Government of Western Australia
Department of Environment Regulation

Licence

Environmental Protection Act 1986, Part V

Licensee: Hartway Naval Base Pty Ltd

Licence: L8267/2008/4

Registered office: Suite 1
57 Labouchere Road
SOUTH PERTH WA 6151

ACN: 129 671 343

Premises address: Hartway Galvanizers Naval Base
46 Hope Valley Road
NAVAL BASE WA 6165
Being Lot 9 on Plan 17827 as depicted in Schedule 1.

Issue date: Thursday, 15 January 2015

Commencement date: Friday, 30 January 2015

Expiry date: Wednesday, 29 January 2020

Prescribed premises category
Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
45	Metal Melting or Casting: premises on which metal or scrap metal is melted in furnaces or cast	100 tonnes or more per year	1800 tonnes per annual period
48A	Metal finishing: premises on which iron or steel is galvanized.	Not applicable	30,000 tonnes per annual period

Conditions
This Licence is subject to the conditions set out in the attached pages.

.....
Lauren Trott
Officer delegated under section 20
of the *Environmental Protection Act 1986*

Contents

Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role
The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER works with the business owners, community, consultants, industry and other representatives to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements
This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link: http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.

- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.

- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

- *Environmental Protection (Abrasive Blasting) Regulations 1998* – these Regulations place obligations on you when carrying out abrasive blasting activities.

You must comply with your Licence. Non-compliance with your Licence is an offence and strict penalties exist for those who do not comply.

Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Licence fees
If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non-payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

Ministerial conditions
If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary
Hartway Naval Base Pty Ltd (Hartway) was established in February 1984 and forms part of the family owned and operated Hart Group of companies. The parent company (Bernard Hart Nominees Pty Ltd) also operate Hartway Galvanisers (L5265/1988) which is located in the Canning Vale Industrial Estate. The Naval Base premises is located on Lot 9 Hope Valley Road, Naval Base within the City of Kwinana in an area zoned general Industry. Cadastral maps depict that a proposed residential area is to be located just over one kilometre north-east of the premises. The site is approximately 1.5 km from Cockburn Sound. It is located within Area A of the Environmental Protection (Kwinana) (Atmospheric Wastes) Policy 1999 (Kwinana EPP) and is subject to total suspended particulates requirements outlined with the Kwinana EPP. There are no residential areas currently located within at least one kilometre from the Premises.

Hartway currently galvanize approximately 26,000 tonnes per annum (tpa) of steel or iron in a “Hot Dip Galvanizing” process and melts approximately 300 tonnes of zinc compounds per annum for recycling. The galvanizing process involves a pre-treatment using caustic soda, hydrochloric and sulphuric acids and a zinc ammonium chloride flux solution. The metal is then immersed in galvanizing baths of molten zinc kept at 450^{o}C. Key potential emissions from this activity include wastewaters from spent rinse water, fumes, odour, particulate matter and solid wastes.

Wastewater from the wet scrubber is disposed of by a licensed contractor. A designated storage tank is used for the collection of spent liquids including hydrochloric acid and flux. Solid waste includes scrap metal and domestic waste, which is removed from site by licensed contractors.

Emissions from the furnace are vented through an exhaust stack which is fitted with a wet scrubber prior to release into the atmosphere. Spills or leaks are contained within bunded areas. Chemicals used in the galvanizing process are stored in tanks situated in concrete pits. The pits have sumps installed to enable pumping of any spillages back into the tanks.

This Licence is the successor to licence L8267/2008/3. Minor changes to some conditions and definitions have occurred in accordance with DER’s standard licence format.

The licence has been amended to increase the through put of the category 45 operations from 900 tonnes a year to 1800 tonnes a year. Fugitive and odour emission conditions have also been removed as a part of the amendment as these potential emissions can be regulated under the general provisions of the act.

