INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE

No LDR0/TSD/20241216123747

Issued under the provisions of the Protocol of 1997, as amended to amend the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 relating thereto, (hereinafter referred to as "the Convention") under the authority of the Government of

IRELAND

By BUREAU VERITAS MARINE & OFFSHORE

| Name of Ship BV No : 31788 E | Distinctive Number or Letters | Port of Registry | Gross Tonnage |
|--|-------------------------------|------------------|---------------|
| ARKLOW WAVE | EIUQ9 | ARKLOW | 9999 |

IMO number: 9818931 THIS IS TO CERTIFY

- 1. That the ship has been surveyed in accordance with Regulation 5 of Annex VI of the Convention; and
- 2. That the survey shows that the equipment, systems, fittings, arrangements and materials fully comply with the applicable requirements of Annex VI of the Convention.

Completion date of the survey on which this Certificate is based: 29 October 2023

This Certificate is valid until * 23 October 2028 subject to surveys in accordance with Regulation 5 of Annex VI of the Convention.

Issued at Newcastle, UK, on the 16 December 2024

Valid only when the Supplement No. LDR0/TSD/20241216123747/SUPP is available for inspection.

BUREAU VERITAS MARINE & OFFSHORE

Lisa Hardy



This document is electronically signed and does not require a manual signature as defined in IMO guideline FAL.5-Circ.39.

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By Order of the Secretary

^{*} Insert date of expiry as specified by the Administration in accordance with regulation 9.1 of Annex VI of the Convention. The day and the month of this date correspond to the anniversary date as defined in regulation 2.1.3 of Annex VI of the Convention, unless amended with regulation 9.8 of Annex VI of the Convention.

IAPP CERTIFICATE No: LDR0/TSD/20241216123747

NAME OF SHIP: ARKLOW WAVE

BV REGISTER : 31788E

ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEYS

THIS IS TO CERTIFY that at a survey required by Regulation 5 of Annex VI of the Convention the ship was found to comply

| with the relevant provision | ns of that Annex: | 1 |
|---------------------------------------|--|--|
| Annual survey | Signed: M. Morgan (Surveyor to BUREAU VERITAS MARINE & OFFSHORE) Place: Belfast, N. Ireland Date: 05 December 2024 | BUREAU VERITAS MARINE & ORIGINAL REGISTA |
| ☐ Annual survey ☐ Intermediate survey | Signed: (Surveyor to BUREAU VERITAS MARINE & OFFSHORE) Place: Date: | |
| ☐ Annual survey ☐ Intermediate survey | Signed: (Surveyor to BUREAU VERITAS MARINE & OFFSHORE) Place: Date: | |
| Annual survey | Signed: (Surveyor to BUREAU VERITAS MARINE & OFFSHORE) Place: Date: | |

| | CATE No : LDR0/TSD/20241216123747 P : ARKLOW WAVE : 31788E | | | | |
|--|---|--|--|--|--|
| ANNUAL/INTERMEDIATE SURVEY IN ACCORDANCE WITH REGULATION 9.8.3 | | | | | |
| | CIFY that, at an survey in accordance with regulation 9.8.3 of Annex VI of the Convention, the ship was found relevant provisions of that Annex: | | | | |
| | Signed: (Surveyor to BUREAU VERITAS MARINE & OFFSHORE) | | | | |
| | Place: | | | | |
| | Date: | | | | |
| | ENDORSEMENT TO EXTEND THE CERTIFICATE IFVALID FOR LESS THAN 5 YEARS WHERE REGULATION 9.3 APPLIES | | | | |
| | ENDORSEMENT TO EXTEND THE CERTIFICATE IFVALID FOR LESS THAN 5 YEARS WHERE REGULATION 9.3 APPLIES with the relevant provisions of the Annex, and this Certificate shall, in accordance with regulation 9.3 of Annex on, be accepted as valid until | | | | |
| | FOR LESS THAN 5 YEARS WHERE REGULATION 9.3 APPLIES with the relevant provisions of the Annex, and this Certificate shall, in accordance with regulation 9.3 of Annex | | | | |
| | FOR LESS THAN 5 YEARS WHERE REGULATION 9.3 APPLIES with the relevant provisions of the Annex, and this Certificate shall, in accordance with regulation 9.3 of Annex on, be accepted as valid until Signed: | | | | |
| | FOR LESS THAN 5 YEARS WHERE REGULATION 9.3 APPLIES with the relevant provisions of the Annex, and this Certificate shall, in accordance with regulation 9.3 of Annex on, be accepted as valid until Signed: (Surveyor to BUREAU VERITAS MARINE & OFFSHORE) | | | | |

The ship complies with the relevant provisions of the Annex, and this Certificate shall, in accordance with regulation 9.4 of Annex VI of the Convention, be accepted as valid until

| Signed: (Surveyor to BUREAU VERITAS MARINE & OFFS. | HORE) |
|--|-------|
| Place: | |
| Date: | |

