

# Works Approval

Works approval number	W6757/2022/1	
Works approval holder ACN Registered business address DWER file number	Agnew Gold Mining Company Pty Ltd 098 385 883 Level 4, 235 St Georges Terrace West Perth WA 6000 DER2022/000557	
Duration	8/03/2023 to 8/03/2028	
Date of issue	8/03/2023	
Premises details	Agnew Gold Mine Mining tenements M36/27, M36/32, M36/53, M36/55, M36/65, M36/150, M36/174, M36/248, M36/314 and M36/450 LEINSTER WA 6437 As defined in Schedule 1	

	Assessed production / design capacity
Category 52: Electric power generation	26 megawatts

This works approval is granted to the works approval holder, subject to the attached conditions, on 8 March 2023, by:

#### MANAGER, RESOURCE INDUSTRIES

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

## Works approval history

Date	Reference number	Summary of changes
8/03/2023	W6757/2022/1	Works approval granted

## Interpretation

In this works approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

## Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

### General

**1.** The works approval holder must manage dust generation at the premises by wetting down activities associated with construction of the power station.

### Infrastructure and equipment

- **2.** The works approval holder must:
  - (a) construct all the infrastructure;
  - (b) in accordance with the corresponding design and construction / installation requirements; and
  - (c) at the corresponding infrastructure location;

as set out in Table 1.

#### Table 1: Infrastructure design and construction requirements

ltem No.	Infrastructure	Design and construction requirements	Infrastructure location
1.	<b>Stage one</b> Gas power station expansion	<ul> <li>(a) To consist of two 2MW Cummins C2000 N5CB gas generators "GG10 and GG11";</li> <li>(b) Gas generators to be housed in purpose built enclosures overlying 250 mm elevated concrete slab</li> <li>(c) Gas generator exhaust to be directed to individual stacks with coordinates listed in Schedule 2.</li> <li>(d) Power station drainage to bunded areas for accumulation of stormwater/other fluids to be disposed of off-site at an appropriately licensed facility</li> </ul>	Installed within existing power station layout As shown in Figure 3 of Schedule 1
2.	Stage two Gas power station expansion	<ul> <li>(a) To consist of two 2MW Cummins C2000 N5CB gas generators: "GG12 and GG13";</li> <li>(b) Gas generators to be housed in purpose built enclosures overlying 250 mm elevated concrete slab</li> <li>(c) Gas generator exhaust to be directed to individual stacks with coordinates listed in Schedule 2.</li> <li>(d) Power station drainage to bunded areas for accumulation of stormwater/other fluids to be disposed of off-site at an appropriately licensed facility</li> </ul>	Installed in an extended area of approximately 0.82 hectares (ha) immediately north-east of the existing power station As shown in Figure 3 of Schedule 1

#### **Compliance reporting**

- **3.** The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 2 being constructed and/or installed:
  - (a) undertake an audit of their compliance with the requirements of condition 2; and
  - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- **4.** The Environmental Compliance Report required by condition 3, must include as a minimum the following:
  - (a) certification by a suitably qualified engineer that the items of infrastructure or component(s) thereof, as specified in condition 2, have been constructed in accordance with the relevant requirements specified in condition 2;
  - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 2; and
  - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

### Time limited operations phase

#### **Commencement and duration**

- **5.** The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 2 where the Environmental Compliance Report as required by condition 3 has been submitted by the works approval holder for that item of infrastructure.
- **6.** The works approval holder may conduct time limited operations for "Stage one" infrastructure specified in condition 8 (as applicable):
  - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 5 for that item of infrastructure; or
  - (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 6(a).
- 7. The works approval holder may conduct time limited operations for "Stage two" infrastructure specified in condition 8 (as applicable):
  - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 5 for that item of infrastructure; or
  - (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 7(a).

#### Time limited operations requirements and emission limits

8. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	<b>Stage one</b> Gas power station (GG10 and GG11)	<ul> <li>(a) Maintained and operated in accordance with the manufacturers specifications;</li> <li>(b) Gas generator exhaust to be directed to individual stacks with coordinates listed in Schedule 2.</li> </ul>	Installed within existing power station layout As shown in Figure 3 of Schedule 1
2.	Stage two Gas power station (GG12 and GG13)	<ul> <li>(a) Maintained in accordance with the manufacturers specifications;</li> <li>(b) Gas generator exhaust to be directed to individual stacks with coordinates listed in Schedule 2.</li> </ul>	Installed in an extended area of approximately 0.82 hectares (ha) immediately north- east of the existing power station As shown in Figure 3 of Schedule 1
3.	<ul> <li>Hydrocarbon storage during stage one and two</li> <li>Bulk lubricant: 1 x 10 kL (gas engines) and 1 x 3 kL (diesel engines) self- bunded tanks.</li> <li>Waste Oil: 1 x 5 kL self-bunded tank.</li> <li>Diesel Fuel: 1 x 10 kL self-bunded day tank.</li> </ul>	<ul> <li>(a) Maintained and operated with the manufacturers specifications;</li> <li>(b) Stored within bunded areas designed to contain at least 110% of the total volume of materials stored; and</li> <li>(c) Hydrocarbon leaks spillages to be contained immediately, for disposal offsite at an appropriately licensed facility</li> </ul>	As shown in Figure 3 of Schedule 1

Table 2: Infrastructure and equipment requirements during time limited operations

#### **Emissions and discharges**

**9.** The works approval holder must ensure that emissions specified in Table 3 are discharged only from the corresponding discharge point and only at the corresponding discharge location.

