ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES LAND AND PROPERTY MINING AND MINERAL PROCESSING MINERAL ESTATES WASTE RESOURCE MANAGEMENT

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NYOBOLT LIMITED

**PRODUCTION OF PRODUCT A** 

NON-TECHNICAL SUMMARY (REDACTED)

JULY 2024





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## **NON-TECHNICAL SUMMARY (REDACTED)**

JULY 2024

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DRAWINGS	TITLE	SCALE
BM12404-001	Environmental Permit Boundary Plan	1:1,250 @A2



# 1 INTRODUCTION

- 1.1.1 Nyobolt Limited ("Nyobolt") have commissioned Wardell Armstrong to prepare an environmental permit application for their pilot facility in Haverhill, Suffolk, which will produce Product A to supply the battery manufacturing sector.
- 1.1.2 Product A anodes have the ability to boost lithium-ion batteries leading to batteries storing large amounts of energy and could help to speed the adoption of electric vehicle technologies. Nyobolt is at the cutting edge of research and development in this area.
- 1.1.3 This Non-Technical Summary has been prepared to provide an overview of the environmental permit application.
- 1.1.4 Section 2 provides detail of the site location and site setting.
- 1.1.5 Section 3 provides an overview of the proposed activities to be carried out at the pilot facility.
- 1.1.6 Section 4 provides a summary of the contents of the environmental permit application.
- 1.1.7 Section 5 summaries the environmental protection measures which will be in place to ensure the activities are carried out in an environmentally safe manner and point source and fugitive emissions are controlled.
- 1.1.8 The facility will operate with a written Environmental Management System in place, in accordance with Environment Agency Guidance.



# 2 SITE LOCATION AND SETTING

- 2.1.1 The full site address is Unit 1a and b, Homefield Road, Homefield Industrial Estate, Haverhill, CB9 8QP.The National Grid Reference (NGR) for the facility is TL 66273 44544.
- 2.1.2 The facility is located on an industrial estate, located approximately 1,200m southwest of Haverhill town centre and 25km southeast of Cambridge City Centre.
- 2.1.3 The site is located within the industrial setting, with the site bound to the:
  - North by deciduous woodland and the Puddle Brook Playing Fields;
  - East by further industrial units;
  - South by further industrial units, the A1017 and agricultural land; and
  - West by the Puddle Brook Playing Fields, the A1017 and agricultural land.
- 2.1.4 The environmental permit boundary is shown in red on drawing BM12404-001.
- 2.1.5 The Amenity, Accident and Habitats Risk Assessment provides further detail on the site setting and the sensitive receptors in proximity of the facility.



## **3** OVERVIEW OF PROPOSED ACTIVITIES

- 3.1 *Process Overview*
- 3.1.1 Nyobolt have developed their processes in order to produce Product A, which involves combining niobium pentoxide and tungsten trioxide, via a sequence of processes.
- 3.1.2 The precursors are milled, mixed, dried, baked, deagglomerated and blended to the final material specification.
- 3.1.3 This processes does not involve the addition of, nor generate, any chemicals and no organic additives are used.
- 3.1.4 Product A will be produced to an appropriate standard to supply the anode manufacturing industry and further to the battery manufacturing sector.
- 3.1.5 It is anticipated that this pilot facility will incrementally increase production; initially producing up to 20 tonnes of Product A, increasing to 100 200 tonnes in the subsequent year and 900 tonnes of Product A per year after that.
- 3.1.6 Further detail and process flow diagrams are provided in the Operating Techniques Report.
- 3.2 Environmental Permitting
- 3.2.1 The production of Product A is a listed activity under Schedule 1 Section 4.2 Part A(1)(v) of the Environmental Permitting Regulations (England and Wales) 2016.
- 3.2.2 It is expected that there will be Directly Associated Activities to the process, including the storage and handling of raw materials and the final product, and control and abatement systems for point source emissions to air.



# 4 ENVIRONMENTAL PERMIT APPLICATION OVERVIEW

- 4.1.1 The environmental permit application comprises of the following documents:
  - Application forms
    - o Part A1
    - o Part B2
    - o Part B3
    - o Part F1
  - This Non-Technical Summary
  - Operating Techniques
  - Environmental Management System Summary
  - Amenity, Accident and Habitats Risk Assessment
  - Best Available Techniques (BAT) Assessment
  - H1 Screening Tool and Summary Note
  - Site Condition Report
  - Associated Drawings
- 4.1.2 The documents supplied demonstrate that the activities will not pose a significant risk to the environment or impact on the amenity to the surrounding environment. The facility will operate in accordance with an Environmental Management System and with comprehensive procedures and protocols ensuring any risks will be managed appropriately.



## 5 ENVIRONMENTAL PROTECTION MEASURES

- 5.1.1 The overall impact of the facility to the environment is considered to be very low. Nyobolt have designed the new pilot facility with comprehensive dust control systems, to ensure any particulate matter is captured and contained within the building. Further detail of the dust abatement system is provided in the Dust Management Plan and Operating Techniques Reports.
- 5.1.2 A H1 Screening Assessment has been carried out to assess the impact of the point source emission to air from the furnace. The H1 Screening Tool and accompanying Technical Note is included in the permit application.
- 5.1.3 All activities will be carried out inside a building, which comprises of impermeable surfacing and sealed drainage.
- 5.1.4 The raw materials used in the production process are relatively non-reactive and they will be stored in appropriate containment (FIBCs) with bunding.
- 5.1.5 There are no organic chemicals to be added to the process, nor does the process generate any chemicals.
- 5.1.6 An Amenity and Accident Risk Assessment has been prepared as part of the permit application to fully assess the risk from the activities on the surrounding environment.



DRAWINGS



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