The licences and works approvals issued for the Premises 07/12/2009 are:

Instrument log		
Instrument	**Issued**	**Description**
W4258/2006/1	07/12/2006	Works approval for construction of the Naval Base site
L8267/2008/1	30/01/2009	New application
L8267/2008/2	30/01/2011	Licence re-issue
L8267/2008/2	06/12/2012	Licence amendment to include category 45
L8267/2008/3	30/01/2013	Licence re-issue
L8267/2008/3	21/08/2013	Licence amendment to new format
L8267/2008/4	15/01/2015	Licence re-issue
L8267/2008/4	26/08/2015	Licence amendment – increase of category 45 through-put

Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION

Licence conditions

1 General

1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

'Act' means the *Environmental Protection Act 1986;*

'annual period' means the inclusive period from 1 January to 31 December in the same year;

'AS 4323.1' means the Australian Standard AS4323.1 *Stationary Source Emissions Method 1: Selection of sampling positions;*

'CEMS' means continuous emissions monitoring system;

'CEMS Code' means the current version of the Continuous Emission Monitoring System (CEMS) Code for Stationary Source Air Emissions, Department of Environment & Conservation, Government of Western Australia;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means;

Senior Manager - Industry Regulation (Process Industries)

At the following addresses:

Department of Environment Regulation
Locked Bag 33
CLOISTERS SQUARE WA 6850
Telephone: (08) 9333 7510
Facsimile: (08) 9333 7550
Email: industry.regulation@der.wa.gov.au

'controlled waste' has the definition in *Environmental Protection (Controlled Waste) Regulations 2004*;

'fumes' means visible gases or vapour generated by the metal finishing process;

'Licence' means this Licence numbered L8267/2008/4 and issued under the Act;

'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;

'NATA' means the National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'normal operating conditions' means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring;

'PM' means total particulate matter including both solid fragments of material and miniscule droplets of liquid;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

'Schedule 1' means Schedule 1 of this Licence unless otherwise stated;

'Schedule 2' means Schedule 2 of this Licence unless otherwise stated;

'shut-down' means the period when plant or equipment is brought from normal operating conditions to inactivity;

'stack test' means a discrete set of samples taken over a representative period at normal operating conditions;

'start-up' means the period when plant or equipment is brought from inactivity to normal operating conditions;

'STP dry' means standard temperature and pressure (0^{o}Celsius and 101.325 kilopascals respectively), dry;

'USEPA' means the United States Environmental Protection Agency;

'USEPA Method 5' means the promulgated Test Method 5 – Determination of Particulate Matter Emissions from Stationary Sources;

'USEPA Method 17' means the promulgated Test Method 17 – Determination of Particulate Matter Emissions from Stationary Sources;

'usual working day' means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia;

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.

1.1.4 Any reference to a guideline or code of practice in the Licence means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

1.1.5 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
(a) pollution;
(b) unreasonable emission;
(c) discharge of waste in circumstances likely to cause pollution; or
(d) being contrary to any written law.

1.2 General conditions

1.2.1 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.

1.2.2 The Licensee, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous materials are stored in accordance with the code of practice for the storage and handling of dangerous goods.

1.2.3 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.2.4 The Licensee shall:

(a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and

(b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.[1]

Note1: The *Environmental Protection (Unauthorised Discharges) Regulations 2004* make it an offence to discharge certain materials into the environment.

1.3 Premises operation

1.3.1 The Licensee shall ensure that all metal finishing activities identified in Table 1.3.1 are undertaken in accordance with the process limits described in that Table.

Table 1.3.1: Processing of materials

Material	Process	Process limits
Iron or steel	Galvanising	a) Exhaust fans shall be operated at all times when galvanising is carried out on the Premises. b) The factory building shall be maintained and operated such that the escape of offensive odours and fumes through doorways and windows is minimised. c) All items removed from the fluxing bath shall be dried before they are placed in the galvanising bath.
Iron or steel	Molten zinc bath	The wet scrubber and fume hood air exhaust shall be operational whenever the molten zinc bath is being utilised.

2 Emissions

2.1 General

2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit specified in any part of section 2 of this Licence.

2.2 Point source emissions to air

2.2.1 The Licensee shall ensure that where waste is emitted to air from the emission points in Table 2.2.1 it is done so in accordance with the conditions of this licence.

Table 2.2.1: Emission points to air

Emission point reference and location on Map of emission points	Emission Point	Emission point height (m)	Source, including any abatement
A1	Wet Scrubber Exhaust Stack	15.5	Emissions from the fume hood located above the zinc bath directed through a wet scrubber.

