



<b>Works approval number</b>	W6369/2020/1
<b>Works approval holder</b>	Mt Weld Mining Pty Limited
<b>ACN</b>	053 160 400
<b>Registered business address</b>	Suite 1, 45 Royal Street EAST PERTH WA 6004
<b>DWER file number</b>	DER2020/000102
<b>Duration</b>	29/10/2020 to 01/01/2026
<b>Date of amendment</b>	28/08/2023
<b>Premises details</b>	Mt Weld Rare Earths Project Elora Road Mining Tenement M38/58 LAVERTON WA 6440 As defined by the Premises maps in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non metallic ore.	443,000 tonnes per year

This amended works approval is granted to the works approval holder, subject to the attached conditions, on 28 August 2023, by:

**A/Manager, Resource Industries  
Regulatory Services**

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

## Works Approval history

Date	Reference number	Summary of changes
29/10/2020	W6369/2020/1	Works approval granted
23/09/2022	W6369/2020/1	Works approval amended to extend commissioning period by an additional 180 calendar days.
28/08/2023	W6369/2020/1	<p>Works approval amended to:</p> <ul style="list-style-type: none"> <li>▪ Replace the rotary dryer feed chute with an enclosed loading system, internal equipment of the rotary drier and to add a baghouse with an additional discharge stack and replace the sealed transfer chute to the discharge conveyor.</li> <li>▪ Extend the expiry date of the works approval to allow for the installation, commissioning and time limited operations of the new equipment.</li> </ul>

## 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:

### Construction phase

#### Infrastructure and equipment

1. The works approval holder must construct and/or install the infrastructure:
  - (a) in accordance with the corresponding design and construction requirements; and
  - (b) at the corresponding infrastructure location as set out in Table 1.

**Table 1: Design and construction / installation requirements**

	Infrastructure	Design and installation requirements	Infrastructure location
1.	Indirect fired rotary dryer	<ol style="list-style-type: none"><li>i. A hood must be installed on the feed bin to minimize fugitive dust generation.</li><li>ii. The combustion chamber is to be completely separated from the concentrate loading/discharge chamber.</li><li>iii. A baghouse is to be constructed with:<ol style="list-style-type: none"><li>a. Separate discharge flue unconnected to the combustion gas flue</li><li>b. An induced draught fan capable of sufficiently pulling steam released in dryer through the heated baghouse filter to reduce particle emissions.</li><li>c. A sealed collection bin to contain collected concentrate dust.</li></ol></li><li>iv. The discharge chamber assembly for the dry concentrate discharge chute must be constructed with an off-take connection to the baghouse.</li><li>v. Controls to be designed such that the starting of the dryer causes the starting of the of the induced draught fan providing positive pressure in the discharge stack.</li><li>vi. Discharge of dried concentrate from the drier will be via the concentrate discharge chute to an enclosed conveyor or augur.</li><li>vii. Drainage infrastructure must be constructed to direct stormwater runoff from the dryer footprint area to the existing runoff pond on the premises.</li></ol>	As indicated in Schedule 1, Figure 2
2.	Hydrocarbon storage	Must be constructed in accordance with AS 1940-2004.	--

## Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure required by condition 1 being constructed and/or installed:
  - (a) undertake an audit of their compliance with the requirements of condition(s) 1; and
  - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
  - (a) certification by an authorised person that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
  - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
  - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

## Environmental commissioning phase

### Environmental Commissioning- commencement and duration

4. The works approval holder may only commence environmental commissioning of an item of infrastructure listed in condition 5 Table 2 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 2 of this works approval.
5. Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 2 may only be carried out:
  - (a) in accordance with the corresponding commissioning requirements; and
  - (b) for the corresponding authorised commissioning duration.

**Table 2: Environmental commissioning requirements**

	Infrastructure	Commissioning requirements	Authorised commissioning duration
1.	Indirect fired rotary dryer	<ol style="list-style-type: none"><li>i. Hood installed on the feed bin must be maintained to minimize fugitive dust generation.</li><li>ii. The dryer must not be in operation without the baghouse induced draught fan also being in operation.</li><li>iii. The baghouse induced draught fan must be maintained and operated such that positive pressure in the discharge stack is sufficient to pull steam released from the dryer through the heated baghouse filter.</li><li>iv. A dust collection bin must be in place to contain dust collected by the baghouse at all times the induced draught fan is in operation.</li><li>v. Drainage infrastructure must be maintained to</li></ol>	No more than 180 days from the date of the submission of the Environmental Compliance Report

		direct stormwater runoff from the dryer footprint area to the existing runoff pond on the premises.	
2.	Hydrocarbon storage	Must be undertaken in accordance with AS 1940.	