#### Table 3 Authorised emission/discharge points

Emission	Discharge point	Discharge point location
<b>Stage one</b> Waste gases from two LNG exhaust stacks: NOx, CO, unburned hydrocarbons, SO <sub>2</sub> , particulate matter in accordance with manufacturers specifications	Two LNG exhaust stacks: GG10 and GG11	As shown in Figure 3 of Schedule 1 and detailed in Table 6 of Schedule 2
<b>Stage two</b> Waste gases from two LNG exhaust stacks: NOx, CO, unburned hydrocarbons, SO <sub>2</sub> , particulate matter in accordance with manufacturers specifications	Two LNG exhaust stacks: GG12 and GG13	As shown in Figure 3 of Schedule 1 and detailed in Table 6 of Schedule 2

#### Monitoring - time limited operations

**10.** The works approval holder must undertake monitoring specified in Table 4 during time limited operations for the LNG and diesel power station.

Table 4 Emission monitoring during time limited operations

Monitoring points	Parameter	Units <sup>1</sup>	Averaging period	Frequency	Method
Each new power generator stack	Volumetric flow rate	m³/s	Minimum 30 minutes	A single sampling event	USEPA Method 2
as listed in Table 6 Schedule 2.	Oxides of Nitrogen (NOx)	mg/m <sup>3</sup>		undertaken between 30 and 60 calendar days following commencement of time limited operations	USEPA Method 7D or 7E

Note 1: All units are referenced to STP dry

- **11.** The works approval holder must ensure that all monitoring equipment used to comply with condition 10 is calibrated in accordance with the manufacturer's specifications.
- **12.** The works approval holder must ensure that all non-continuous sampling and analysis undertaken required by condition 10 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

#### **Compliance reporting – time limited operations**

- **13.** The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations.
- **14.** The works approval holder must ensure the report required by condition 13 includes the following:
  - (a) a summary of the time limited operations;
  - (b) a review of performance and compliance against the conditions of the works approval; and
  - (c) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

### **Records and reporting (general)**

- **15.** The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
  - (a) the name and contact details of the complainant, (if provided);
  - (b) the time and date of the complaint;
  - (c) the complete details of the complaint and any other concerns or other issues raised; and
  - (d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.
- **16.** The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:
  - (a) the works conducted in accordance with condition 2;
  - (b) any maintenance of infrastructure that is performed in the course of complying with condition 7;
  - (c) complaints received under condition 15.
- **17.** The books specified under condition 16 must:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - (c) be retained by the works approval holder for the duration of the works approval; and
  - (d) be available to be produced to an inspector or the CEO as required.

## **Definitions**

In this works approval, the terms in Table 5 have the meanings defined.

### Table 5: Definitions

Term	Definition	
books	has the same meaning given to that term under the EP Act.	
CEO	<ul> <li>means Chief Executive Officer.</li> <li>CEO for the purposes of notification means:</li> <li>Director General</li> <li>Department administering the <i>Environmental Protection Act</i> 1986</li> <li>Locked Bag 10</li> <li>Joondalup DC WA 6919</li> <li>info@dwer.wa.gov.au</li> </ul>	
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.	
discharge	has the same meaning given to that term under the EP Act.	
emission	has the same meaning given to that term under the EP Act.	
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.	
EP Act	Environmental Protection Act 1986 (WA).	
EP Regulations	Environmental Protection Regulations 1987 (WA).	
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.	
prescribed premises	has the same meaning given to that term under the EP Act.	
Suitably qualified engineer	<ul> <li>means a person who:</li> <li>(a) holds a tertiary qualification in mechanical engineering or equivalent; and</li> <li>(b) has a minimum of three years of experience working as an engineer.</li> </ul>	
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.	
USEPA Method 2	means the United States Environmental Protection Authority Method 2 – Determination of Stack Gas Velocity Flow Rate	

Term	Definition	
USEPA Method 7	means the United States Environmental Protection Authority Method 7 – Determination of Nitrogen Oxide Emissions from Stationary Sources	
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.	
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.	

#### END OF CONDITIONS

## Schedule 1: Maps

### **Premises map**

The boundary of the prescribed premises is shown in the map below (Figure 1).



Figure 1: Map of the boundary of the prescribed premises



Figure 2 Power plant location and land tenure



\mbssvrlworking\Gold Fields\Agnew Gold Mine\Approvals\Works Approval\2022 Power Station Expansion\GIS\Agnew WA Power Station\_2022.qgz 15/02/2023 F4 Existing and Proposed Power Station Layout

#### Figure 3 Existing and proposed power station layout

## **Schedule 2: Power station stack coordinates**

The power station stack coordinates for the expansion are listed in Table 6.

#### Table 6: Gas power station stack coordinates (GDA2020)

Stack ID	Easting	Northing
GG10	6900599.342	255510.566
GG11	6900595.003	255522.842
GG12	6900650.494	2555461.6
GG13	6900645.99	255473.985