



<b>Licence Number</b>	L8120/2006/4
<b>Works Approval Holder</b>	Nationwide Oil Pty Ltd
<b>ACN</b>	066 383 364
<b>File Number:</b>	2013/003482-1
<b>Premises</b>	Nationwide Oil Parkeston Facility Portion of Hampton Location 33 Yarri Road KALGOORLIE WA 6430 (as defined by the prescribed co -ordinates in Schedule 1: Maps Premises Boundary)
<b>Date of Amendment</b>	15/05/2019

## Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act), as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

Manager, Process Industries  
Regulatory Services

*Officer delegated under Section 20 of the Environmental Protection Act 1986*

## Definitions and interpretation

### Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

**Table 1: Definitions**

Term	Definition
Material Change	means a change to the activities carried out on the Premises that may result in an increased risk to public health, amenity or the environment;
NPI	National Pollutant Inventory
Sulfur	These two terms are used interchangeably throughout this document to refer to the element “S” on the periodic table which has an atomic number of 16
Sulphur	

### Amendment Notice

The CEO has initiated an amendment to Condition 2.2.1 of Licence L8120/2006/4. This CEO initiated amendment allows for the correction of % sulphur<sup>1</sup> content of the dehydrated fuel oil used to operate the boiler. Nationwide Oil Pty Ltd requested this amendment be made to the Licence as part of an application made to the Department of Water and Environment Regulation (DWER) on 10 July 2018. DWER now corrects this omission with Amendment Notice 2.

This amendment is made pursuant to section 59(1)(a) of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

The guidance statements listed in Appendix 1 have informed the decision made on this amendment.

### Amendment description

The CEO initiated amendment relates to changing the % sulphur content for the dehydrated fuel oil (DFO) in Table 2.1.1 of Licence L8120/2006/4 from '0.4 – 0.5%' to '1.5% or less'. The Licence Holder has advised that the level of sulphur of 0.4-0.5% is not able to be achieved reliably 100% of the time due to the changing nature of recycled input materials. The proposed change reflects the % sulphur content change in saleable DFO will align with Nationwide Oil's product data sheet for Fuel Oil 100 (Cleanaway, 2016).

The premises lies within proximity of residential areas where protection of sensitive human receptors and health impacts from cumulative ambient sulphur emissions and is subject to the EPP SO<sub>2</sub> Policy (the Environmental Protection (Goldfields Residential Areas) (Sulfur Dioxide) Policy 2003) and the EPP SO<sub>2</sub> Regulations (Environmental Protection) Goldfields Residential Areas (Sulfur Dioxide) Regulations 2003 as found on the Environmental Protection Authority website (EPA, 2019).

## Amendment history

Table 2 provides the amendment history for L8120/2006/4.

**Table 2: Licence amendments**

Instrument	Issued	Amendment
L8120/2006/4	7/08/2014	Licence changed to REFIRE format
L8120/2006/4	29/04/2016	Department initiated amendment to extend the licence duration until 19 August 2025
L8120/2006/4	15/02/2019	Amendment Notice 1: Licence Holder initiated amendment to remove redundant conditions
L8120/2006/4	15/05/2019	Amendment Notice 2: Department initiated amendment to change the % sulfur content of the dehydrated fuel used for the water tube boiler.

## Risk assessment

The Delegated Officer has considered the increased amount of sulphur that is proposed to be contained within the DFO used to fire the boilers at the premises in combination with emissions data reports from the National Pollution Inventory reports for the 2015/16, 2016/17 and 2017/18 periods for Nationwide Oil Kalgoorlie (NPI, 2019). The amount of SO<sub>2</sub> emissions generated from the combustion of DFO is significantly low and such that it is not considered sufficient for capture by NPI data as shown by Figure 1 below, in spite of being within proximity of the EPP SO<sub>2</sub> policy area.