IAPP CERTIFICATE No: LDR0/TSD/20241216123747

NAME OF SHIP: ARKLOW WAVE

BV REGISTER: 31788E

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE REGULATION 9.5 OR 9.6 APPLIES

| This Certificate | shall, in accordance with regulation of Annex VI of the Convention, be accepted as valid until |
|------------------|--|
| | Signed: (Surveyor to BUREAU VERITAS MARINE & OFFSHORE) |
| | Place: |
| | Date: |
| | |
| | |
| | ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE REGULATION 9.8 APPLIES |
| In accordance wi | th regulation 9.8 of Annex VI of the Convention, the new anniversary date is |
| | Signed: (Surveyor to BUREAU VERITAS MARINE & OFFSHORE) |
| | Place: |
| | Date : |
| | |
| | |
| In accordance wi | th regulation 9.8 of Annex VI of the Convention, the new anniversary date is |
| | Signed: (Surveyor to BUREAU VERITAS MARINE & OFFSHORE) |
| | Place: |
| | Date : |
| | |
| | |

SUPPLEMENT TO THE INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE (IAPP CERTIFICATE)

RECORD OF CONSTRUCTION AND EQUIPMENT

Notes:

- 1. This Record shall be permanently attached to the IAPP Certificate. The IAPP Certificate shall be available on board the ship at all times.
- 2. The Record shall be at least in English, French or Spanish. If an official language of the issuing country is also used, this shall prevail in case of a dispute or discrepancy.
- 3. Entries in boxes shall be made by inserting either a cross (X) for the answers "yes" and "applicable" or a dash (-) for the answers "no" and "not applicable" as appropriate.
- 4. Unless otherwise stated, regulations mentioned in this Record refer to regulations of Annex VI of the Convention and resolutions or circulars refer to those adopted by the International Maritime Organization.

1. PARTICULARS OF SHIP

1.1. Name of ship: ARKLOW WAVE

BV Register: 31788E

1.2. IMO Number: 9818931

1.3. Date on which keel was laid or ship was at a similar stage of construction: 14 December 2015

1.4. Length (metres)*:



^{*} completed only in respect of ships constructed on or after 1 January 2016, that are specially designed, and used solely for recreational purposes and to which, in accordance with regulation 13.5.2.1 or regulation 13.5.2.3, the NOx emission limit as given by regulation 13.5.1.1 will not apply.

SUPPLEMENT TO IAPP CERTIFICATE No: LDR0/TSD/20241216123747/SUPP

NAME OF SHIP: ARKLOW WAVE

BV REGISTER: 31788E

2. CONTROL OF EMISSIONS FROM SHIPS

2.1 Ozone-depleting substances (regulation 12)

2.1.1 The following fire-extinguishing systems, other systems and equipment containing ozone depleting substances, other than hydro-chlorofluorocarbons, installed before 19 May 2005 may continue in service

| System or equipment | Location on board | Substance |
|---------------------|-------------------|-----------|
| - | <u>-</u> | - |

2.1.2 The following systems containing hydro-chlorofluorocarbons (HCFCs) installed before 1 January 2020 may continue in service

| System or equipment | Location on board | Substance |
|---------------------|-------------------|-----------|
| - | - | - |

- 2.2 Nitrogen oxides (NOx) (regulation 13)
- 2.2.1 The following marine diesel engines installed on this ship are in accordance with the requirements of regulation 13, as indicated:

| Applicable regulation of MARPOL | | | | | |
|--|---------------------------------|--|----------------|---|------------------|
| Applicable regulation of MAKI OL Annex VI | | | T | - · · · · · · · · · · · · · · · · · · · | F |
| | C = NOx Technica | l Code 2008) | Engine #1 | Engine #2 | Engine #3 |
| | (AM = Approved method) | | | | |
| | | | CATERPILLAR | YANMAR CO., LTD. | YANMAR CO., LTD. |
| 1 | Manufacturer an | d model | MOTOREN GmbH & | 6AYL-WET | 6AYL-WET |
| | | | Co. KG 8M32C | | |
| 2 | Serial number | | 39305 | 4896 | 4897 |
| 3 | | application cycle(s) – | E2 | D2 | D2 |
| | NTC 3.2) | | | | |
| 4 | Rated power (kV | | 3840 | 438 | 438 |
| 5 | | PM) (NTC 1.3.12) | 600 | 1500 | 1500 |
| 6 | Identical engine 1/1/2000 exemp | installed on or after ted by 13.1.1.2 | - | - | - |
| _ | Identical engine | | | | |
| 7 | (dd/mm/yyyy) a | | - | - | - |
| 8a | | 13.2.1.1 & | _ | | |
| - Ga | | 13.2.2 | - | - | - |
| 8b | Major | 13.2.1.2 & | _ | _ | _ |
| | conversion | 13.2.3 | | | |
| 8c | (dd/mm/yyyy) | 13.2.1.3 & | - | - | - |
| 9a | | 13.2.3 13.3 | | | |
| 9a 9b | | 13.2.2 | - | - | - |
| 90 9c | Tier I | 13.2.3.1 | - | - | - |
| 9d | 11011 | 13.2.3.2 | <u>-</u> | - | - |
| 9e | - | 13.7.1.2 | - | - | - |
| 10a | | 13.4 | X | X | X |
| 10b | | 13.2.2 | - | - | - |
| | - | 13.2.2 | | | |
| 10c | | (Tier III not possible) | - | - | - |
| 10d | Tier II | 13.2.3.2 | - | - | - |
| 10e | | 13.5.2 (Exemptions) | - | - | - |
| 10f | | 13.7.1.2 | - | - | - |
| 11a | | 13.5.1.1 | - | - | - |
| 11b | Tier III | 13.2.2 | - | - | - |
| 11c | (ECA-NOx only) | 13.2.3.2 | - | - | - |
| 11d |] | 13.7.1.2 | - | - | - |
| 12 | | Installed | - | - | - |
| 13 | AM* | Not commercially | | | |
| | AlVI | available at this survey | - | - | - |
| 14 | | Not applicable | - | - | - |