2.2.2 The Licensee shall not cause or allow point source emissions to air greater than the limits listed in Table 2.2.2.

Table 2.2.2: Point source emission limits to air			
Emission point reference and location on Map of emission points	**Parameter**	**Limit (including units)[1]**	**Averaging period**
A1	PM	50 mg/m^3	Stack test (Minimum 60 minute average)

Note 1: All units are referenced to STP dry

3 Monitoring

3.1 General monitoring

3.1.1 The licensee shall ensure that all samples are submitted to a laboratory with current NATA accreditation for the parameters to be measured.

3.1.2 The Licensee shall ensure that annual monitoring is undertaken at least 9 months apart.

3.1.3 The Licensee shall record production or throughput data and any other process parameters relevant to any non-continuous or CEMS monitoring undertaken.

3.1.4 The Licensee shall have all monitoring equipment referred to in any condition of the Licence calibrated in accordance with the manufacturer's specifications, and any relevant Australian standard.

3.1.5 The Licensee shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the Director accompanied with a report comprising details of any modifications to the methods.

3.2 Monitoring of point source emissions to air

3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of point source emissions to air				
Emission point reference and location Map of emission points	**Parameter**	**Units[1],**	**Frequency[2]**	**Method**
A1	PM	mg/m^3 g/sec	Annually	USEPA Method 5 or USEPA Method 17

Note 1: All units are referenced to STP dry
Note 2: Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production.

3.2.2 The Licensee shall ensure that sampling required under Condition 3.2.1 of the Licence is undertaken at sampling locations in compliance with the AS 4323.1 or relevant part of the CEMS Code.

4 Information

4.1 Records

4.1.1 All information and records required by the Licence shall:
- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
- (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
  - (i) off-site environmental effects; or
  - (ii) matters which affect the condition of the land or waters.

4.1.2 The Licensee shall ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
- (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.

4.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.

4.1.4 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

4.2 Reporting

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 60 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form[1]
-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the annual period and any action taken	None specified
4.1.3	Compliance	Annual Audit Compliance Report (AACR)
4.1.4	Complaints summary	None specified
-	Throughput in tonnes per year	none specified

Note 1: Forms are in Schedule 2

4.2.1 The Licensee shall ensure that the Annual Environmental Report also contains:
- (a) any relevant process, production or operational data recorded under Condition 3.1.3; and
- (b) an assessment of the information contained within the report against previous monitoring results and Licence limits.

4.2.2 The Licensee shall submit the information in Table 4.2.2 to the CEO according to the specifications in that table.

Table 4.2.2: Non-annual reporting requirements

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licensee from third parties

4.3 Notification

4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form[2]
2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day.	N1

