



## Application for Works Approval Amendment

### Division 3, Part V *Environmental Protection Act 1986*

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<b>Works Approval Number</b>	W6050/2017/1
<b>Works Approval Holder</b>	First Graphene Limited
<b>ACN</b>	007 870 760
<b>File Number</b>	DER2017/000661
<b>Premises</b>	First Graphene 1 Sepia Close Henderson, WA, 6166  Legal description - Lot 89 on Plan 62941  Certificate of Title Volume 2737 Folio 195
<b>Date of Report</b>	04/06/2020
<b>Decision</b>	Final

## 1. Definitions of terms and acronyms

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

**Table 1: Definitions**

Term	Definition
ACN	Australian Company Number
Amendment Report	refers to this document.
Category/ Categories/ Cat.	Categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	Chief Executive Officer of the Department of Water and Environmental Regulation CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Delegated Officer	an officer under section 20 of the EP Act.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)
Existing Works Approval	The Works Approval issued under Part V, Division 3 of the EP Act and in force prior to the commencement of, and during this Review
Premises	refers to the premises to which this Amendment Report applies, as specified at the front of this Amendment Report
Works Approval Holder	refers to the occupier of the premises, being the person specified on the front of the Works Approval as the person to whom this Works Approval has been granted

## Works Approval Amendment

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend works approval W6050/2017/1 granted under the EP Act for First Graphene Limited (Works Approval Holder), a graphene manufacturing plant in Henderson.

Details of the amendment are set out in the form of an amended works approval document.

The Works Approval Holder applied to amend works approval W6050/2017/1 on 10 March 2020 to;

- increase the expected annual production of graphene;
- extend the duration of the works approval and;
- ensure the works approval requirements are consistent with minor changes to the plant as detailed below.

## Background

Works Approval W6050/2017/1 was granted on 30 June 2017 for category 72 – chemical manufacturing, in which imported graphite from Sri Lanka is processed, using an electrochemical exfoliation process, to make graphene.

## Amendment Description

The Works Approval Holder requested the amendments to the works approval listed in Table 2.

**Table 2: Description of requested amendments**

Part of works approval W6050/2017/1	Reason for Amendment request	Delegated Officer's response
Duration	Works approval due to expire on 29 June 2020 and works only partially completed. An extension of two years is requested.	The duration of the works approval has been extended by two years. The expiry date has been updated to 29 June 2022.
Works Approval Holder	Name change	The name has been updated from First Graphite Limited to First Graphene Limited.
Table 2: Infrastructure and equipment requirements Table	<ol style="list-style-type: none"><li>1. Increase the maximum volume of Class 8 product (Sulphuric Acid solution) to be stored in an internal bunded area from 6,000L to 8,500L.</li><li>2. Increase the maximum number of Electrochemical Cells from 11 to 16, which will increase the design capacity from 20 tonnes per year to 90 tonnes per year of graphene per annum.</li></ol>	Infrastructure Requirements Table updated with the new information. Refer to 'Decision' section below.

As part of this amendment DWER has also corrected unintended errors, updated definitions, and updated references relating to Australian Standards in the works approval. Table 3 provides a summary of the administrative amendments to be included in the works approval.

**Table 3: Summary of administrative amendments**

Document location in works approval W6050/2017/1	Description
Front Page	Premise street address updated from 1 Sepia Court to 1 Sepia Close.
Table 1: Definitions	Reference to AS 3780-1994 updated to AS 3780-2008.
Table 2: Infrastructure and equipment requirements of works approval	Reference to AS 3780-1994 updated to AS 3780-2008.

## Works approval history

Table 4 summarises the works approval history for the premises.

**Table 4: Works approval and licence history**

Instrument	Issued	Nature and extent of works approval
W6050/2017/1	30 June 2017	Installation of chemical manufacturing equipment necessary to process graphite, using an electrochemical exfoliation process, to make graphene.

## Other approval/s

The works approval holder has advised that liquid waste will now be discharged to the sewer in accordance with a Trade Waste Permit issued by Water Corporation of Western Australia

The works approval holder has provided the information in Table 5 relating to other approvals applicable to the amendment application.

**Table 5: Relevant approvals**

Legislation	Number	Approval
<i>Water Services Act 2012</i> <i>Water Services Regulations 2013</i>	<i>Trade Waste Permit No. 58925</i>	The Water Corporation has approved the discharge of Trade Waste to the sewage system subject to the pre-treatment, monitoring and discharge parameters specified in the permit.

## Decision

The Works Approval Holder included emission monitoring data that the Delegated Officer has previously reviewed. The monitoring data demonstrates that the installation of additional infrastructure and the corresponding increase in annual production does not alter the previously assessed risk profile of the premises.

In accordance with Section 59 of the EP Act, the Delegated Officer has granted the amendment to the works approval consistent with Table 2 and 3. This decision is on the basis that the changes are not expected to change the previously assessed emissions and discharges risk profile and no further detailed risk assessment is required.

## Works Approval Holder's comments

The Works Approval Holder was provided with the draft Amendment Report and draft works approval on 2 June 2020. The Works Approval Holder responded on 2 June 2020 with no comments.

## Conclusion

Based on this assessment, and a consideration of the Key Documents listed in Appendix 1, it has been determined that the application to amend works approval W6050/2017/1 will be granted and details of the amendments are set out in the form of an amended works approval.

Chris Malley  
A/Manager, Process Industries

Delegated Officer under section 20 of the  
*Environmental Protection Act 1986*

## Appendix 1: Key documents

	Document title	Availability
1.	Works Approval W6050/2017/1	accessed at <a href="http://www.der.wa.gov.au">www.der.wa.gov.au</a>
2.	Application to amend works approval W6050/2017/1 dated 10 March 2020	DER Record: A1874863
3.	DER, July 2015. Guidance Statement: Regulatory Principles. Department of Environment Regulation, Perth.	accessed at <a href="http://www.der.wa.gov.au">www.der.wa.gov.au</a>
4.	DER, October 2015. Guidance Statement: Setting Conditions. Department of Environment Regulation, Perth.	
5.	DWER, June 2019. Guideline: Industry Regulation Guide to Licensing. Department of Water and Environmental Regulation, Perth.	
6.	DER, February 2017. Guidance Statement: Risk Assessments. Department of Environment Regulation, Perth.	