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ASCO UK LTD

GREAT YARMOUTH SHIP TO SHORE FACILITY

SITE CONDITION REPORT

DECEMBER 2022

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SITE CONDITION REPORT

DECEMBER 2022

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CONTENTS

1	INTRODUCTION	1
2	SITE LOCATION	2
3	ENVIRONMENTAL SETTING AND CONDITION OF THE LAND AT PERMIT USE	4
4	PERMITTED ACTIVITIES	7
5	CONCLUSIONS	9

TABLES

Table 3:1	Permitted Waste Operations And Installations Close To The Facility	5
Table 3:2	Historic Pollution Incidents Within 250m Of The Site Boundary	6
Table 4:1	Potentially Polluting Substances Stored Or Generated At The Site	8

DRAWINGS

BM12124-001	Site Location Plan	1:20,000 @ A4
BM12124-002	Environmental Permit Boundary and Site Layout	1:500 @ A3
16447-004	Site Storm Drainage Layout	1:400

1 INTRODUCTION

- 1.1.1 ASCO UK Ltd proposes 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.
- 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 drilling and gas terminals, including slops. 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 deposit and offtake 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.
- 1.1.8 The surrounding land use includes an existing harbour area that has been operational for a considerable number of years. The site has been associated with resupply of the off-shore oil and gas industry for over 20 years.

1.1.9 This report describes the previous uses of the site and resulting ground conditions, identifying any contamination that may have resulted. Polluting substances that may be used or generated on site and pollution prevention measures are also identified and described.

1.1.10 In accordance with the published “European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions” there is no requirement for intrusive site investigation on the basis that site infrastructure is already constructed and will be subject to a comprehensive maintenance programme to ensure it is fit for purpose before permitted activities commence. The collection of intrusive soil samples will potentially damage the integrity of the infrastructure and is therefore inappropriate.

2 SITE LOCATION

2.1.1 The site is located South Denes Road, Great Yarmouth NGR TG 52659 05693. The site’s location is shown on Drawing BM12124-001.

2.1.2 The site is bordered on the immediate north and east by industrial units and other offshore resupply facilities. The River Yare flows adjacent to the western permit boundary, which has further harbour facilities on the opposite bank.

2.1.3 Behind the harbour, directly opposite the site across the River Yare, are domestic dwellings (270m) and commercial/retail premises (around 500m to the northwest).

2.1.4 A community centre and playing field are also located approximately 420m to the northwest.

2.1.5 The site has been in use for various industrial purposes over the course of the last 100 years.

2.1.6 Historical maps dating between 1887 and 2008 indicate the following past uses of the site (see Table 2:1):

- In c.1898, maps show industrial and harbour-type units and a ferry point were present in the area.
- Maps prior to 1922 show the site to have been used as a dock and fish wharf within Great Yarmouth harbour. Associated industrial and warehousing units are also present surrounding it. A fish market may also have been located at the site or adjoining it.

- In c.1946, a historical aerial photograph indicates the area was in use as a harbour.
- A 1988 aerial photograph shows the tank farm is largely present, and the site appears to be in use as a general offshore oil and gas resupply and docking facility.

Date (approx)	Site Land Use	Adjacent Land Use
Pre-1922	Map shows the area marked as “fish wharf” and appears to be a harbour area.	Surrounding land is industrial/warehousing with a gas works to the north and fields to the south. Opposite the site the area is largely undeveloped with some riverside industrial development along the banks.
1946	Aerial photography shows the site as a wharf and harbour facility with ships docked. No other significant change.	No significant change
1988	Land is shown as used in relation to the resupply of offshore oil and gas industry.	Most of the nearby area and opposite bank of the River Yare has been developed into industrial units and facilities.
2014	No significant change	No significant change other than a large harbour area at the mouth of the River Yare on the seashore.
2018	No significant change	No significant change

2.1.7 Since the 1922 and 1946 maps, additional development in the area surrounding the site has taken place with industrial units dominating. Further residential developments have also arisen in this time.

2.1.8 It is likely that while in use as a fish wharf and docks, the site benefitted from concrete and other surfacing, although this cannot be confirmed.

2.1.9 While the exact nature of the activities that these historical uses of the site involved are not immediately clear, the fishing industry and the off-shore resupply sector are not believed to have caused any significant pollution.

2.1.10 There are no records of spillages or other incidents during these previous uses.

3 ENVIRONMENTAL SETTING AND CONDITION OF THE LAND AT PERMIT USE

3.1 Geology, Hydrology and Hydrogeology

3.1.1 Geological information for the site has been obtained from the British Geological Survey (BGS) website and its GeoIndex Onshore tool.

