

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



**ASCO UK LTD** 

**GREAT YARMOUTH SHIP TO SHORE FACILITY** 

**NON-TECHNICAL SUMMARY** 

**DECEMBER 2022** 



#### Wardell Armstrong

Sir Henry Doulton House, Forge Lane, Etruria, Stoke-on-Trent, ST1 5BD, United Kingdom Telephone: +44 (0)1782 276 700 www.wardell-armstrong.com



DATE ISSUED: DECEMBER 2022

JOB NUMBER: BM12124

REPORT NUMBER: 0004
VERSION: V0.1
STATUS: Final

**ASCO UK LTD** 

**GREAT YARMOUTH SHIP TO SHORE FACILITY** 

NON-TECHNICAL SUMMARY

**DECEMBER 2022** 

**PREPARED BY:** 

Katie Heath Environmental Scientist

**REVIEWED BY:** 

Alison Cook Technical Director

**APPROVED BY:** 

Alison Cook Technical Director

This report has been prepared by Wardell Armstrong LLP with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The report is confidential to the Client and Wardell Armstrong LLP accepts no responsibility of whatever nature to third parties to whom this report may be made known.

No part of this document may be reproduced without the prior written approval of Wardell Armstrong LLP.



WASTE RESOURCE MANAGEMENT

Olison Sal

## ASCO UK LTD GREAT YARMOUTH SHIP TO SHORE FACILITY NON-TECHNICAL SUMMARY



# **CONTENTS**

1	INTRODUCTION		1
2	ENVIRONMENTAL PERMIT APPLICATION2		
3	SITE SETTING		
4	PROPOSED ACTIVITIES		
5	ENVIRONMENTAL RISK AND MITIGATION4		
DRAWINGS		TITLE	SCALE
BM12124_001		Site Location Plan	1:20,000
BM12124_002		Environmental Permit Boundary and Site Layout	1:150



## 1 INTRODUCTION

- 1.1.1 ASCO UK Ltd propose to develop a waste storage facility (tank farm) at its 'ship to shore' site on South Denes Road, Great Yarmouth. The location of the site is shown on drawing BM12124-001.
- 1.1.2 The facility will accept up to 20,000 tonnes per annum of hazardous and non-hazardous wastes from the oil and gas industry, including offshore platforms and drilling rigs, and onshore gas terminals. Within storage tanks, materials will undergo treatment by gravity settlement, allowing separate offtake of the mud and liquid fractions of the waste.
- 1.1.3 Under the Environmental Permitting (England and Wales) Regulations 2016, the proposed storage of hazardous waste is classified as an installation activity and listed under Schedule 1, Part 2, Section 5.6 A(1), while the storage of non-hazardous waste is classified as a waste operation. The physico-chemical treatment (by gravity separation) of hazardous waste for recovery or disposal and the physico-chemical treatment of non-hazardous waste for disposal are also listed activities, falling under Section 5.3 A(1) and Section 5.4 A(1), respectively. The treatment of non-hazardous waste for recovery is classified as a waste operation.
- 1.1.4 Permitted wastes will be limited to drilling fluids contaminated with hydrocarbons, plus other liquid and slurry wastes from offshore drilling and on-shore gas holders. No Naturally Occurring Radioactive Materials (NORM) will be deposited at the facility. Waste deliveries will be made by ship and road tanker and all wastes will be removed from site by road tanker.
- 1.1.5 The facility will comprise five storage tanks with a total storage capacity of 550m³. All tanks will be located within a single bund with a capacity of c. 392m³ that provides sufficient capacity for 110% of the largest tank (c. 177m³) and at least 25% of the total tank capacity (137.5m³). Hazardous and non-hazardous wastes will not be stored in the same tank.
- 1.1.6 The permit boundary is shown on drawing BM12124-002 and includes the tank farm, all related pipework and an area adjacent to the bund for road tankers to discharge and off-take waste. The wider ASCO site includes a lower tier COMAH facility which is located adjacent to the permit boundary of the ship to shore site.
- 1.1.7 The facility will be operated under an Environmental Management System (EMS) accredited to ISO14001.



## 2 ENVIRONMENTAL PERMIT APPLICATIONH

- 2.1.1 This application comprises the following: -
  - Applications forms;
    - Part A;
    - Part B2;
    - o Part B3;
    - o Part B4;
    - Part F;
  - Non-Technical Summary;
  - Operating Techniques;
  - Best Available Techniques Assessment;
  - Amenity and Accident Risk Assessment;
  - Site Condition Report;
  - Conservation Risk Assessment;
  - Flood Risk Assessment; and
  - Drawings;
    - o Permit Boundary Plan;
    - Site Layout Plan;
    - Site infrastructure.
- 2.1.2 These documents detail the proposals for the Ship to Shore facility, explaining the measures to protect the environment both during the operation of the site and at closure and decommissioning.

## 3 SITE SETTING

- 3.1.1 The facility is located on the quayside of Great Yarmouth Harbour on the tidal River Yare, South Denes Road, Great Yarmouth NR30 3LX. The NGR for the facility is TG 52665 05690. Drawing reference BM12124\_001 shows the wider location of the site.
- 3.1.2 Surrounding the site are a mixture of commercial and residential premises. Several environmentally sensitive areas are in the wider geographical area of the site. These receptors include Breydon Water SSSI, North Denes SSSI, residential areas and commercial areas. These are detailed in the Amenity and Accident Risk Assessment.
- 3.1.3 The River Yare directly borders the facility and the North Sea is some 600m to the East.