### Monitoring during environmental commissioning

6. The works approval holder must monitor emissions:

- from each discharge point;
- for the corresponding parameter;
- at the corresponding frequency;
- for the corresponding averaging period;
- in the corresponding unit; and
- using the corresponding method, as set out in Table 3.

**Table 3: Emissions monitoring during environmental commissioning**

Discharge Point	Parameter	Frequency <sup>1</sup>	Averaging period	Unit <sup>2</sup>	Method <sup>3</sup>
Dryer Heat Tube Discharge Flue Refer Schedule 1, Figure 3	Volumetric flow rate	Once during commissioning period after steady state is achieved	N/A	m <sup>3</sup> /s	USEPA Method 2
	Total Particulate Matter		60 minutes	mg/m <sup>3</sup>	USEPA Method 5
	Oxides of Nitrogen (NO <sub>x</sub> as NO <sub>2</sub> )		30 minutes		USEPA Method 7E
	Total Volatile Organic Compounds (VOCs)		60 minutes		USEPA Method 18
	Particulate metals (speciated)		60 minutes		USEPA Method 29
	Radionuclides (in particulates)		60 minutes	Bq/dscm	USEPA Method 114
Combustion Gas Discharge Flue Refer Schedule 1, Figure 3	Volumetric flow rate	Once during commissioning period after steady state is achieved	N/A	m <sup>3</sup> /s	USEPA Method 2
	Total Particulate Matter		60 minutes	mg/m <sup>3</sup>	USEPA Method 5
	Oxides of Nitrogen (NO <sub>x</sub> as NO <sub>2</sub> )		30 minutes		USEPA Method 7E

Discharge Point	Parameter	Frequency <sup>1</sup>	Averaging period	Unit <sup>2</sup>	Method <sup>3</sup>
	Total Volatile Organic Compounds (VOCs)		60 minutes		USEPA Method 18
	Particulate metals (speciated)		60 minutes		USEPA Method 29

Note 1: Duplicate sample runs conducted consecutively on the same sampling day

Note 2: All units are referenced to STP Dry

Note 3: Where any USEPA method refers to USEPA Method 1 for the sampling plane, this must be read as a referral to AS/NZS 4323.1:2001

7. The works approval holder must record the results of all monitoring activity required by condition 6.
8. The works approval holder must ensure that all monitoring equipment used to comply with condition 6 is operated and calibrated in accordance with the manufacturer's specifications.
9. The works approval holder must ensure that all non-continuous sampling and analysis undertaken pursuant to condition 6 is undertaken by a holder of a current accreditation from the National Association of Testing Authorities (NATA) for the methods of sampling and analysis relevant to the corresponding relevant parameter.

### Environmental commissioning - reporting requirements

10. The works approval holder must submit to the CEO an Environmental Commissioning Report within 60 calendar days of the completion date of environmental commissioning for each item of infrastructure specified in Table 2.
11. The works approval holder must ensure the Environmental Commissioning Report required by condition 10 of this works approval includes the following:
  - (a) a summary of the environmental commissioning activities undertaken, including timeframes and amount of rare earth concentrate processed through the indirect fired rotary dryer;
  - (b) the point-source emissions monitoring results recorded in accordance with condition 7;
  - (c) a review of the works approval holder's performance and compliance against the design specifications conditions of this works approval; and
  - (d) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures.

## Time limited operations phase

### Commencement and duration

12. The works approval holder may only commence time limited operations for an item of infrastructure identified in Table 1:
  - (a) where the item of infrastructure is not authorised to undertake environmental commissioning, the Environmental Compliance Report as required by

condition 2 has been submitted by the works approval holder for that item of infrastructure; and

- (b) where the item of infrastructure is authorised to undertake environmental commissioning under condition 4, the Environmental Commissioning Report for that item of infrastructure as required by condition 10 has been submitted by the works approval holder.

**13.** The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1:

- (a) for a period not exceeding 120 calendar days from the day the works approval holder meets the requirements of condition 2 or 10 (as applicable) 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 13(a).

### Time limited operations- infrastructure and equipment

**14.** During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 4 is maintained and operated in accordance with the corresponding operational requirement set out in Table 4.