Note 1: Forms are in Schedule 2

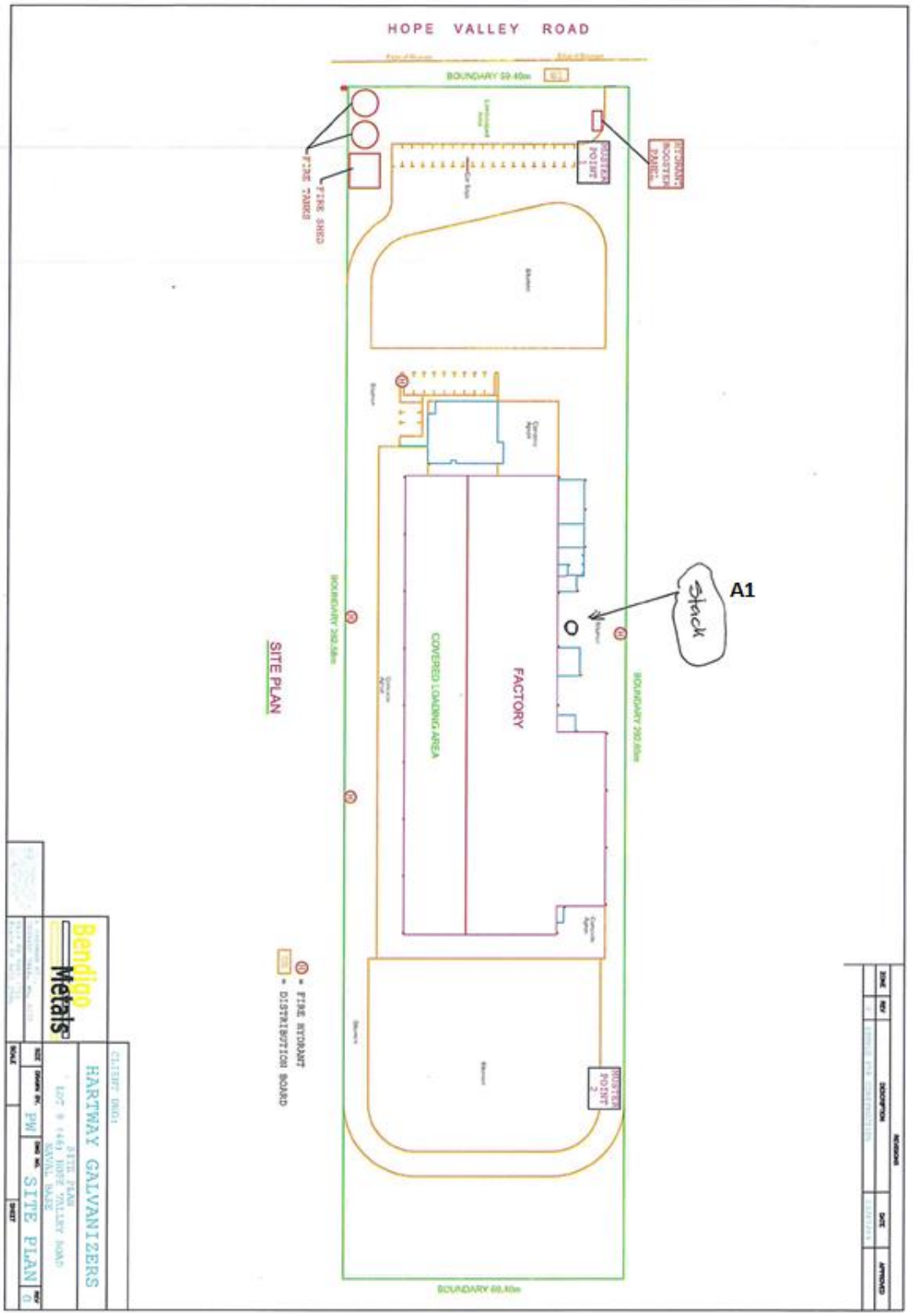
Schedule 1: Maps

Premises map

The Premises is shown in the map below. The yellow line depicts the Premises boundary.

Map of emission points

The location of the emission point defined in Tables 2.2.1, Table 2.2.2 and Table 3.2.1 is shown below.



Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A

LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name: Trading as:	ABN:
Reporting period: _____ to _____	

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the Licence complied with within the reporting period? (please tick the appropriate box)

Yes ☐ Please proceed to Section C

No ☐ Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:

SECTION B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each licence condition that was not complied with.

a) Licence condition not complied with:	
b) Date(s) when the non-compliance occurred, if applicable:	
c) Was this non-compliance reported to DER?	
☐ Yes ☐ Reported to DER verbally Date _____ ☐ Reported to DER in writing Date _____	☐ No
d) Has DER taken, or finalised any action in relation to the non-compliance?	
e) Summary of particulars of the non-compliance, and what was the environmental impact:	
f) If relevant, the precise location where the non-compliance occurred (attach map or diagram):	
g) Cause of non-compliance:	
h) Action taken, or that will be taken to mitigate any adverse effects of the non-compliance:	
i) Action taken or that will be taken to prevent recurrence of the non-compliance:	

Each page must be initialled by the person(s) who signs Section C of this AACR

Initial:

SECTION C

SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:
An individual	□	by the individual licence holder, or
	□	by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other unincorporated company	□	by the principal executive officer of the licensee; or
	□	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A corporation	□	by affixing the common seal of the licensee in accordance with the *Corporations Act 2001*; or
	□	by two directors of the licensee; or
	□	by a director and a company secretary of the licensee, or
	□	if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or
	□	by the principal executive officer of the licensee; or
	□	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A public authority (other than a local government)	□	by the principal executive officer of the licensee; or
	□	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	□	by the chief executive officer of the licensee; or
	□	by affixing the seal of the local government.