3.1.2 There are no groundwater Source Protection Zones within 2km of the facility.

3.2 Made Ground

3.2.1 While no intrusive surveys have been carried out at the site, BGS records indicate that the site is underlain by made ground. This is consistent with the site's previous use, which would suggest a definite layer of surface and subsurface made ground was used to construct some of the harbour area. The age and composition of the made ground is unknown.

3.3 Superficial Geology

3.3.1 British Geological Survey records shows that the surface deposits are made up of sand and gravel deposits of North Denes Formation, classified as a Secondary A Aquifer.

3.4 Bedrock Geology

3.4.1 The underlying bedrock of the site is comprised of Crag Group sand and gravel deposits, classified as a Principal Aquifer.

3.5 Surface Water Features

3.5.1 The Environment Agency's flood information for planning shows the site to be in a Flood Zone 3 area with a high risk of flooding. This is predominantly from the River Yare that runs north to south along the western boundary of the site.

3.5.2 The site is approximately 500m away from the open sea (to the east) and so any tidal events that might cause flooding could affect the site.

3.5.3 Apart from the River Yare there are no graded watercourses within 2km of the site. The Yare is classified as "moderate" under ecological and chemical classification.

3.6 Other Activities in The Vicinity of The Site

3.6.1 There are a number of discharge consents in the immediate and surrounding area of the proposed facility. Given that the facility will have sealed and impermeable surfaces then the facility will not impact upon these.

3.6.2 Permitted waste operations and installations have been identified on the Environment Agency Public Register as in the area of this facility. Table 3.1 identifies these.

3.6.3 These sites are listed as potential receptors as required by the Environment Agency as potentially affected by pollution or other impacts from the site or incidents occurring there.

Table 3:1 Permitted Waste Operations And Installations Close To The Facility			
Permit holder	Permit number	Name and address of site	Approximate distance
C & L Waste Oil Collection Limited	JB3705LY/T001	Great Yarmouth Oil Reclamation Facility, Yarmouth Business Park, Thamesfield Way, Great Yarmouth, Norfolk, NR31 0DN	700m
RWE UK Generation UK Plc	KP3531US	The Power Station, South Denes Road, Norfolk, NR30 3PY	700m
East Coast Waste Limited	JB3908UV/T001	East Coast Waste Limited, Harfreys Industrial Estate, Harfreys Road, Great Yarmouth, Norfolk, NR31 0LS	700m
EUROPEAN METAL RECYCLING LIMITED	LB3402XQ/T001	Great Yarmouth, South Quay, Great Yarmouth, Norfolk, NR30 3LD	800m
E E Green & Son Ltd	EB3535AM/V002	Hafrey's Road Transfer Station, Hafrey's Road, Townlands, Great Yarmouth, Norfolk, NR31 8JL	845m
East Coast Waste Limited	GB3009GG/T001	Land off Harfrey's Road, Townlands, Great Yarmouth, Norfolk, NR31 9PY	845m
Thurtle Walter	CP3094NZ/V003	W T Waste, Harfreys Road, Harfreys Ind Est, Great Yarmouth, Norfolk, NR31 0LS	850m
G & A Car Spares Limited	CB3702FS/V002	G & A Car Spares, G & A Car Spares, 127 - 129, South Quay, Great Yarmouth, Norfolk, NR30 3LD	900m
C&L Waste Oil Collection Ltd	NP3038MB	Yarmouth Business Park, Thamesfield Way, Great Yarmouth, Norfolk, NR31 0DN	912m
KDC Contractors Limited	JB3104XR/T001 VP3206LU	Great Yarmouth Decommissioning Facility, South Beach Parade, Great Yarmouth, Norfolk, NR30 3QD	Approximately 1km
Augean North Sea Services Ltd	ZP3637RM	Great Yarmouth Waste Management Resource Centre, Unit 2, Bessemer Way, Harfreys Industrial Estate, Norfolk, NR31 0LX	1.08km

Table 3:1 Permitted Waste Operations And Installations Close To The Facility			
Permit holder	Permit number	Name and address of site	Approximate distance
ASCO UK Ltd	GP3630YS/T001	Great Yarmouth Technical Waste Management Centre, Berths 2-4, South Denes Road, Great Yarmouth, Norfolk, NR30 3QF	1.51km

3.6.4 ASCO have a COMAH installation directly bordering this proposed facility. This facility has an accident management plan and is tightly regulated by the Environment Agency and Health and Safety Executive.

3.7 Pollution Incidents

3.7.1 Data from the Environment Agency Public Register indicates that there have been five pollution incidents within 2km of the site boundary.