**Table 4: Time limited operations requirements**

	Infrastructure	Time limited operations requirements	Authorised duration for time limited operations
1.	Indirect fired rotary dryer	<ul style="list-style-type: none"> <li>i. Hood installed on the feed bin must be maintained to minimize fugitive dust generation.</li> <li>ii. The dryer must not be in operation without the baghouse induced draught fan also being in operation.</li> <li>iii. The baghouse induced draught fan must be maintained and operated such that positive pressure in the discharge stack is sufficient to pull steam released from the dryer through the heated baghouse filter.</li> <li>iv. A dust collection bin must be in place to contain dust collected by the baghouse at all times the induced draught fan is in operation.</li> <li>v. Drainage infrastructure must be maintained to direct stormwater runoff from the dryer footprint area to the existing runoff pond on the premises.</li> </ul>	No more than 120 calendar days from the date of submission of environmental commissioning report
2	Hydrocarbon storage	<ul style="list-style-type: none"> <li>i. Must be undertaken in accordance with AS 1940.</li> </ul>	

### Time limited operations - reporting requirements

**15.** The works approval holder must submit to the CEO a report on performance during time limited operations within 60 calendar days of the completion date of time limited operations for each item of infrastructure specified in Table 4.

- 16.** The works approval holder must ensure that time limited operations report required by condition 15 of this works approval includes the following:
- (a) a summary of the activities undertaken during time limited operations, including timeframes and amount of rare earth concentrate processed through the indirect fired rotary dryer;
  - (b) a review of the works approval holder's performance and compliance against the design specifications conditions of this works approval; and
  - (c) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures.

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

- 17.** 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.
- 18.** 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 1;
  - (b) any maintenance of infrastructure that is performed in the course of complying with condition 14;
  - (c) monitoring programmes undertaken in accordance with conditions 6; and
  - (d) complaints received under condition 17.
- 19.** The books specified under condition 18 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	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
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 commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
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	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
prescribed premises	has the same meaning given to that term under the EP Act.
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.

Term	Definition
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.

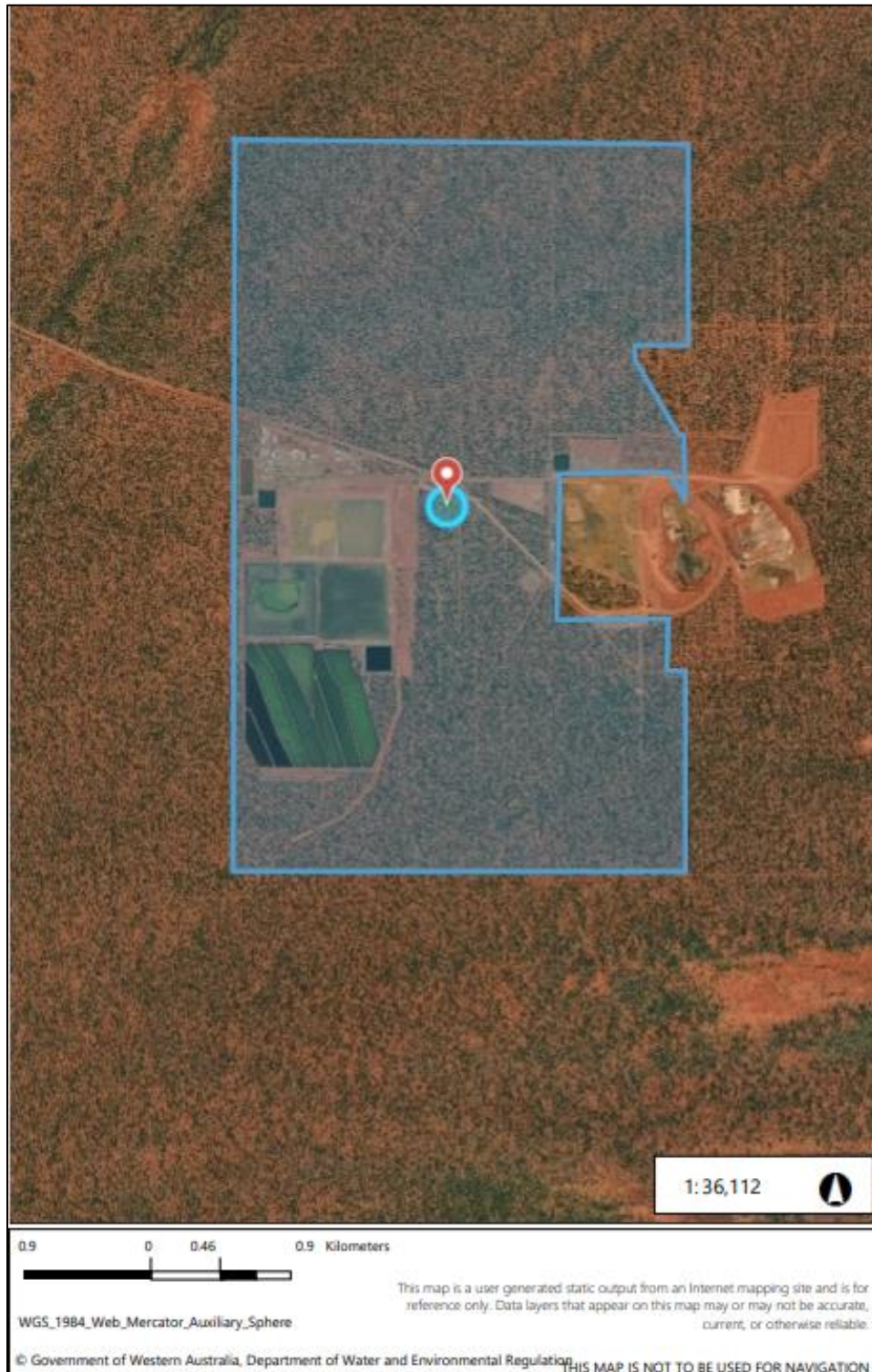
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**END OF CONDITIONS**