**Figure 1: Air Emissions data reported for the Nationwide Oil Pty Ltd, Kalgoorlie Premises for the 2017/2018 reporting period**

Substance	Air Total (kg) <sup>[1][2]</sup>	Air Fugitive (kg) <sup>[1]</sup>	Air Point (kg) <sup>[1]</sup>	Land (kg) <sup>[1]</sup>	Water (kg) <sup>[1]</sup>	Total (kg) <sup>[1]</sup>
Cumene (1-methylethylbenzene) ⓘ	5.6	5.6				5.6
Total Volatile Organic Compounds ⓘ	1,800	1,700	48			1,800
Xylenes (individual or mixed isomers) ⓘ	4.5	4.5				4.5

[1] All emission/transfer quantities are displayed to two significant figures. Displayed emission totals may not exactly equal the sum of their individual emissions.  
 [2] Air Total = Air Point + Air Fugitive

Source: National Pollution Inventory, 2019

BHP Billiton Nickel West Pty Ltd, the party responsible for managing the Kalgoorlie Air Monitoring Network reported one exceedance of the EPP SO<sub>2</sub> trigger value of 2 ppm over a one hour averaging period within a Protected Area under EPP SO<sub>2</sub> Policy 2003 in the last 12 month period (BHPNiW, 2019). No health or amenity impacts were reported to have occurred as a result of this event.

Upon consideration that there are sensitive human residential receptors captured by the EPP SO<sub>2</sub> Policy 2003 area which are subject SO<sub>2</sub> emissions from multiple industrial emission sources and that the exact emission profile from the boiler used at the premises has not been quantified at the premises, the Delegated Officer has determined that although unlikely, it is **possible** that emissions from the premises could contribute to future exceedances of the ambient level criteria within the EPP SO<sub>2</sub> Policy area at some time if the amount of sulphur burnt within the boilers is not constrained.

The consequence of the change in SO<sub>2</sub> emissions from the increase of elemental sulphur content of the DFO is considered **minor** and may result in very small increases to SO<sub>2</sub> emissions on site, however these could impact to low level health and amenity impacts on a

local scale due to the amount of SO<sub>2</sub> emissions already contained within the airshed from other industrial sources. Therefore the Delegated Officer considers the overall risk from the change in consequence of the emissions is rated as **medium**, and suitable for regulatory controls.

## Decision

The Delegated Officer has determined that increasing the upper limit of sulphur for the dehydrated fuel oil to 1.5% will not increase the emission risk profile of the Premises significantly, and while there is no 'material change' associated with this CEO initiated amendment, it still could result in a slight increase of SO<sub>2</sub> in the airshed and was therefore suitable for restriction. The Delegated Officer therefore amends the sulphur content in Table 2.1.1 of Licence L8120/2006/4 to 1.5% or less.

## Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 13/05/2019. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

## Amendment

1. Definitions of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

## 2 Emissions

### 2.1 Point source emissions to air

- 2.1.1 The Licensee shall ensure that where waste is emitted to air from the emission points in Table 2.1.1 it is done so in accordance with the conditions of this Licence.

<b>Emission point reference</b>	<b>Emission Point and source</b>	<b>Emission point height (agl)</b>	<b>Source, including any abatement</b>
1	Water Tube Boiler house stack	14.5m	Dehydrated fuel oil used to operate boiler (maximum design capacity of 290 kg per hour with <del>0.4—0.5%</del> <u>a</u> sulphur content <u>of 1.5% or less</u> )
2	Force Feed Evaporator Tower outlet	13m	Force Feed Evaporator Plant
3	Cooling Tower stack	3.7m	Cooling Tower

## Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L8120/2006/4 – Nationwide Oil Pty Ltd	L8120/2006/4	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
2	Licence L8210/2006/4 – Amendment Notice 1	L8120/2006/4	
3	Amendment Supporting Information Fuel Oil Fact Sheet	Cleanaway, 2016	DWER records: A1779940
4	DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	DER 2015a	accessed at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
5	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	DER 2015b	
6	DER, November 2016. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	DER 2016b	
7	DER, November 2016. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	DER 2016c	
8	Environmental Protection (Goldfields Residential Areas) (Sulfur Dioxide) Policy 2003	EPA, 2019a	Accessed at: <a href="http://www.epa.wa.gov.au/policies-guidance/environmental-protection-goldfields-residential-areas-sulfur-dioxide-policy-and">http://www.epa.wa.gov.au/policies-guidance/environmental-protection-goldfields-residential-areas-sulfur-dioxide-policy-and</a>
9	Environmental Protection (Goldfields Residential Areas) (Sulfur Dioxide) Regulations 2003	EPA, 2019b	
10	2017/2018 report for NATIONWIDE OIL PTY LTD, NWO Kalgoorlie - Parkeston, WA	NPI, 2019	accessed at <a href="http://www.npi.gov.au/">http://www.npi.gov.au/</a>
11	BHP Billiton Nickel West Pty Ltd KAMN Monthly monitoring data for February 2019	BHPNiW, 2019	DWER records:A1771621