3.7.2 There were no pollution incident records for the proposed facility site or the area immediately surrounding it.

3.7.3 Table 3.2 provides details of these reported pollution incidents.

Table 3:2 Historic Pollution Incidents Within 250m Of The Site Boundary	
Location	Details
Distance: 100- 500m E NGR: TG 51360 0687	Severity: Category 2 – Significant Incident (water) Pollutant: Unspecified Date: 13/05/2009 Ref No: 678658 Receiving Water: Unknown
Distance: 100-150m N NGR: TG 5320 0633	Severity: Category 2 – Significant Incident (water) Pollutant: Unspecified Date: 21/11/2002 Ref No: 866428 Receiving Water: Unknown
Distance: 500 – 1000m NW NGR: TG 51360 06887	Severity: Category 2 – Significant Incident (water) Pollutant: Unspecified Date: 13/05/2009 Ref No: 678658 Receiving Water: Unknown
Distance: 500 – 1000m NW	Severity: Category 2 – Significant Incident (land)

Table 3:2 Historic Pollution Incidents Within 250m Of The Site Boundary	
Location	Details
NGR: TG 51360 06887	Pollutant: Unspecified Date: 30/11/2001 Ref No: 45912 Receiving Water: Unknown

3.7.4 None of the recorded pollution incidents will have had an effect on the facility site, given their nature and distance.

3.8 Existing Pollution Control Measures and Evidence of Contamination

3.8.1 The site is currently in use by ASCO as an offshore oil and gas resupply site facility with ASCO staff stationed there during operational hours. There is no evidence of pollution or contamination having been observed by staff during their hours of work.

3.8.2 ASCO UK Ltd have not recorded any pollution incidents, leaks or spillages that have caused pollution while they have operated at the site and none have been reported via other parties.

3.8.3 The majority of the site is concrete. All bunding and surfacing will be checked. If any damage is noted, it will be renewed before the site commences activities. The site will benefit from sealed drainage and any water collected will be tankered off site if they are believed to be contaminated.

3.8.4 Uncontaminated and clean rainwater or roof water will be discharged into the River Yare.

3.8.5 A drainage system is present on the site and is seen in Drawing 16447-004 shows the facility drainage system.

4 PERMITTED ACTIVITIES

4.1.1 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 outloading to road tankers. Five storage tanks are provided with a total storage capacity of 550m³. All tanks will be located within a single bund with a capacity of c. 390m³ that provides sufficient capacity for 110% of the largest tank (c. 177m³) and 25% of the total storage capacity of all tanks (137.5m³).

4.1.2 The facility will accept up to 20,000 tonnes per annum of both hazardous and non-hazardous wastes, comprising:

- drilling muds and fluids;
- slops and hydrocarbon contaminated fluids; and
- liquids and sludges from gas terminals.

4.1.3 All waste deliveries will be made either by ship and road tanker, and all wastes will be removed from site by road tanker. These wastes will be transferred from docked ships on arrival, via a sub-surface pipe, equipped with leak detection, to the facility tank farm.

4.1.4 Incompatible wastes, including hazardous and non-hazardous wastes, will not be stored in the same tank.

4.1.5 Table 4:1 below lists the potentially polluting substances used or generated at the facility and the control measures employed to protect the environment.

Table 4:1 Potentially Polluting Substances Stored Or Generated At The Site				
Substance	Use/source	Dangerous substance listed under COMAH Regs	Control measures	Risk of contamination to Soil or Water
Lubricating Oil	Plant maintenance	No	If required will be stored only in small quantities. These will be stored within in appropriate containers. Spill kit provided on site to clear any spillages.	Very low
Waste sludges and Oils	Oil and gas industrial procedures	No	Site infrastructure includes secondary containment though bunding of storage tanks, and tertiary containment provided by sealed drainage system which also covers tanker loading area.	Very low
Diesel/oils	Fuel for site plant	No	It is not proposed that diesel and oils will be kept on site. Any fuel spill from tankers will be contained by impermeable site surfacing and sealed drainage system. Spill kit provided on site to clear any minor spillages.	Very low
Hydraulic oils	Plant maintenance	No	Not proposed to be stored on site and will only be used in small quantities as required. These will be used within bunded area. Spill kit provided on site to clear any spillages.	Very low

5 CONCLUSIONS

- 5.1.1 The previous site activities may have had the potential to cause limited ground pollution. However, the use of sealed drainage and concrete surfacing has mitigated this. There are no records of environmental pollution incidents to date at the site and no contamination or other concerns have been noted. The site has, therefore, been found to present a low risk to receptors and the current condition of the site is considered to be good.
- 5.1.2 Permitted activities to be undertaken at the site will not present a significant risk of pollution or harm where appropriate control measures, as outlined, are undertaken.

DRAWINGS

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