# Schedule 1: Maps

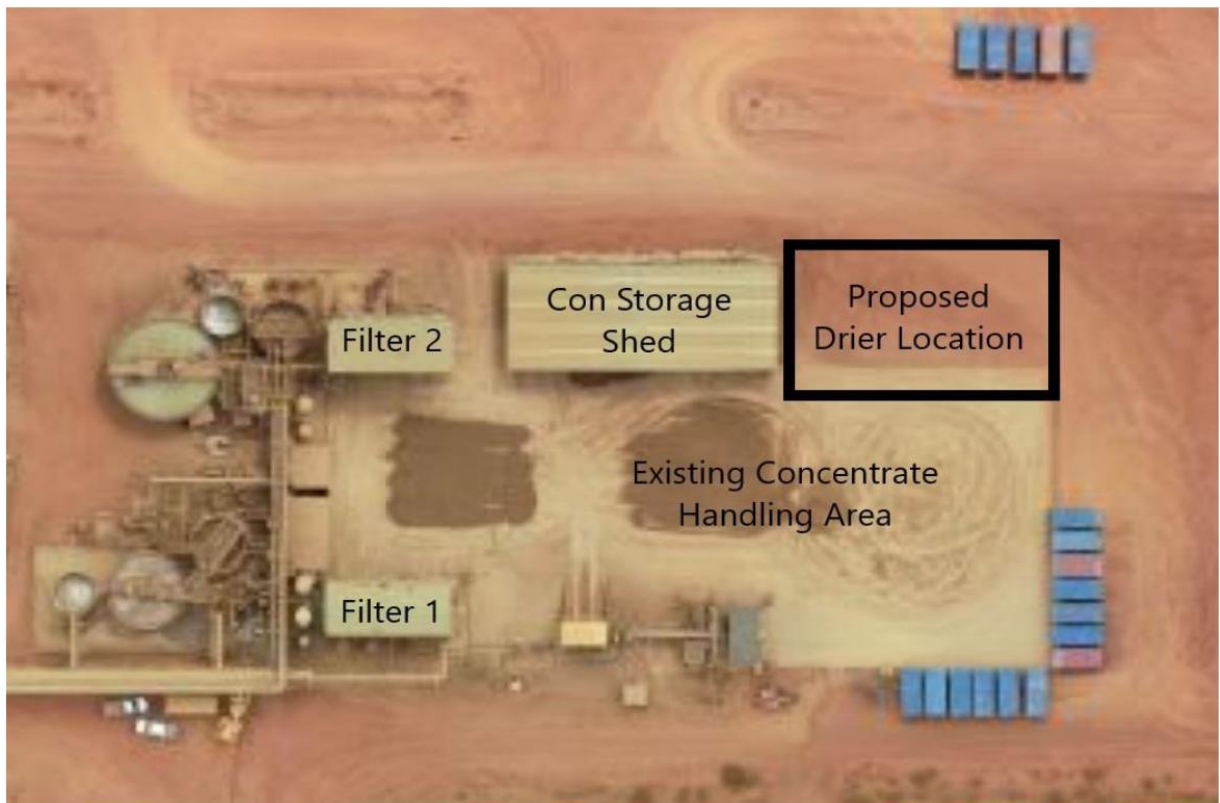
## Premises map

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

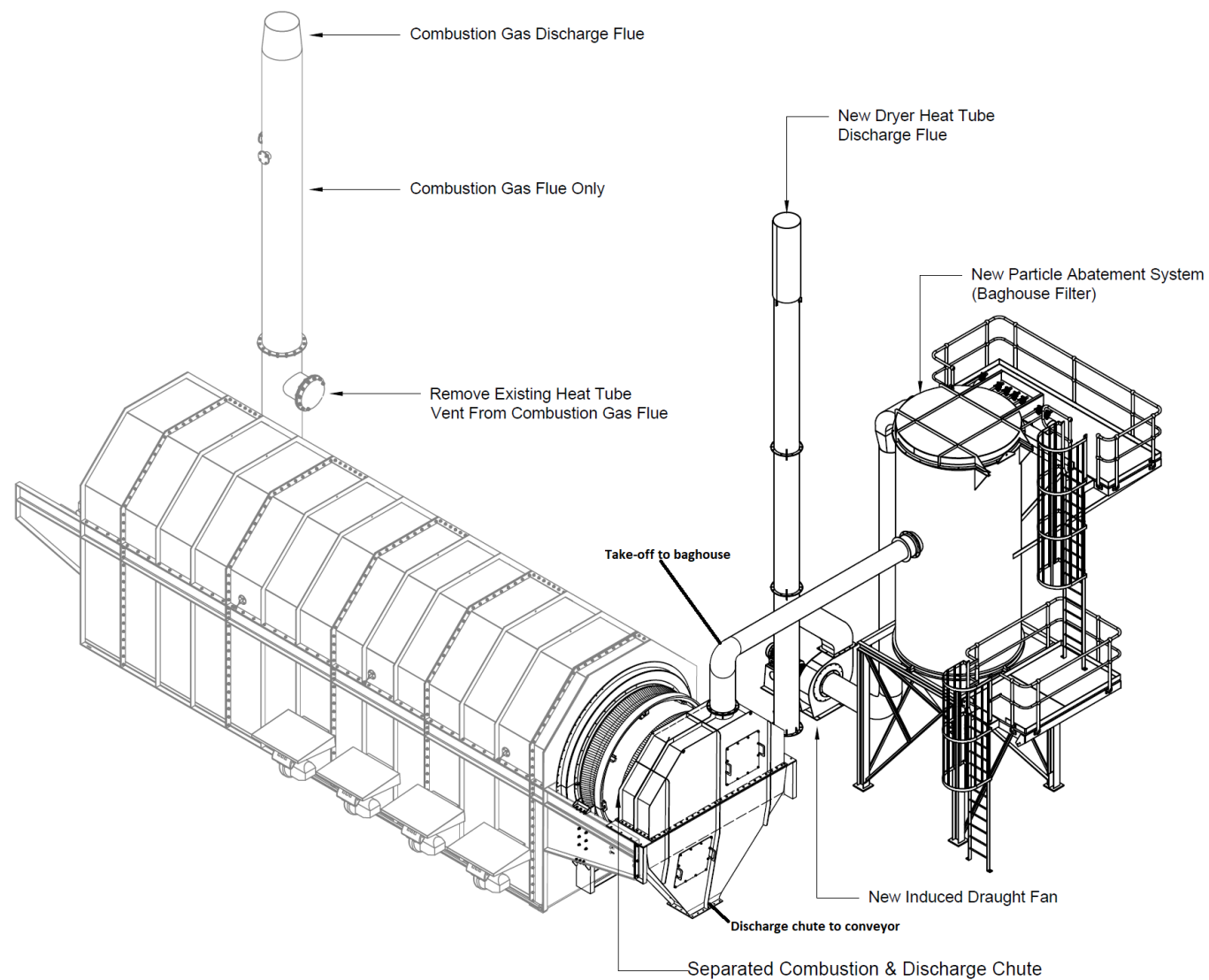


**Figure 1: Map of the boundary of the prescribed premises**

W6369/2020/1 (Date of amendment: 28 August 2023)



**Figure 2: Position of dryer infrastructure**



**Figure 3: Rotary drier, baghouse, combustion gas flue and dryer heat tube/discharge flue**

W6369/2020/1 (Date of amendment: 28 August 2023)