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of $50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: _____/_____/_____

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: _____/_____/_____

SEAL (if signing under seal)

Licence:	L8261/2008/4	Licensee:	Hartway Naval Base Pty Ltd
Form:	N1	Date of breach:	

Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

These pages outline the information that the operator must provide.
Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of Hartway Naval Base Pty Ltd	
Date	

Government of Western Australia
Department of Environment Regulation

Decision Document

Environmental Protection Act 1986, Part V

Proponent: Hartway Naval Base Pty Ltd

Licence: L8267/2008/4

Registered office:	Suite 1 57 Labouchere Road SOUTH PERTH WA 6151
ACN:	129 671 343
Premises address:	Hartway Galvanizers Naval Base 46 Hope Valley Road NAVAL BASE WA 6165 Being Lot 9 on Plan 17827 as depicted in Schedule 1.
Issue date:	Thursday, 15 January 2015
Commencement date:	Friday, 30 January 2015
Expiry date:	Wednesday, 29 January 2020

Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by:	Richard Wilson Licensing Officer
Decision Document authorised by:	Lauren Trott A/Manager Licensing Process Industries

Contents

1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986* (the Act). Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

2 Administrative summary

Administrative details		
Application type	Works Approval ☐ New Licence ☐ Licence amendment ☒ Works Approval amendment ☐	
Activities that cause the premises to become prescribed premises	**Category number(s)**	**Assessed design capacity**
	45	1800 tonnes per annual period
	48A	30,000 tonnes per annual period
Application verified Application fee paid	Date: N/A Date: N/A	
Works Approval has been complied with Compliance Certificate received	Yes☐ No☐ N/A☒ Yes☐ No☐ N/A☒	
Commercial-in-confidence claim	Yes☐ No☒	
Commercial-in-confidence claim outcome	N/A	
Is the proposal a Major Resource Project?	Yes☐ No☒	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the *Environmental Protection Act 1986*?	Yes☐ No☒	Referral decision No: Managed under Part V ☐ Assessed under Part IV ☐
Is the proposal subject to Ministerial Conditions?	Yes☐ No☒	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the *Environmental Protection Act 1986*)?	Yes☐ No☒ Department of Water consulted Yes ☐ No ☒	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes☒ No☐ Kwinana EPP (Atmospheric Wastes)		
Is the Premises subject to any EPP requirements? Yes☒ No☐ Site is subject to SO_2 and total suspended particulates requirements of Kwinana EPP.		

3 Executive summary of proposal and assessment

Hartway Naval Base Pty Ltd (Hartway) was established in February 1984 and forms part of the family owned and operated Hart Group of companies. The premises is located on Lot 9 Hope Valley Road, Naval Base within the City of Kwinana in an area zoned general Industry and is approximately 1.5 km from Cockburn Sound.

It is located within Area A of the Environmental Protection (Kwinana) (Atmospheric Wastes) Policy 1999 (Kwinana EPP) and is subject to total suspended particulates requirements outlined within the Kwinana EPP. There are no residential areas currently located within at least one kilometre from the Premises.

Hartway currently galvanize approximately 26,000 tonnes per annum (tpa) of steel or iron in a "Hot Dip Galvanizing" process and melts approximately 300 tonnes of zinc compounds per annum for recycling. The galvanizing process involves a pre-treatment using caustic soda, hydrochloric and sulphuric acids and a zinc ammonium chloride flux solution. The metal is then immersed in galvanizing baths of molten zinc kept at 450^{o}C. Key potential emissions from this activity include wastewaters from spent rinse water, fumes, odour, particulate matter and solid wastes.

Wastewater from the wet scrubber is disposed of by a licensed contractor. A designated storage tank is used for the collection of spent liquids including hydrochloric acid and flux. Solid waste includes scrap metal and domestic waste, which is removed from site by licensed contractors.

Emissions from the furnace are vented through an exhaust stack which is fitted with a wet scrubber prior to release into the atmosphere. Spills or leaks are contained within bunded areas. Chemicals used in the galvanizing process are stored in tanks situated in concrete pits. The pits have sumps installed to enable pumping of any spillages back into the tanks.

