INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE

No LDR0/MMO/20150224110303

Issued under the provisions of the Protocol of 1997, as amended by resolution MEPC.176(58) in 2008, to amend the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 related thereto (hereinafter referred to as "the Convention") under the authority of the Government of

GOVERNMENT OF IRELAND

By BUREAU VERITAS

Name of Ship BV No: 09715M	Distinctive Number or Letters	Port of Registry	Gross Tonnage
ARKLOW FREEDOM	EIEX9	ARKLOW	2998

IMO number: 9361756

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: 08/02/2013

This Certificate is valid until* 28 March 2018 subject to surveys in accordance with Regulation 5 of Annex VI of the Convention.

Issued at CORK, on the 24 February 2015

Valid only when the Supplement No. LDR0/MMO/20150224110547 is available for inspection.

BUREAU VERITAS

^{*} 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 2.3 of Annex VI of the Convention, unless amended with regulation 9.8 of Annex VI of the Convention.

IAPP CERTIFICATE No: LDR0/MMO/20150224110303

NAME OF SHIP: ARKLOW FREEDOM

BV REGISTER: 09715M

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 provisions of that Annex:

Annual survey	Signed: M.MORGAN (Surveyor to BUREAU VERITAL) Place: WATERFORD Date: 03rd MARCH 2014
☐ Annual survey ☑ Intermediate survey	Signed: M.MORGAN (Surveyor to BUREAU ERITA) Place: CORK Date: 24th FEBRUARY 2015
☐ Annual survey ☐ Intermediate survey	Signed: (Surveyor to BUREAU VERITAS) Place: Date:
Annual survey	Signed: (Surveyor to BUREAU VERITAS) Place: Date:

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NAME OF SHIP: ARKLOW FREEDOM

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ANNUAL/INTERMEDIATE SURVEY IN ACCORDANCE WITH REGULATION 9.8.3

THIS IS TO CERTIFY that, at an survey in accordance with regulation 9.8.3 of Annex VI of the Convention, the ship was found to comply with the relevant provisions of that Annex:

Signed:

(Surveyor to BUREAU VERITAS)

Place:

ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS THAN 5 YEARS WHERE REGULATION 9.3 APPLIES

The ship complies with the relevant provisions of the Annex, and this certificate shall, in accordance with regulation 9.3 of Annex VI of the Convention, be accepted as valid until

Signed

(Surveyor to BUREAU VERITAS)

Place : Date :

ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND REGULATION 9.4 APPLIES

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)

Place:

Date:

IAPP CERTIFICATE No: LDR0/MMO/20150224110303

NAME OF SHIP: ARKLOW FREEDOM

BV REGISTER: 09715M

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)

Place:

Date:

ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE REGULATION 9.8 APPLIES

In accordance with regulation 9.8 of Annex VI of the Convention, the new anniversary date is

Signed:

(Surveyor to BUREAU VERITAS)

Place:

Date:

In accordance with regulation 9.8 of Annex VI of the Convention, the new anniversary date is

Signed:

(Surveyor to BUREAU VERITAS)

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 FREEDOM

BV Register: 09715M

1.2. IMO Number: 9361756

1.3. Date on which keel was laid or ship was at a similar stage of construction: 15/03/2007

1.4. Length (metres)*: -



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

SUPPLEMENT TO	IAPP CERTIFICATE No: LDR0/MMO/20150224110547
NAME OF SHIP:	ARKLOW FREEDOM
BV REGISTER:	09715M

2. CONTROL OF EMISSIONS FROM SHIPS

- 2.1 Ozone-depleting substances (regulation 12)
- [-1 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
	a.	

[-1 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

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NAME OF SHIP:	ARKLOW FREEDOM	
BV REGISTER:	09715M	

2.2 Nitrogen oxides (NOx) (regulation 13)

Approved Method installed

[x] 2.2.1 The following marine diesel engines installed on this ship comply with the applicable emission limit of regulation 13 in accordance with the revised NOx Technical Code 2008.

		Engine #1	Engine #2	Engine #3
Manufacture	r and model	Caterpillar MaK 6M25	SISU Diesel 634DSBIMG	SISU Diesel 634DSBIMG
Serial numbe	er	44265	\$18229	\$18230
Use		Main Propulsion	Aux. Engine	Aux. Engine
Power outpu	t (kW)	1980	170	170
Rated speed		750	1500	1500
Date of insta	llation	2008	2008	2008
(dd/mm/yy)				
Date of	According to			
major	Reg. 13.2.2			
conversion	According to			
(dd/mm/yy)	Reg. 13.2.3			
	Reg. 13.1.1.2	□.		\Box .
Tier I Reg. 1	3.3	\boxtimes .	⊠.	\boxtimes .
Tier II Reg.		□.		□.
	13.2.2 or 13.5.2	\square .		□.
Tier III Reg.	13.5.1.1	\square .		
Approved Method exists		\Box .		
Approved M		□.		
commercially				
Approved M	ethod installed			□.
		Engine #4	Engine #5	Engine #6
Manufacture				
Serial number	er			
Use				
Power output				
Rated speed				
Date of insta	llation			
(dd/mm/yy)				
Date of	According to			
major	Reg. 13.2.2			
conversion	According to			
(dd/mm/yy)	Reg. 13.2.3			
	Reg. 13.1.1.2	<u></u> .		
Tier I Reg. 1		<u>.</u>	<u> </u>	<u> </u>
Tier II Reg.		□.		<u> </u>
	13.2.2 or 13.5.2	□.		□.
Tier III Reg.		□.		
Approved M		\square .		
Approved M		Π.		
commercially	y available			

SUPPLEMENT TO IAPP CERTIFICATE No: LDR0/MMO/20150224110547

NAME OF SHIP: ARKLOW FREEDOM

BV REGISTER: 09715M

- 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:
- .1 fuel oil with a sulphur content as documented by bunker delivery notes that does not exceed the limit value of:
 - [-] 4,50% m/m (not applicable on or after 1 January 2012); or
 - [x] 3,50% m/m (not applicable on or after 1 January 2020); or
 - [x] 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:
 - [-] 4,50% m/m (not applicable on or after 1 January 2012); or
 - [-] 3,50% m/m (not applicable on or after 1 January 2020); or
 - [-] 0,50% m/m
- 2.3.2 When the ship operates inside an Emission Control Area specified in regulation 14.3, the ship uses:
- .1 fuel oil with a sulphur content as documented by bunker delivery notes that does not exceed the limit value of:
 - [-] 1,00% m/m (not applicable on or after 1 January 2015); or
 - [x] 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:
 - [-] 1,00% m/m (not applicable on or after 1 January 2015); or
 - [-] 0,10% m/m
- 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:

- [x] .1 installed on or after 1 January 2000 which complies with resolution MEPC.76(40) as amended
- [-] .2 installed before 1 January 2000 which complies with

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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 CORK, on the 24 February 2015

BUREAU, VERITAS

By Order of the Secretar