 $^{* \}textit{Refer to the 2014 Guidelines on the approved method process (resolution \textit{MEPC.243(66)})}.$

SUPPLEMENT TO IAPP CERTIFICATE No: LDR0/TSD/20241216123747/SUPP

NAME OF SHIP: ARKLOW WAVE

BV REGISTER: 31788E

- 2.3 Sulphur oxides (SOx) and particulate matter (regulation 14)
- 2.3.1 When the ship operates outside of an Emission Control Area specified in regulation 14.3, the ship uses:
 - [X].1 fuel oil with a sulphur content as documented by bunker delivery notes that does not exceed the limit value of 0,50% m/m and/or
 - [-].2 an equivalent arrangement approved in accordance with regulation 4.1 as listed in 2.6 that is at least as effective in term of SOx emission reductions as compared to using a fuel oil with a sulphur content limit value of 0,50% m/m
- 2.3.2 When the ship operates inside an Emission Control Area specified in regulation 14.3, the ship uses:
 - [X].1 fuel oil with a sulphur content as documented by bunker delivery notes that does not exceed the limit value of 0.10% m/m and/or
 - [-].2 an equivalent arrangement approved in accordance with regulation 4.1 as listed in 2.6 that is at least as effective in terms of SOx emission reductions as compared to using a fuel oil with a sulphur content limit value of 0,10% m/m
- [X] 2.3.3 For a ship without an equivalent arrangement approved in accordance with regulation 4.1 as listed in paragraph 2.6, the sulphur content of fuel oil carried for use on board the ship shall not exceed 0.50% m/m as documented by bunker delivery notes
- [X] 2.3.4 The ship is fitted with designated sampling point(s) in accordance with regulation 14.10 or 14.11
- [-] 2.3.5 In accordance with regulation 14.12, the requirement for fitting or designating sampling point(s) in accordance with regulation 14.10 or 14.11 is not applicable for a fuel oil service system for a low-flashpoint fuel for combustion purposes for propulsion or operation on board the ship
- 2.4 Volatile organic compounds (VOCs) (regulation 15)
 - [-] 2.4.1 The tanker has a vapour collection system installed and approved in accordance with MSC/Circ.585
 - [-] 2.4.2.1 For a tanker carrying crude oil, there is an approved VOC Management Plan.
 - 2.4.2.2 VOC Management Plan approval reference:
- 2.5 Shipboard incineration (regulation 16):

The ship has an incinerator:

- .1 installed on or after 1 January 2000 that complies with:
 - [X] .1 resolution MEPC.76(40) as amended by resolution MEPC.93(45).
 - [X] .2 resolution MEPC.244(66).
- .2 installed before 1 January 2000 that complies with:
 - [-] .1 resolution MEPC.59(33), as amended by resolution MEPC.92(45).
 - [-] .2 resolution MEPC.76(40) as amended by resolution MEPC.93(45).

SUPPLEMENT TO IAPP CERTIFICATE No: LDR0/TSD/20241216123747/SUPP

NAME OF SHIP: ARKLOW WAVE

BV REGISTER: 31788E

2.6 Equivalents (regulation 4):

The ship has been allowed to use the following fitting, material, appliance or apparatus to be fitted in a ship or other procedures, alternative fuel oils, or compliance methods used as an alternative to that required by this Annex:

| System or equipment | Equivalent used | Approval reference |
|---------------------|-----------------|--------------------|
| - | - | - |

THIS IS TO CERTIFY that this Record is correct in all respects.

Issued at Newcastle, UK, on the 16 December 2024

BUREAU VERITAS MARINE & OFFSHORE

Lisa Hardy



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