## 4 PROPOSED ACTIVITIES

- 4.1.1 The facility will be used for the receipt and storage of both hazardous and non-hazardous wastes from the oil and gas industry.
- 4.1.2 The site will be operated according to the operator's management procedures and Environmental Management System (EMS) utilising best available techniques (BAT) to reflect best practice and ensure environmental protection.
- 4.1.3 Wastes will arrive on resupply ships and road tankers. Following checks, the wastes will be offloaded into a tank according to its properties. During storage, the material will undergo gravity settlement, separating the liquid proportion of the material from the muds. These separated fractions can then be removed from site by road-tanker separately for further treatment and/or disposal at an appropriately permitted facility.
- 4.1.4 Stored wastes will be segregated in terms of their nature and characteristics including hazardous classification or state.
- 4.1.5 The proposed permitted wastes types are a known type and composition due to the mature nature of the oil and gas industry however, all appropriate Duty of Care and documentation will be exchanged and appropriately retained at the site in regard to the wastes accepted and dispatched from the site.
- 4.1.6 Due to tide and resupply requirements in the industry ships may arrive at varying times through the day and night. The site will therefore operate and be able to accept waste 24 hours a day, 365 days a year.
- 4.1.7 An appropriately qualified Technically Competent Manager will attend and inspect the site frequently and trained staff will be on site during waste deliveries or dispatch to ensure that the site complies with its permit conditions and does not cause pollution. The Technically Competent Manager will be present at the site in line with Environment Agency guidance requirements.
- 4.1.8 All waste storage tanks will have appropriate over-fill alarms and non-return valves fitted.
- 4.1.9 Tanks and pipework will be cleaned and flushed at appropriate times and between waste transfer to prevent the contamination of non-hazardous wastes with hazardous wastes. The effluent from this cleaning will be collected and removed by tanker to an appropriately permitted facility.
- 4.1.10 Further information is provided in the Operating Techniques report.



## 5 ENVIRONMENTAL RISK AND MITIGATION

- 5.1.1 Robust site design ensures there is appropriate environmental protection at the site.

  The main risk resulting from the site will be emissions to surface water, especially during off-loading and delivery.
- 5.1.2 To protect surface water, secondary containment is provided for the tanks by a CIRIA C736 compliant bund. Tertiary containment is also provided through the wider site surface water drainage system, which will provide a sealed drainage system through automated shut-off valves. This also effectively provides secondary containment for the reception point (pipe connection) and outloading areas of the facility. Only clean rainwater will be discharged to surface water.
- 5.1.3 Emissions to air will be limited to any releases through the pressure relief valves fitted to each storage tank for health and safety purposes, likely limited to during delivery. Any scenarios where the PRV is open will be very short (seconds as opposed to minutes or longer) and will not present a risk to air quality.
- 5.1.4 The site will have minimal risk of causing additional risk of noise pollution given the site's heavily industrial setting and the fact that the waste is carried on existing ship movements.
- 5.1.5 Further information has been provided in the Amenity and Accident Risk Assessment for receptors within the locality of the facility. These include residential, commercial, industrial and environmental receptors.



# **DRAWINGS**

# wardell-armstrong.com

#### STOKE-ON-TRENT

Sir Henry Doulton House Forge Lane Etruria Stoke-on-Trent ST1 5BD Tel: +44 (0)1782 276 700

#### **BIRMINGHAM**

Two Devon Way Longbridge Technology Park Longbridge Birmingham B31 2TS Tel: +44 (0)121 580 0909

**BOLTON** 41-50 Futura Park Aspinall Way Middlebrook Bolton BL6 6SU Tel: +44 (0)1204 227 227

## **BRISTOL**

**Temple Studios Temple Gate** Redcliffe Bristol BS1 6QA Tel: +44 (0)117 203 4477

## **BURY ST EDMUNDS**

**Armstrong House** Lamdin Road Bury St Edmunds Suffolk **IP32 6NU** Tel: +44 (0)1284 765 210

## CARDIFF

Tudor House 16 Cathedral Road Cardiff **CF119LJ** Tel: +44 (0)292 072 9191

#### CARLISLE

Marconi Road Burgh Road Industrial Estate Carlisle Cumbria CA2 7NA Tel: +44 (0)1228 550 575

#### **EDINBURGH**

**Great Michael House** 14 Links Place Edinburgh EH6 7EZ Tel: +44 (0)131 555 3311

## **GLASGOW**

24 St Vincent Place Glasgow G1 2EU Tel: +44 (0)141 428 4499

#### **LEEDS**

36 Park Row Leeds LS1 5JL Tel: +44 (0)113 831 5533

#### LONDON

Third Floor 46 Chancery Lane London WC2A 1JE Tel: +44 (0)207 242 3243

## **NEWCASTLE UPON TYNE**

City Quadrant 11 Waterloo Square Newcastle upon Tyne NE1 4DP Tel: +44 (0)191 232 0943

#### **TRURO**

Baldhu House Wheal Jane Earth Science Park Baldhu Truro TR3 6EH Tel: +44 (0)187 256 0738

#### International office:

#### **ALMATY**

29/6 Satpaev Avenue Hyatt Regency Hotel Office Tower Almaty Kazakhstan 050040 Tel: +7(727) 334 1310