# Schedule 1: Maps

## Premises Boundary

The blue line indicates the Premises boundary. Emission points to air 1, 2 and 3 shown in red

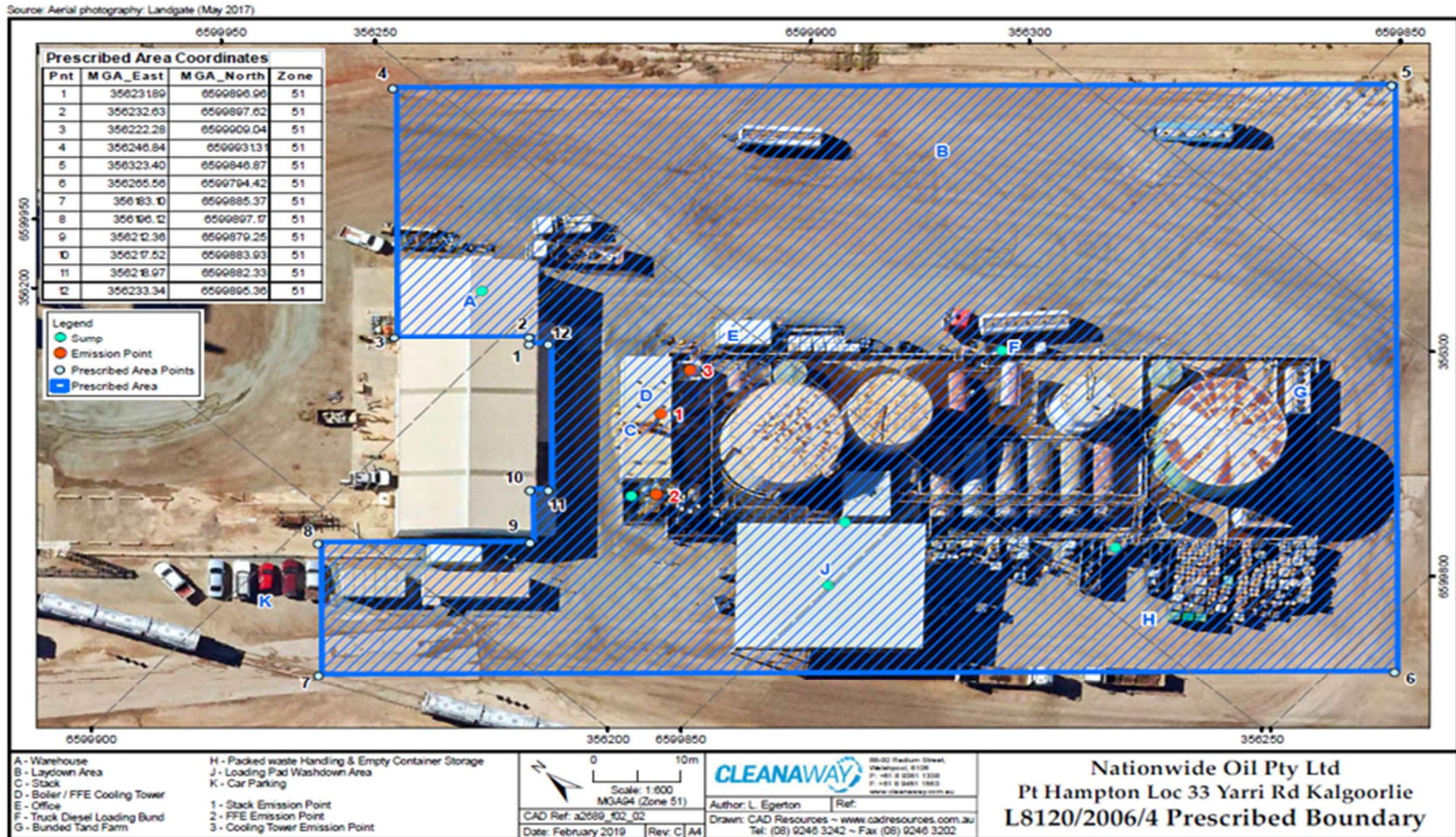


Image provided as part of a licence amendment supporting documentation

## **Appendix 2: Summary of Licence Holder comments**

The Licence Holder was provided with the draft Amendment Notice on 13/05/2019 for review and comment. The Licence Holder responded in an email received by DWER on 14/05/2019 waiving the remaining comment period until 10 June 2019.