Hartway currently melt up to 900kg of zinc (in the form of dross) a year in a Metaullics Zinkoff Recovery System (MZR). The unit is purpose built for the recovery of zinc from the floating skimmings from the galvanizing bath which is known as top dross. This inorganic material consists of 90-98% zinc with some aluminium, iron, chlorides nickel and lead.

The MZR furnace is a standalone unit that uses natural gas. Ash is loaded into a sealed steel container, which is then moved into the furnace plenum. Although hermitically sealed at the point of loading, there is a small vent to release gaseous build-up into the furnace while heating is in progress. The drum is heated to 530℃ and once a melting cycle has finished, molten zinc is poured into ingot moulds. Residues as solids from the melt are recycled into the next pour or can be on-sold to other industries such as for fertilisers.

This licence amendment is for the increase of the category 45: Metal Melting or casting throughput from 900 tonnes per annum to 1800 tonnes per annum. The increase will occur with the installation of a second MZR with similar capacity to the one already used at the premises. There is not expected to be an increase in emissions from the premises due to the use of the second unit.

The licence has also been amended to remove conditions relating to fugitive emissions and odour. It has been determined that these types of emissions from this premises can be regulated by the general provisions of the *Environmental Protection Act 1986*.

4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
Through put	N/A	This amendment is to increase the throughput of category 45 operations for melting of recovered zinc material in a second MZR. The unit is used to melt waste zinc material using natural gas. Recovered zinc is reused in the galvanizing process. There is not expected to be an increase in emissions from the site due to the use of the additional MZR. The MZR is fully contained. Dross is loaded into the hermitically sealed container which is then placed into the furnace where it is heated to around 530℃. There is no direct contact between the dross and the flame which means there are almost no emissions from the unit.	P4 form and supporting documentation
Fugitive emissions	Previously 2.6.1	Condition L2.6.1 has been removed from the licence. <u>Emission Description</u> *Emission:* Fumes from the galvanizing process and pre-treatment. *Impact:* Nuisance odour impacts on neighbouring businesses, short term reduced local air quality. *Controls*: The site is located in an industrial complex and the nearest residence to the site is approximately 1km away. The Environmental Management Plan for the site states that the site uses dry galvanizing and exhaust fans are used whenever galvanizing. After materials have been removed from the flux bath they are allowed to dry prior to being placed in the galvanizing bath. By ensuring that materials to be galvanized are dry the amount of fumes produced are significantly reduced. The site directs fumes from the galvanizing bath to a wet scrubber. Pre-treatment baths are operated to ensure that fumes are minimised	

DECISION TABLE			
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		Risk Assessment *Consequence:* Insignificant *Likelihood*: Unlikely *Risk Rating:* Low Regulatory Controls Fume emissions can be regulated under the general provisions of the *Environmental Protection Act 1986* Residual Risk Assessment *Consequence:* Insignificant *Likelihood*: Unlikely *Risk Rating:* Low	
Odour	Previously 2.7.1	Condition 2.7.1 has been removed from the licence. Emission Description *Emission:* Odour emissions from the galvanizing process. *Impact:* Nuisance odour impacts on neighbouring businesses. Dry galvanizing is not a highly odourous process under standard operating conditions. *Controls*: The site is located in an industrial complex and the nearest residence to the site is approximately 1km away. The Environmental Management Plan for the site states that the site uses dry galvanizing and exhaust fans are used whenever galvanizing is taking palace. After materials have been removed from the flux bath they are allowed to dry prior to being placed in the galvanizing bath to reduce the formation of vapours. The fumes from the galvanizing bath are vented to a wet scrubber.	

DECISION TABLE			
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
		Risk Assessment *Consequence:* Insignificant *Likelihood*: Unlikely *Risk Rating:* Low Regulatory Controls General provisions of the *Environmental Protection 1986 Act* Risk Assessment *Consequence:* Insignificant *Likelihood*: Unlikely *Risk Rating:* Low	
Notification	Previously 5.3.1	Part of the previous condition 5.3.1 (now 4.3.1) has been changed, deleting the text requiring the licensee to notify DER of any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution. This is considered duplication as these requirements are covered by section 72 of the EP Act.	

5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
24/08/2015	Draft licence sent to Licensee for comment	No comments received	NA

6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High