for making the proposed choice*
  - (d) Alternative methods of discharge*
  - (e) Possible conditions that could be imposed to mitigate adverse effects.**
- (2) Part II of the Act, in particular, the generation, emissions and odour, and the implications for kaitiakitanga, finite characteristics of resources, the maintenance of amenity values, the intrinsic values of ecosystems, and the maintenance and enhancement of the quality of the environment.*